COLLANA DEL DIPARTIMENTO DI GIURISPRUDENZA
DELL'UNIVERSITÀ DI PISA

NUOVA SERIE - *Atti di Convegno*

ENHANCING SUSTAINABLE TRANSPORT

Interdisciplinary Issues

edited by
Andrea Bartalena, Luca Della Tommasina,
Gabriella Iermano, Luca Spataro

G. Giappichelli Editore

COLLANA DEL DIPARTIMENTO DI GIURISPRUDENZA
DELL'UNIVERSITÀ DI PISA

Nuova serie – *Atti di convegno*

10

ENHANCING SUSTAINABLE TRANSPORT

Interdisciplinary Issues

edited by
Andrea Bartalena, Luca Della Tommasina,
Gabriella Iermano, Luca Spataro

G. Giappichelli Editore

© Copyright 2022 - G. GIAPPICHELLI EDITORE - TORINO
VIA PO, 21 - TEL. 011-81.53.111 - FAX 011-81.25.100
http://www.giappichelli.it

ISBN/EAN 978-88-921-4601-3
ISBN/EAN 978-88-921-7860-1 (ebook - pdf)

Comitato scientifico:
F. Barachini, A.M. Calamia, E. Catelani, F. Giardina, T. Greco, E. Malfatti,
E. Marzaduri, O. Mazzotta, S. Menchini, E. Navarretta, A. Petrucci, R. Tarchi

Responsabile scientifico:
F. Dal Canto

Book published with the contribution of the Jean Monnet Project nr. 62016-EPP-1-2020-1-IT-EPPJMO-PROJECT coordinated by Luca Spataro.

Co-funded by the
Erasmus+ Programme
of the European Union

Typesetting: Media Print s.r.l. - Livorno

Printed: Media Print s.r.l. - Livorno

Photocopies for personal use are allowed, provided they do not exceed the limit of 15% of each volume/periodical file and only upon a SIAE payment in accordance with art. 68, commas 4 and 5, of the 22/04/1941 law, n. 633.

Photocopies for professional, economic or commercial use or for any other non-personal use are only allowed following specific authorisation by CLEARedi, Centro Licenze e Autorizzazioni per le Riproduzioni Editoriali, Corso di Porta Romana 108, 20122 Milano, e-mail autorizzazioni@clearedi.org and website www.clearedi.org.

INDICE

page

ANDREA BARTALENA
PREFACE VII

ELENA ORRÙ
SUSTAINABILITY IN THE TRANSPORT SECTOR.
AN OVERVIEW 1

MATTEO DEL CHICCA
SUSTAINABLE TRANSPORT:
SOME REMARKS ABOUT
THE INTERNATIONAL LEGAL FRAMEWORK 19

GIAMMARIA FAMIGLIETTI
GREENING THE INSURANCE INDUSTRY.
PRODUCTS, DISTRIBUTION, AND OPERATIONAL IMPACTS 31

MARÍA GÓMEZ SANTOS
INSURANCE, TRANSPORT AND SDGS:
THE SPANISH AGENDA 49

ANNA MONTESANO
THE SOCIAL DIMENSION OF SUSTAINABILITY
IN NAVIGATION:
RECENT TRENDS AND CHALLENGES
IN THE MARITIME LABOUR MARKET 63

MARILENA BACCI
THE GERMAN NEW FRONTIER OF SUSTAINABILITY LAW:
THE *LIEFERKETTENSORGFALTSPFLICHTENGESETZ*.
ANY IMPACT ON THE TRANSPORT SECTOR? 79

page

DANIELE BUONCRISTIANI
THE EU TAXONOMY REGULATION AND
THE CORPORATE SUSTAINABILITY REPORTING DIRECTIVE 105

GABRIELLA IERMANO
SUITABLE BUSINESS LEGAL STRUCTURES
FOR SUSTAINABLE TRANSPORT.
THE BENEFIT CORPORATION 121

GIULIA BOLETTO
SUITABLE BUSINESS LEGAL STRUCTURES
FOR SUSTAINABLE TRANSPORT.
THE SOCIAL ENTERPRISE 143

LUCA DELLA TOMMASINA
SUSTAINABILITY-RELATED DISCLOSURES
IN FINANCIAL SERVICES AND DIALOGUE POLICIES
IN LISTED COMPANIES 157

FRANK ANDREAS SCHITTENHELM
SUSTAINABLE TRANSPORT - PROFITABILITY AND RISK 195

MARIA CRISTINA QUIRICI
GREEN BOND AS INSTRUMENT OF IMPACT INVESTING
FOR FINANCING SUSTAINABLE TRANSPORTS 211

MARCO ANTONELLI-STEFANO MAGGI-FRANCESCO ALBERTI
REMOTE AREAS SUSTAINABLE RECONNECTION:
THE VOLTERRA RACK RAILWAY CASE 259

GABRIELLA IERMANO
AFTERWORD 283

AUTHORS AND EDITORS 287

Andrea Bartalena

PREFACE

«*Enterprise is a relevant social fact*». So wrote Alberto Mazzoni twelve years ago in an essay dedicated to management responsibility for the incorrect operation of the company once business continuity is no longer achievable [1]. This statement was used to stress the fact that management of any enterprise projects its effects and has significant implications on the surrounding environment: effects and implications which become more and more crucial in a crisis situation, when shareholders' interests give way to those of other stakeholders (not only creditors, but also workers, other companies or enterprises and, last but not the least, the community as a whole) who may be negatively affected by the economical and financial decay of one operator.

Beyond the peculiarities of insolvency law and of preventive restructuring frameworks, recently dealt with by Directive (EU) 2019/1023, the point at issue is that any enterprise creates and is based on a series of relationships (predominantly, but non exclusively, of contractual type) which are so strictly intertwined that running of a business can't but take into account its reflections on various external subjects and fields. Hence the ever growing attention to corporates' social responsibility and, more recently, to sustainability.

However, if, starting from this assumption, one takes a closer look at the issues and theories just mentioned, one can easily realize the dissimilarities that exist between them and the different role that the emergence and the protection of the interests and expectations of stakeholders different from the shareholders (and tending to be in opposition to them) imply.

As a matter of fact, in a crisis situation creditors' protection leads to a reduction of directors' freedom of action and of their discretion in the management of the company, which appears justified since, at least in most

[1] *Mazzoni*, "La responsabilità gestoria per scorretto esercizio dell'impresa priva della prospettiva di continuità aziendale", in "Amministrazione e controllo nel diritto delle società. *Liber Amicorum* Antonio Piras", Torino, 2010, 813 ff. , 822.

cases, the onset of the crisis or even of insolvency is attributable to their lack of commitment to providing the company with an efficient organizational system, suitable for allowing them to ascertain the early signs of economic and financial difficulties of the company, or even to their culpable omission to promptly take the necessary actions to restore the management balance, not to speak of shareholder's causal contribution for failing to further fund the company.

On the opposite, the theory of CSL, the pursuit of ESG factors and, more generally, the care for all the interests involved in the running of the business imply the assumption of duties which impose an active, indeed proactive, conduct and give the management power itself a positive conformation which does not end with the pursuit of the shareholders' objectives.

On this issue should an immediate clarification be made. Companies are set up by shareholders to achieve the purpose of enhancing the value of the shares they own and maximising their profitability: although criticised and revised, the theory of the maximisation of shareholder value is still coherent. The consideration in the management of a company of interests belonging to subjects external to the shareholding structure is usually permitted - at least, in the absence of a legislative provision authorizing it and so long as profit is attested, like in Italy, as the ordinary company purpose - if, in one way or another, it translates into a benefit for the company, from an economic and reputational point of view, and, therefore, indirectly for its shareholders, at least in the long term.

That said, however, it is now a fact that companies, especially large corporations, cannot carry out their business without taking into due account their externalities. Highly significant, then, is the evolution that this assumption has had (and which perhaps corresponds to the progressive addition of the values expressed by ESG factors to the CSR theory): to an assessment of the negative effects that corporate management can have on the interests of various categories of stakeholders, which has led to the identification of a series of dutiful conducts aimed at preventing harmful phenomena (just think of environmental disasters) has also added the awareness that protection of these interests also requires an active behaviour, if the final objective is the elimination of social discriminations, of the exploitation of child labour, of the devastation of the environment, and so on.

In this perspective, the recent constitutional reform implemented in Italy through the inclusion of environmental protection among the fundamental principles of the Republic (article 9, paragraph 3) and as a limit to the freedom of economic initiative (article 41, paragraph 2) is the symptom of a new way of conceiving the role of large companies in the context of economic and social systems.

The path to putting the new values into practice is, however, very long

and complex due to a series of reasons: this is proved by the progressive and penetrating intervention of the European legislator on a plurality of levels, not to mention other international documents setting out objectives and instruments to orient companies towards sustainability.

In fact, there are three profiles on which it is indispensable, in an integrated system, to reach a sufficient homogeneity at the regulatory level, that is: (i) the standardization of terminology; (ii) the development of shared evaluation criteria; (iii) the enforcement of the rules. These are all aspects that have been or are about to be tackled at international and European level (suffice it to mention the Taxonomy Regulation 2020/852/EU, the Corporate Sustainability Report Directive recently approved by the European Parliament, the Proposal of Directive on Corporate Sustainability Due Diligence), both by hard law and soft law (see the first set of European Sustainability Reporting Standards-ESRS elaborated by the European Financial Reporting Advisory Group-EFRAG and submitted to the European Commission on November 23th, 2022), although so far does the achievement of those obiectives seem faraway especially with regards to the absolute necessity of uniformity both in language and in the setting up of common principles and standards with the aim to supplying both regulators, on one hand, and, on the other, companies (in particular, large corporations whose shares are negotiated on securities markets), the investing industry, workers and stakeholders at large with the necessary instruments to understand the policies underlying the use of labels and declarations evoking ESG issues.

Complying with sustainability means also scrutinize and overview the scrupolous respect of the set of rules adopted by an operator along the chain of supply, by thoroughly informing and checking their application by suppliers, clients, workers and so on, similarly to what happens, in Italy, with the Ethical Codes or the Organisation, Management and Control Models ex d.lgs. 8 giugno 2001, no. 231, functional to prevent criminal conducts by the management which may result in exposing the company to the application of severe penalties.

However, this is not an unexplored field. A similar approach, in terms of producer and distributor liability, has been implemented in the financial sector (in Italian law, articles 21.2 *bis* and 21.2 *ter*, T.U.F.; articles 63 ff. Consob Intermediaries Regulation, recently amended just to include sustainability factors among the benchmarks that must be taken into account in producing or distributing financial instruments), with a projection of the dutiful conduct also along the supply chain.

The challenge which lies ahead and now represents an obligatory path for achieving, in general terms, sustainability involves the three phases indicated above (the identification of sectors of intervention, the elaboration of shared evaluation criteria, the choice of consequences springing from

unlawful conducts) and requires a joint effort not only between the various systems, but also at an interdisciplinary level between experts of different cultural sectors.

The reparatory system appears particularly complex: proof of this is, for example, the choice already made by the German legislator (with the *Gesetz über die unternehmerischen Sorgfaltspflichten in Lieferketten* of 2021) to introduce addictional penalties for breach of the provisions complying with ESG principles in the supply chain, at the same time excluding damages claims against companies and their directors and managers. But, notwithstanding the difficulties connected at the enforcement level, it is a qualifying aspect, above all to avoid the so-called greenwashing, i.e. the external proclamation of compliance with ESG factors (also through the improper use of syntagms and logos that recall, for example, respect for the environment in the steps of the production process) which, in reality, does not occur, with a high risk therefore, of providing the market with misleading information and of exploiting an unjustified competitive advantage over other operators who actually comply with these factors or, on the opposite side, honestly declare non to pursue them. Highly significant, for example, is the recent dispute arisen against the Board of Directors of BlackRock by the hedge fund Bluebell Capital Partners, which has questioned their compliance with the declared ESG policies and given particular emphasis to the reputational risk to which BlackRock may be therefore exposed.

The essays contained in this volume deal with the application of sustainability criteria in the specific field of transport with a multidisciplinary approach, but with a view to apical issues, so giving a complete overview of the results already obtained but also, and more important, of the changelling activities that need to be implemented in order to preserve the integrity of the environment, to promote equality on different plans (sex, race, access to education, job opportunities), to cancel any form of slavery, to promote safety at work, and so on. But foremost what is needed, and represents a sort of precondition, is a change of the mental attitude, a sort of "cultural revolution" that managers, enterprisers, public servants and all economic operators must undergo, aware of the educational role they may and must accept to play.

Here returns the parallelism with bankruptcy law. Given an objective to achieve (the safeguard of an enterprise, the protection of the values evoked by the acronym ESG), the most efficient policy appears that of prevention, i.e. the timely adoption of policies, initiatives, measures suitable for hindering conducts that, although profitable in a short-term perspective, in the long run appear socially and economically devastating.

December 2022

Elena Orrù

SUSTAINABILITY IN THE TRANSPORT SECTOR. AN OVERVIEW

Table of contents: 1. Seventeen (and more) shades of sustainability. – 2. Focus on some challenges for reaching a comprehensive sustainability in the transport sector: the evolution of the international and EU institutions' approach towards environmental sustainability in the transport sector. – 2.1. Socio-labour conditions. – 2.2. Women and transports. – 3. Conclusions. Current perspectives and proposed instruments.

1. *Seventeen (and more) shades of sustainability*

Sustainability is at the core of current policies and public financing at every level: international, EU and domestic. It results evident by considering, as an example, the UN 2030 Agenda for Sustainable Development, adopted with the General Assembly's Resolution on 25 September 2015 [1]. The Agenda comprises seventeen goals structured in one hundred sixty-nine targets and came into force on 1 January 2016. The resolution describes sustainable development as "eradicating poverty in all its forms and dimensions, combating inequality within and among countries, preserving the planet, creating sustained, inclusive and sustainable economic growth and fostering social inclusion" [2]. These targets are expressly considered by the above-mentioned Resolution as "linked to each other and (…) interdependent" [3]. Moreover, the achievement of sustainable development must involve its three dimensions, i.e. economic, social and environmental [4].

Despite the fact that none of the SDGs directly focuses on transportation, this is indeed a paradigmatic sector, since it entails different shades of

[1] Its text and related useful information can be retrieved at *https://sdgs.un.org/2030agenda*, accessed on 30 April 2022.

[2] Para. 13.

[3] *Ibid.*

[4] Para. 2.

sustainability. The most renowned of them is improving its environmental impact, for example by accelerating the transition to zero emission vehicles. Furthermore, the transport sector – much more than others – still experiences a lack of gender equality, at least for some activities therein performed. Moreover, due to the particular technicalities and dangerousness of some of the facilities and activities involved in the sector, it is necessary to grant, with specifically designed rules, safety and security of workers. Finally, it is not possible to deal with sustainability in this sector without considering also the limited resources and capacities of its environments and infrastructures [5].

The year before the adoption of the 2030 Agenda for Sustainable Development, an independent High-Level Advisory Group on Sustainable Transport was appointed, for a period of three years, by the UN Secretary-General Ban Ki-moon with the main aim to submit policy recommendations for promoting accelerated implementation of sustainable transport, connected in particular to the goals of inclusive and equitable growth. The High-Level Advisory Group should also address social development and protection of the global environment and ecosystems, including climate change.

In its Position Paper on Financing Sustainable Transport adopted on 13 July 2015 [6], it is recognized transport's "essential role in countries' economic growth, competitiveness, balanced and livable spatial development, access to water and energy, and food security" and "for social inclusion and improved quality of life".

As for other bodies, the UN Inland Transport Committee (ITC) has identified three main SDGs for its contribution in implementing transport-related targets of the 2030 Agenda: the third, "Ensure healthy lives and promote well-being for all at all ages", the ninth, "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation", and the eleventh, "Make cities and human settlements inclusive, safe, resilient and sustainable" [7].

However, considering it as a whole, the transport sector can be deemed important, either directly or indirectly (i.e. as a means), for the fulfilment of most of the SDGs and the related targets. It has relevance not only, for example, for the environmental dimension of sustainability and, in particu-

---

[5] On this topic, *Gustavo Romanelli/Michele M.Comenale Pinto*, "Trasporto, turismo e sostenibilità ambientale", Diritto dei trasporti 2000, 659, 660.

[6] *https://sustainabledevelopment.un.org/content/documents/7618AdvisoryGroupTransport.pdf*, accessed on 30 April 2022.

[7] Note by the ITC Secretariat *Sustainable Transport in the 2030 Agenda and the Sustainable Development Goals* of 12 December 2016.

lar, under the goals 9 and 11 [8]: its contribution can be considered relevant for all the UN SDGs. In particular, it is necessary to emphasize its role with regard to the social and cultural dimensions of sustainability.

In the foreword to the report *Mobilizing Sustainable Transport for Development*, issued by the above-mentioned High-Level Advisory Group on Sustainable Transport in October 2016, the United Nations Secretary-General Ban Ki-moon recognized that “sustainable transport supports inclusive growth, job creation, poverty reduction, access to markets, the empowerment of women, and the well-being of persons with disabilities and other vulnerable groups. It is also essential to our efforts to fight climate change, reduce air pollution and improve road safety”. The report provides also a definition of sustainable transport as “the provision of services and infrastructure for the mobility of people and goods—advancing economic and social development to benefit today’s and future generations—in a manner that is safe, affordable, accessible, efficient, and resilient, while minimizing carbon and other emissions and environmental impacts” [9].

The SLoCaT Partnership on Sustainable, Low Carbon Transport, for example, considers the role of transports for the fulfilment of thirteen targets in at least eight SDGs [10]: the indirect target “agricultural productivity” under the second SDG; the direct target “road safety” and the indirect one “air pollution” within SDG 3; the indirect target “access to safe drinking water” in the fourth SDG; the direct target “energy efficiency” and the indirect one “renewable energy” under the SDG 7; the direct target “sustainable infrastructure” within SDG 9; the direct target “urban access” and the indirect one “sustainable cities” in the eleventh SDG; the direct target “fuel subsidies” and the indirect one “food loss and waste” under SDG 12 and, finally, the indirect targets “climate change adaptation” and mitigation within the thirteen SDG. The 2019 SLoCaT report describes also that, in their Voluntary National Reviews (VNRs), some countries connected transport infrastructure and services also to other SDGs, some of which were not considered by the partnership itself, such as the first, the fourth, the fifth and the eighth [11].

---

[8] Target 11.2 expressly establishes, “by 2030, [to] provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons”.

[9] P. 10. This definition is based on the 2011 Bogota Declaration on Sustainable Transport Objectives.

[10] SLoCaT (2019), *Sustainable Transport: A Critical Driver to Achieve the Sustainable Development Goals*, Available at: *www.slocat.net/vnr*, accessed on 30 April 2022.

[11] P. 15.

Moreover, the Sustainable Transport Division of UNECE stresses the importance of transportation for fulfilling thirteen SDGs [12]. The first goal, pertaining to "No poverty", is deemed relevant under its targets 1.4 and 1.5, in other words granting access to basic services and reducing humans' exposure and vulnerability to climate-related extreme events. Under the second goal, "Zero hunger", transportation plays a role according to its targets 2.1, because it is a means for enabling "access to food all year round", and 2.a for increasing investment in rural infrastructure. Then, the commission considers also the third goal, related to good health and well-being: transportation plays a role with regard to the number of global deaths and injuries from road traffic accidents. According to the UN Commission, transportation is relevant as a means for achieving also the fourth goal for ensuring access to quality education to all women and men (target 4.3). UNECE identifies transport also as a means for achieving equitable and universal access to safe and affordable drinking water for all under the target 6.1. The next three SDGs are also considered insofar as transportation is useful for achieving some of the related targets, i.e. improving energy efficiency (7.3), protecting labour rights and promoting safe and secure working environments (8.8) and developing "quality, reliable and sustainable [transport] infrastructures" (9.1). Falls within the eleventh goal providing access to "safe, affordable, accessible and sustainable transport systems for all" (11.2). The next goal is considered relevant in order to "reduce food losses along production and supply chains" (12.3), to "rationalize inefficient fossil-fuel subsidies" (12.c) and to "achieve the environmentally sound management of chemicals" (12.4). The transport sector can also contribute to the thirteen SDG for strengthening "resilient and adaptive capacity to climate-related hazards" (13.1) and climate change mitigation (13.3 and 13.a). As for the next goal, concerning life beyond water, the regime and organization of transport services and infrastructures can contribute to prevent and reduce marine pollution (14.1). According to UNECE, under the last SDG, the transport sector is relevant for investment promotion regimes (17.5), for fostering exports from developing countries (17.11) and public-private partnerships (17.17).

From the analysis above it is possible to infer that UNECE has therefore not deemed transportation relevant for the accomplishment of SDGs 5, 10,

---

[12] Francesco Dionori – UNECE, presentation "*How to Achieve Transport – and Trade – related Sustainable Development Goals*" at the conference "*UNECE and the transport specific SDGs Podgorica*", Montenegro 11-12 October 2017 on *https://unece.org/transport-and-sustainable-development-goals*, accessed on 30 April 2022. United Nations, *Transport for Sustainable Development The case of Inland Transport*, 2015. United Nations, *Sustainable transport, sustainable development. Interagency report for second Global Sustainable Transport Conference*, 2021.

15 and 16, respectively addressing gender equality, reduced inequalities, life on land and peace, justice and strong institutions. Actually, through an in-depth analysis of the above-mentioned sustainability goals and the related targets, the transport sector could be considered as playing an important role in their accomplishment, too.

The fifth SDG is meant to obtain gender equality and empower all women and girls. The targets that could be, in particular, considered relevant for the transport sector are, first of all, eliminating any forms of discrimination and violence against women and girls, including trafficking and sexual and other types of exploitation (5.1 and 5.2), in order to introduce policies and organize transport services for protecting women and girls' safety and security and avoiding any discrimination onboard transport means or within the related infrastructures [13] and introducing effective controls meant to prevent human trafficking [14]. Other cross-cutting targets are: granting the effectiveness of women's full participation and their equal opportunities for leadership at all levels of decision-making in political, economic and public life (5.5) and the adoption and full implementation of thorough policies and laws for enhancing gender equality and the empowerment of all women and girls at all levels (5.c).

The tenth SDG is meant to "reduce inequalities within and among countries". The provision of and accessibility to adequate public transport services is crucial for achieving this purpose within a single country and hence among different States [15]. Since its foundation, territorial, social and economic cohesion is pivotal under the European Economic Community, then European Community and finally European Union. Art. 3.3 of the Treaty on European Union (TEU) requests the Union to further it among the Member States. Under Art. 4.2, let. c) of the Treaty on the Functioning of European Union (TFEU), the economic, social and territorial cohesion is a shared competence between the Union and the Member States, which can satisfy the related needs through services of general economic interest (among which, public transport services) according to Art.s 14 and 106.2 of the same Treaty. It is therefore possible to infer that transport services are essential to enable people to improve their living conditions, for exam-

[13] On this matter, see for example, ITF (2018), *Women's Safety and Security: A Public Transport Priority*, OECD Publishing, Paris.

[14] In 2018, for example, ICAO issued the Circular 352, providing for *Guidelines for Training Cabin Crew on Identifying and Responding to Trafficking in Persons. Ruwantissa Abeyratne*, Legal Priorities in Air Transport, Springer, 2019, p. 55 et seq.

[15] ITF, The Economic Benefits of Improved Accessibility to Transport Systems Roundtable, *https://www.itf-oecd.org/economic-benefits-improved-accessibility-transport-systems-roundtable-0*, accessed on 31 August 2022.

ple by seeking job opportunities in different cities or States: consequently, transportation can contribute to the fulfilment of targets 10.1 and 10.2, but also of target 10.7, meant to "facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies".

SDG 15 addresses life on land, by "protect[ing], restor[ing] and promot[ing] sustainable use of terrestrial ecosystems, sustainably manag[ing] forests, combat[ting] desertification, and halt[ing] and revers[ing] land degradation and halt[ing] biodiversity loss". For this purpose, it is necessary to re-consider the planning and organization of transport and logistics infrastructures and services, and foster the development and deployment of sustainable fuels [16]. It is also necessary, for example, to improve the controls in the transport sector in order to fight against illegal wildlife trade.

SDG No 16 is meant to "promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels". Transportation can be deemed relevant under targets 16.1, 16.5, 16.6 and 16.b, because transparent and efficient public services, accessible to all the prospective users without any discriminations can contribute to reduce the feeling of unsafety while walking alone after dark and of discrimination and the cases of corruption and bribery, that are addressed by them. It can also better the government's expenditure and the population's satisfaction with experience of public services.

Following the considerations above, it emerges transport's role as an enabler to achieve the SDGs from different points of view. Actually, fostering sustainability in the transport sector is not a new challenge, but what has changed over the years is the increasing awareness of its effects for most aspects of our life and the new tools that are being implemented, such as specific contract clauses meant to share between the parties to the contract the commitment to a more sustainable transportation, new corporations, green bonds.

The following paragraphs are therefore devoted to briefly examining some of the main issues for achieving sustainability in this sector.

---

[16] See, for example, ICAO Assembly's working paper for the 40th Session Executive Committee Agenda Item 21 "*United Nations 2030 Agenda- Sustainable Development Goals (SDGs). ICAO's activities in support of United Nations 2030 Agenda – Sustainable Development Goals (SDGs)*".

2. *Focus on some challenges for reaching a comprehensive sustainability in the transport sector: the evolution of the international and EU institutions' approach towards environmental sustainability in the transport sector*

Considering environmental sustainability, since the second part of the XX century, several international conventions have been issued for preventing pollution from transport activities or reducing its harmful consequences. However, they concern only specific modalities and activities or polluting substances and often – and particularly in the maritime sector – are the response to severe accidents [17]. Pollution in transports can, for example, affect water (e.g., spills or throwing of polluting substances and garbage, wrecks, coatings), or consist in air or noise pollution, endangering the habitats and survival of many animals.

Moreover, as for single transport modalities and the issues pertaining to the exploitation of the environment and the limited resources and capacities, the United Nations Convention on the Law of the Sea, signed in Montego Bay on 10 December 1982, defines the area of the seabed and ocean floor and the subsoil thereof as "common heritage of mankind" [18]. Under the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (the so-called Outer Space Treaty), opened for signature by the three depository Governments (the Russian Federation, the United Kingdom and the United States of America) on 27 January 1967 and entered into force on 10 October 1967, "the Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means" [19].

The contribution of transport to negative impacts on the environment, on the one hand, and its importance for climate action and sustainability under the social and economic perspectives, on the other, was notably recognized by the Report "Our Common Future" adopted at the end of the 1987 World Commission on Environment and Development (WCED).

Further advances concerning also the transport sector occurred during the 1992 United Nations Conference on Environment and Development (UNCED – also known as the Earth Summit) held in Rio de Janeiro, in the United Nations Framework Convention on Climate Change (UNFCCC)

---

[17] On this topic, *Romanelli/Comenale Pinto* (fn. 5), p. 659.

[18] Art. 136.

[19] Art. II.

and the plan of action resulting thereof, i.e. the Agenda 21 [20], where transportation is considered under different perspectives and for diversified purposes [21]. As for environment pollution, in particular, it was remarked that approximately a quarter of energy-related global greenhouse gas emissions comes from it. Moreover, in 1997 the UN General Assembly remarked the future huge increasing demand for energy and the role of transport as a driver for achieving sustainability.

Just to mention only few of the further sources in the evolution of the UN's action on climate and sustainability, in the United Nations Millennium Declaration, adopted on 8 September 2000 [22], the improvement of transit transport systems in landlocked developing countries through public resources and technical assistance by bilateral and multilateral donors was recognized as an instrument for overcoming the impediments of geography.

The 2002 World Summit on Sustainable Development and the resulting Johannesburg Plan of Implementation (JPOI) are worth to remember, too. According to the Plan, improving transportation (and especially public transport services) and the related infrastructures, along with goods delivery networks, also through partnerships, falls within the tools for fighting against poverty, for changing unsustainable patterns of consumption and production, for safeguarding and managing natural resources that are at the basis of economic and social development.

Ten years later, during the 2012 United Nations Conference on Sustainable Development (a.k.a. Rio +20) the centrality of transportation and mobility for sustainable development was confirmed. During that conference, the process that led to the seventeen SDGs was launched and guidelines on green economy policies were adopted. Further progresses have been achieved so far during the Conferences of the Parties to the UNFCCC (COPs) that followed it.

With regard to the EU level, transportation (including the Trans-European Transport Network, TEN-T) and the protection of the environment have always been core competences of the European Community, then Union [23]. Many EU Member States or, in certain cases, the EU itself

---

[20] Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992 (United Nations publication, Sales No. E.93.I.8 and corrigenda), vol. I, Resolutions Adopted by the Conference, resolution 1, annex II.

[21] The text can be retrieved at *https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf*, accessed on 30 April 2022.

[22] General Assembly resolution No 55/2.

[23] As for the environment, see the tenth para and Art.s 3.3, 21.2, let. d) and f), TEU. They are shared competences with Member States according to Art.s 4.2, let. e), g) and h),

are party to international conventions aimed at preventing pollution and regulating the related responsibilities and its organs and agencies contribute to drafting the technical implementing provisions within the relevant international bodies. Moreover, in certain cases the technical standards and requirements in force within the EU territory are stricter than those adopted at the international level.

The first environmental action plan adopted by the Commission dates back to 1973, but the EU policy concerning sustainability of the transport sector was particularly improved in the 1990s. The two action plans adopted in 1993 [24] and in 1997 [25] set longer term objectives and are distinguished by a more global approach. The two plans targeted five sectors, among which transports. These sectors cross-cut the programs' themes and the related targets. The seventh Environmental Action Programme (EAP) [26] was enacted in 2014: it provided for three thematic priorities and four enabling framework ones. Transport was no more an explicit target, but one of the sectors interested by the programme's implementation.

Concerning specifically the Common Transport Policy (CTP), the 1992 Commission's White Paper "The Future Development of the Common Transport Policy: A Global Approach to the Construction of a Community Framework for Sustainable Mobility" [27], recognized as one of the new challenges for the CTP the "integration of environmental objectives".

The need of integrating the CTP with sustainable development was furthermore urged, at that time, also by the 1997 Treaty of Amsterdam, which came into force on 1 May 1999. The Cardiff European Council in June 1998 promoted environmental integration into the EU policies in the different sectors and asked the sector Councils "to establish their own strategies for giving effect to environmental integration and sustain-

---

90 to 100, 170 to 172 and 191 to 193, TFEU. The legal basis for EU action is the Treaty on the Functioning of the European Union (TFEU).

[24] European Commission, Directorate-General for Environment, *Towards sustainability*: a *European Community programme of policy and action in relation to the environment and sustainable development*, in OJ No C 138, of 17 May 1993, p. 7.

[25] European Commission, Directorate-General for Environment, *Towards sustainability: the European Commission's progress report and action plan on the fifth programme of policy and action in relation to the environment and sustainable development*, Publications Office, 1997. *M. Laura Giagnorio Saviotti/Specchiarello Michela*, "La posizione della Unione Europea sullo sviluppo sostenibile", Lavoro e previdenza oggi, 1998, 1054.

[26] European Commission, Directorate-General for Environment, *General Union environment action programme to 2020: living well, within the limits of our planet*, Publications Office, 2014.

[27] COM (92) 494 final.

able development within their respective policy areas" [28].

The Transport Council adopted its Strategy for the years 1999-2001 on 6 October 1999. In November 1999, the Commission adopted the working paper "From Cardiff to Helsinki and beyond" that included the assessment of the strategies undertaken by different sectoral Councils for protecting the environment. As for the transport sector, the working paper recommended to define the meaning of sustainable transport and to set long-term environmental targets.

The 2001 White Paper "European Transport Policy for 2010: Time to decide" [29] is informed, among the others, by the principle that "a modern transport system must be sustainable from an economic and social as well as an environmental viewpoint" [30]. The means identified for pursuing environment sustainability in the sector are shifting between modes of transports in favour of more environmentally friendly ones, as evidenced also during the European Council's meeting in Gothenburg in June 2001, and including external costs, such as those related to the environment, in transport charges [31].

In 2011 the European Commission adopted the comprehensive strategy "Transport 2050", aimed at boosting mobility while improving the competitiveness and sustainability of the transport sector: the White Paper "Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system" was enacted [32]. It recognized the importance of transport for improving economy and society, but also the need of its sustainability, to be achieved also through international cooperation. For this purpose, new technologies for vehicles and traffic management are envisaged as important tools – among others – for lowering transport emissions.

Moreover, in 2016 an EU "Strategy for low-emission mobility" was launched: it is based on three main priority areas for action, i.e. increasing the efficiency of the transport system, digital technologies and further-

---

[28] Presidency Conclusions, para 34.

[29] European Transport Policy for 2010: Time to Decide – White Paper. COM (2001) 370 final, 12 September 2001. *Stefano Zunarelli*, "Il Libro Bianco sui trasporti: elementi di novità e di continuità della politica dell'Unione europea nel settore dei trasporti", Diritto dei trasporti, 2002, 463.

[30] P. 6.

[31] See also European Commission, *Fair Payment for Infrastructure Use: A Phased Approach to a Common Transport Infrastructure Charging Framework in the EU*. White Paper. COM (98) 466 final, 22 July 1998. *Giovan Battista Di Miceli*, "Politica dei trasporti e politica ambientale", Aggiornamenti sociali 3 (1996), 211.

[32] COM(2011) 144 final.

ing modal shifts; speeding up the deployment of low-emission alternative energy for transport; and moving towards zero-emission vehicles [33]. For this purpose, that same year the European Strategy on Cooperative Intelligent Transport Systems and Connected and Automated Mobility started, too [34]. In May 2017, the *Strategic Transport Research and Innovation Agenda* (STRIA) [35] was adopted within "Europe on the Move" package.

Over the years, the EU institutions have also launched financing programmes and supported national projects financed with public resources meant to encourage the modal shift in favour of more environmentally friendly modalities and the related infrastructures. Some examples are, for the first case, the TEN-T [36] and several national projects providing public financing for shifting relevant parts of haulage from road carriage to rail or waterborne transport [37], for the second. Currently, the goals set by the

[33] Communication COM(2016) 501 of 20 July 2016, *A European Strategy for Low-Emission Mobility*.

[34] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions COM/2016/0766 final, *A European strategy on Cooperative Intelligent Transport Systems, a milestone towards cooperative, connected and automated mobility*; Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions COM/2018/283 final, *On the road to automated mobility: An EU strategy for mobility of the future*.

[35] European Commission Staff Working Document SWD (2017) 223, *Towards Clean, Competitive and Connected Mobility: The Contribution of Transport Research and Innovation to the Mobility Package*; European Commission Communication COM (2017) 0283 Final, *Europe on the Move. An Agenda for a Socially Fair Transition towards Clean, Competitive and Connected Mobility for All.*

[36] The TEN-T was launched with the Council Decision No 93/629/EEC of 29 October 1993 on the creation of a trans-European road network, following the 1992 Commission's White Paper. Following the end of the 1993 decision's validity on 30 June 1995, the Council Regulation (EC) No 2236/95 of 18 September 1995 laying down general rules for the granting of Community financial aid in the field of trans-European networks, and the Decision No 1692/96/EC of the European Parliament and of the Council of 23 July 1996 on Community guidelines for the development of the trans-European transport network, that was replaced by the Decision No 661/2010/EU of the European Parliament and of the Council of 7 July 2010 on Union guidelines for the development of the trans-European transport network. Currently, the TEN-T is governed by the Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU, as subsequently modified, and the Regulation (EU) 2021/1153 of the European Parliament and of the Council of 7 July 2021 establishing the Connecting Europe Facility and repealing Regulations (EU) No 1316/2013 and (EU) No 283/2014.

[37] Some examples are the recent Italian projects so-called Marebonus and Ferrobonus. See *Luca Marfoli*, "Mobilità sostenibile e trasporto intermodale", Rivista di Diritto

above-mentioned EU policies have been pursued also within the EU Sustainable and Smart Mobility Strategy [38], the European Green Deal [39] and the NextGenerationEU (NGEU or NextGen) [40]. In particular, within the European Green Deal, the European Climate Law [41] sets the ambitious goal of climate neutrality by 2050, whereas the last package identifies six policy pillars for MSs' plans: green transition, digital transformation, inclusive growth and jobs, social and territorial cohesion, health and resilience, and policies for the next generation. Some of them (i.e. the first, second and third) are directly linked also to transportation and mobility, but, according to the previous analysis, projects involving also the transport sector could be considered appropriate also for the other pillars. As for the implementation of the NGEU by the single MSs, most national projects in the transport field provide for investments in modern and clean vehicles and recharging infrastructures, the improvement of public transport and the promotion of active mobility [42].

---

dell'Economia, dei Trasporti e dell'Ambiente, 2013, 19; *Chiara Vagaggini*, "Il "Marebonus": il nuovo incentivo del settore marittimo", Rivista del Diritto della Navigazione, 2017, 749.

[38] European Commission, Communication COM/2020/789, *Sustainable and Smart Mobility Strategy. Putting European Transport on Track for the Future*, 9 December 2020.

[39] European Commission, Communication COM/2019/640 Final, *The European Green Deal*.

[40] Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions COM(2020) 456 final, *Europe's moment: Repair and Prepare for the Next Generation*; Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions COM/2020/442 final, *The EU budget powering the recovery plan for Europe*; Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions COM(2020) 440 final, *Adjusted Commission Work Programme 2020*; Council Regulation (EU) 2020/2094 of 14 December 2020 establishing a European Union Recovery Instrument to support the recovery in the aftermath of the COVID-19 crisis; Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088; Regulation (EU) 2021/240 of the European Parliament and of the Council of 10 February 2021 establishing a Technical Support Instrument; Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility.

[41] Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999.

[42] EU Parliament's briefing *Transport trends in national recovery and resilience plans*, 21 February 2022, available in *https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698765/EPRS_BRI(2021)698765_EN.pdf*, accessed on 30 September 2022.

2.1. *Socio-labour conditions*

At the international level, there are several International Labour Organization (ILO) Conventions covering some specific issues of working conditions in general. Many conventions specifically concern the transport sector. They were concluded thanks to the cooperation among the ILO, the international organizations established for each transport modality, such as the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO), and the Contracting States. The most notable aspects are that many of them concern seafarers and dockers: few of these conventions deal with the other transport modes [43]. Working conditions in the transport sector are also governed by international instruments approved within the single relevant organizations, mostly for safety and security issues, according to their respective competence.

As a consequence, the international framework could be considered fragmented.

In the EU, the regime and policies in the area of employment fall within the single MS's competence, whereas, social policy is a shared competence between the EU and the MSs [44]. However, the TFEU requires MSs to coordinate their employment policies and the EU to ensure it with guidelines [45]. The EU institutions can make provisions affecting the working conditions while acting in an area falling within their exclusive or shared competence, such as, for example, for ensuring an effective competition in liberalized markets, for implementing the freedom of movement of workers [46] and the creation of the internal market or safety and security. According to Art. 9 TFEU, "in defining and implementing its policies and activities, the Union shall take into account requirements linked to the promotion of a high level of employment, the guarantee of adequate social protection, the fight against social exclusion, and a high level of education, training and protection of human health".

Among the initiatives for coordinating the national social and employment policies in general, it is possible to recall the Community Charter of Fundamental Social Rights for Workers, adopted on 9 December 1989, in order to ensure uniform principles applicable to workforce. In 2017, at the Gothenburg Summit, the European Pillar of Social Rights was proclaimed.

---

[43] Annex to ILO working paper No 298, Working Paper "Promoting the employment women in the transport sector – Obstacles and policy options", by Prof. Peter Turnbull.

[44] Art. 4.2, let. b), TFEU.

[45] Art.s 2.3, 5.2 and 5.3.

[46] Ch. I, Title IV, TFEU.

It establishes twenty principles to which national regimes should conform.

As for the transport sector, there are no general common provisions at the EU level, but sector specific sources meant to implement the international conventions within the EU or to ensure adequate social protection and safety and security in certain activities, which could be affected by uncontrolled unfair competition among transport undertakings.

2.2. *Women and transports*

The transport sector has traditionally been mainly a male-dominated industry, especially for the most sector-specific and technical jobs. These issues have often found it difficult to emerge within the political discussions at the different levels. At the international one, there is no uniform instrument and these problems have not been discussed within the EU for many years.

Moreover, the present subject entails two different perspective: the role and working conditions of women as professionals or workers in this sector, on the one hand, and women as passengers and users of public transport services, on the other.

As for the first aspect, according to some studies, in 2020 women were on average the 16 % of total workforce in the different transport sectors and modes[47]. This percentage could probably decrease if sector-specific and technical jobs and top management levels are considered. Most of women employed in the transport sector, work in land transport, but they represent only the 14.6% of the employees. On the contrary, in water transport they represent the 20% of the workforce. This share increases in the air transport, where women account for the 42% of the workforce[48].

Gender as a transport policy issue, in order to facilitate women's access to transport jobs, was introduced, for the first time in the EU, in the 2009 European Commission's communication "A sustainable future for transport: towards an integrated, technology-led and user friendly system"[49].

[47] European Parliament at a glance webpage, 'Women working in transport', *https://www.europarl.europa.eu/RegData/etudes/ATAG/2022/729293/EPRS_ATA(2022)729293_EN.pdf*, accessed on 8 September 2022.

[48] Number and share of women employed in transport,

[49] COM/2009/0279 final, whereas 53. On this topic, see also Silvia Sansonetti/Eamonn Davern, "*Women and transport*", study commissioned by the European Parliament's Policy Department for Citizens' Rights and Constitutional Affairs, December 2021, available at *https://www.europarl.europa.eu/RegData/etudes/STUD/2021/701004/IPOL_STU(2021)701004_EN.pdf*, accessed on 7 September 2022.

In 2014 the Commission published the report "She Moves – Women's issues in transportation" [50], which addresses both the aspects considered in this paragraph.

Following the above-mentioned 2011 White Paper, on 9 September 2015 the European Parliament issued the "Resolution on the implementation of the 2011 White Paper on Transport: taking stock and the way forward towards sustainable mobility", where it was remarked the need of measures to enhance "women's participation in the transport labour market, remove possible existing barriers, and ensure equal treatment of men and women by addressing existing remuneration and advancement gaps".

Women's working conditions in the transport sector are affected both by general sources, such as the Directive (EU) 2019/1158 of the European Parliament and of the Council of 20 June 2019 on work-life balance for parents and careers and repealing Council Directive 2010/18/EU, and by sector-specific provisions, which however often do not include gender considerations.

It is worth to mention also the platform "Women in Transport – EU Platform for change", launched by the Commission in 2017 and meant to promote women's employment and equal opportunities in the sector.

With regard to the second of the aspects mentioned at the beginning of this paragraph, when planning transport services, it is necessary to consider also women's different needs, often linked to their care-giver roles. Women, in fact, tend to use public transport services more and at different times during each day than men and need also safer and more efficient transport services. These problems could be solved by including women in decision-making processes [51].

In its Resolution of 11 September 2012 on the role of women in the green economy [52], the EU Parliament stated that "social sustainability involves a social order permeated by gender and social equality regardless of gender, ethnicity, colour, religion, sexual orientation, disability or political opinion", recalled that, whereas women in general do not affect the environment as much as men, they are much more affected by climate change and environmental policies, and urged the EU Commission and the MSs to better the quality and quantity of public transport services.

---

[50] European Commission, Directorate-General for Mobility and Transport, She moves: women's issues in transportation, Publications Office, 2014, *https://data.europa.eu/doi/10.2832/62974*.

[51] *Robin Law*, "Beyond 'women and transport': towards new geographies of gender and daily mobility", Progress in Human Geography, 23 (1999), 567; *Francesca Sperotti*, "Donne e trasporti: un binomio da potenziare", Diritto delle relazioni industriali, 2011, 907.

[52] 2012/2035(INI).

3. *Conclusions. Current perspectives and proposed instruments*

At the end of this bird's eye view analysis on sustainability issues and opportunities in the transport sector, it is possible to conclude that it is indeed relevant for almost all of the current goals. However, one of the main flaws affecting it is the scarce awareness among people and the institutions, in particular the domestic ones, and the lack of co-ordination and uniformity in their approaches towards the main issues. This is evidenced by the fact that the transport sector was able to attract less than 13% of all environmental funding[53].

The relevant law addressing the sector at the different levels appear to be fragmented, with the predominance of only some modalities or some aspects within the single one. Furthermore, some aspects are still not fully considered by policy and law makers at the international level.

A better integration and consideration of the several dimensions of sustainability in the transport sector at all levels and in transport planning, policy and investment is crucial. For this purpose, it was suggested both a vertical integration, involving all the levels of government, and a horizontal one, dealing with the different modes, territories and sectors[54].

For achieving the aim to raise awareness on the involvement of transports in sustainability, hard law and soft law instruments can be applied.

As for soft law instruments, they can have different degrees of strength. First of all, there are social and market concerns, such as the moral suasion and influence by the market and stakeholders.

Second, contract and corporate tools can be envisaged. Fall within the first category climate clauses incorporating commitments by the party or enabling to terminate the contract if the customer finds a greener offer of services by another supplier, that the current one cannot match[55].

With regard to corporate tools, companies can subject themselves to Voluntary Sustainability Standards (VSS). They can be described as norms and standards drafted for ensuring that a product meets certain sustainability (environmental, social and economic) targets with regard to its qualities or attributes, production, processing methods and transport. VSS are

---

[53] *Nancy Vandycke*, "Envisioning the Transport We Need Goals of the UN High-Level Advisory Group on Sustainable Transport, in Connections", Transport & ICTs, September 2015.

[54] High-Level Advisory Group on Sustainable Transport's report "Mobilizing Sustainable Transport for Development", October 2016.

[55] An example is the 'Termination for Greener Supplier' clause or 'Agatha's Clause' drafted by the Chancery Lane Project and available at *https://chancerylaneproject.org/climate-clauses/termination-for-greener-supplier/*, accessed on 31 August 2022.

considered important tools for the fulfilment of the SDGs, however it is not possible to actually assess their efficacy[56].

The corporate aspects include also the company's legal status or structure. One of the proposed means for the transport sector, in particular for community transport services, are social enterprises[57].

As for hard law and the tools that can be employed by the lawmakers, it is possible to impose specific duties or establish incentives. The law provisions can also directly affect the contract's content, as exemplified by the Italian regime of road freight transport, where, in the absence of a written contract evidencing the contrary, also the client, the shipper, the consignor and the goods' owner are liable for infringements to traffic rules[58].

In addition, the competent public authorities can impose specific sustainability provisions, technical specifications, conditions for performance of contracts, social clauses and VSSs in public procurements or concession awards.

On the contrary, requirements concerning the tenderers' legal status in public procurement procedures would be contrary to the principles of non-discrimination and neutrality as regards the system of property ownership in the Member States in the TFEU: in fact, set aside procurements are currently prohibited under the EU law.

Depending on the specific regime of public procurement, it could be possible to include sustainability criteria for assessing the tenders and awarding the contract or concession (social procurement)[59]. With regard to the transport sector, Art. 82.2 of the Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC, specifies that the criterion of the most economically advantageous tender from the point of view of the contracting entity must be applied according to "the price or cost, using a cost-effectiveness approach (…) and may include the best price-quality ratio, which shall be assessed on the basis of criteria, including qualitative,

[56] UNCTAD, Reflecting on Sustainability Standards: Trade and the Sustainability Crisis, 2022, in *https://unctad.org/system/files/official-document/ditctab2022d4_en.pdf*, accessed on 7 September 2022.

[57] *Cristian Negrutiu/Cristinel Vasiliu/Calcedonia Enache*, "Sustainable Entrepreneurship in the Transport and Retail Supply Chain Sector", J. Risk Financial Manag. 13 (2020), 267; *Varsolo Sunio/Miguel Laperal/Iderlina Mateo-Babiano*, "Social enterprise as catalyst of transformation in the micro-mobility sector", Transportation Research Part A: Policy and Practice, 138 (2020), 145.

[58] Art. 7 of Law No 286/2005.

[59] SIGMA, *Incorporating Social Considerations into Procurement*, January 2011.

environmental and/or social aspects, linked to the subject-matter of the contract in question", as exemplified by the same provision.

Finally, public financing, at the international, EU and domestic level, is still relevant, especially in developing countries, though private-public partnerships should be encouraged[60].

For this purpose, an integrated approach among the different government levels and public policies and investments with a long-term view could achieve the most effective results. In this manner, on the one hand, local authorities and municipalities, which can have a closer vision of their communities' needs and their territories' situation, could be empowered and their financial capacity could be increased[61]. On the other, however, it is necessary to coordinate the local instances with a holistic approach at the higher levels.

[60] High-Level Advisory Group on Sustainable Transport's report "*Mobilizing Sustainable Transport for Development*", October 2016; Nancy Vandycke (fn. 52).

[61] *Ibid.*

Matteo Del Chicca

SUSTAINABLE TRANSPORT: SOME REMARKS ABOUT THE INTERNATIONAL LEGAL FRAMEWORK

Table of contents: 1. Introduction. – 2. A possible meaning of sustainable transport for the international community. – 3. Some international agreements concerning (also) sustainable transport. – 4. Concluding remarks.

1. *Introduction*

As it could be seen also in the chapters of this collected book, some States have included sustainable transport in their national legal orders, with different degrees of codification and implementation. In this regard, it could be reminded – for example – the Economic and Social Development Plan 2016-2020 of Bolivia, which clearly identifies sustainable transport as a prerequisite for ensuring full access to good quality and sustainable basic services, including also concrete goals for multimodal transport solutions and sharing expected results [1]. In addition, it should be cited the National Urban Policy of Jordan, aimed to increase the share of public transport from 13% to 25% by 2025, to reduce vehicle fuel consumption and emissions, and to lessen motorized vehicle travel, particularly in densely populated areas [2].

Other States actually have not included sustainable transport in their domestic law yet, but they have implemented concrete proposals in order to enhance it. For example, transport measures have been proposed by Japan, which include improving traffic flow, introducing low-carbon aviation and maritime strategies, and promoting mode shift to public transport

[1] Bolivia, "Economic and Social Development Plan 2016-2020 within the framework of integrated development for living well", 2016.

[2] See "Mainstreaming Transport and Mobility into Jordan's National Urban Policy Thematic Guide", United Nations Human Settlements Programme, 2021.

and railways, next-generation automobiles, eco-driving and car sharing [3]. Ivory Coast proposed to use territorial planning to promote smart development and reduce travel demand, to advance urban transport plan development (e.g. Abidjan urban train), and to facilitate purchase of low-emission vehicles, as well as scrapping of high-emission vehicles through standards, incentives, or obligations [4]. It should be also recalled the Spanish Preliminary Draft of the Sustainable Mobility Law, which intends to apply a new model of mobility and transport in Spain, aimed to promote low-emission transport and to guarantee equality among people and territories, both in cities and rural areas, recognising mobility as a right: for example, such Spanish draft law would introduce a duty for companies with over 500 workers to have a sustainable transport plan in Spain [5].

National laws notwithstanding, what is the legal framework of sustainable transport at the international law level [6]?

Firstly, it must be clarified what sustainable transport could mean for the international community. Such meaning will be analysed taking also into consideration the 2030 Agenda for Sustainable Development and the Sustainable Development Goals established by such Agenda [7].

After examining the international community perspective about sustainable transport, some possible sources of international law concerning sustainable transport will be then surveyed, in order to assess if and how far such matter is currently regulated by international rules [8]. Finally, some concluding remarks will be made, highlighting also some possible issues with the contemporary international law framework ruling sustainable transport [9].

---

[3] See "Transport and Climate Change: How nationally determined contributions can accelerate transport decarbonization", NDC Partnership.

[4] *Ibidem*.

[5] See "Anteproyecto de Ley de Movilidad Sostenible", *Ministerio de Transportes, Movilidad y Agenda Urbana*, sent the first time to Spanish Council of Ministers on 1 March 2022.

[6] This chapter will not analyse sustainable transport in the law of international regional organizations.

[7] *Infra* par. 2.

[8] *Infra* par. 3.

[9] *Infra* par. 4.

2. *A possible meaning of sustainable transport for the international community*

What could sustainable transport mean for the international community? At the present time we have a definition of sustainable transport given by the United Nations Secretary-General's High-level Advisory Group on Sustainable Transport. It must be considered that a UN Secretary-General Advisory Group is a team of experts established by the UN Secretary-General in order to give advices on a specific topic, to make clear some issues, eventually proposing ideas or solutions, but it has not properly an international law-making power. This is the reason because the definition given by the UN Secretary-General's High-level Advisory Group on Sustainable Transport is not a legally binding definition, i.e. it is not an international *hard* law definition, currently it could be at most an international *soft* law definition.

Anyway, in its 2016 report, such UN Secretary-General's High-level Advisory Group defined sustainable transport as follows: "the provision of services and infrastructure for the mobility of people and goods - advancing economic and social development to benefit today's and future generations - in a manner that is safe, affordable, accessible, efficient, and resilient, while minimizing carbon and other emissions and environmental impacts" [10].

Even if it is not an international hard law definition of sustainable transport, it could be a suitable starting point in order to understand what sustainable transport could mean for the international community.

On the basis of such definition, sustainable transport surely looks strongly interconnected with sustainable development. In this regard, as is well known, the UN General Assembly – with the resolution A/RES/70/1, on 25 September 2015 – adopted a new global sustainable development framework: the 2030 Agenda for Sustainable Development (the '2030 Agenda') [11]. Even just looking at the wording used in the sustainable transport definition we could find several proximities between it and the previous UN General Assembly resolution on 2030 Agenda: for example, both refer to "economic and social development" [12], to "future generations" [13], and to "environ-

[10] "Mobilizing Sustainable Transport for Development", Summary of the Report by the United Nations Secretary-General's High-Level Advisory Group on Sustainable Transport, October 2016.

[11] A/RES/70/1, "Transforming our world: the 2030 Agenda for Sustainable Development", Resolution adopted by the General Assembly on 25 September 2015.

[12] *Ibidem*, parr. 30, 35, 41 and 63.

[13] *Ibidem*, Preamble (p. 2) and parr. 18, 53.

mental impacts"[14], as well as both make use of adjectives like "safe"[15], "affordable"[16], "accessible"[17], "efficient"[18], and "resilient"[19]. Although the 2030 Agenda resolution sometimes used the wording here cited in topics slightly different from (even if connected to) sustainable transport, anyway such identical terms give an account of the linkages between sustainable development and sustainable transport. Additionally, paragraph 27 of the 2030 Agenda resolution is aimed "to build strong economic foundations for all the countries"[20]: in this context, sustainable transport systems are considered as one of the factors (along with many others) which could be "essential for prosperity"[21].

Furthermore, the 2030 Agenda has at its core seventeen Sustainable Development Goals[22] and it must pointed out that sustainable

---

[14] *Ibidem*, Goal 11 (p. 22).

[15] *Ibidem*, parr. 7, 25, 29, 34, as well as in several Goals: 2 (p. 15), 3 (p. 16), 4 (p. 17), 6 (p. 18), 8 (p. 20), 10 and 11 (p. 21).

[16] *Ibidem*, parr. 7, 27, as well as in many Goals: 3 (p. 16-17), 4 (p. 17), 6 (p. 18), 7 (p. 19), 9 (p. 20-21), 11 (p. 21).

[17] *Ibidem*, parr. 48, 74 (g), Goal 11 (p. 21-22).

[18] *Ibidem*, parr. 34, 46, 90, Goal 12 (p. 22-23).

[19] *Ibidem*, Preamble (p. 1), parr. 7, 9, 27, and Goals 2 (p. 15), 9 (p. 20), 11 (p. 21-22).

[20] *Ibidem*, par. 27.

[21] "Sustained, inclusive and sustainable economic growth is *essential* for prosperity. This will only be possible if wealth is shared and income inequality is addressed. We will work to build dynamic, sustainable, innovative and people-centred economies, promoting youth employment and women's economic empowerment, in particular, and decent work for all. We will eradicate forced labour and human trafficking and end child labour in all its forms. All countries stand to benefit from having a healthy and well-educated workforce with the knowledge and skills needed for productive and fulfilling work and full participation in society. We will strengthen the productive capacities of least developed countries in all sectors, including through structural transformation. We will adopt policies which increase productive capacities, productivity and productive employment; financial inclusion; […] *sustainable transport systems*; and quality and resilient infrastructure" (italics added), *ibidem*.

[22] It could be reminded that the seventeen Sustainable Development Goals are the followings: "Goal 1: End poverty in all its forms everywhere. Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture. Goal 3: Ensure healthy lives and promote well-being for all at all ages. Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Goal 5: Achieve gender equality and empower all women and girls. Goal 6: Ensure availability and sustainable management of water and sanitation for all. Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all. Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. Goal 10: Reduce inequality within and among countries. Goal 11:

transport looks linked to many of them.

Firstly, sustainable transport is deeply and widely connected to Sustainable Development Goal 11, i.e. “Make cities and human settlements inclusive, safe, resilient and sustainable”. Particularly, Goal 11.2 explicitly states to “[…] provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons” [23], thus making evident the broad and profound connection between sustainable transport and Sustainable Development Goal 11. As mentioned earlier, the definition of sustainable transport (given by UN Secretary-General’s High-level Advisory Group) recalls the Goal 11 (especially the Goal 11.2) even in the wording, since also sustainable transport – according to its definition – should be, among other things, “safe, affordable, accessible” [24]. Indeed, sustainable transport definition recalls Goal 11 also for the content, for example stating to minimize “carbon and other emissions and environmental impacts”, thus referring to Goal 11.6, which is aimed to “reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality” [25].

Moreover, sustainable transport is inevitably linked also to several additional Sustainable Development Goals: for example, to Goal 3 (“Ensure healthy lives and promote well-being for all at all ages”) [26], to Goal 7 (“Ensure access to affordable, reliable, sustainable and modern energy for

---

Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 12: Ensure sustainable consumption and production patterns. Goal 13: Take urgent action to combat climate change and its impacts. Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development”, *ibidem*, p. 14.

[23] *Ibidem*, p. 21.

[24] The definition of sustainable transport given by UN Secretary-General’s High-level Advisory Group on Sustainable Transport, mentioned earlier, is here recalled for the sake of convenience: “the provision of services and infrastructure for the mobility of people and goods - advancing economic and social development to benefit today’s and future generations - in a manner that is safe, affordable, accessible, efficient, and resilient, while minimizing carbon and other emissions and environmental impacts”.

[25] A/RES/70/1, p. 22.

[26] *Ibidem*, p. 16-17.

all")[27], to Goal 8 ("Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all")[28], to Goal 9 ("Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation")[29], to Goal 12 ("Ensure sustainable consumption and production patterns")[30], and to Goal 13 ("Take urgent action to combat climate change and its impacts")[31]. Goal 3.6, for example, is specially intended to "halve the number of global deaths and injuries from road traffic accidents"[32], whereas Goal 7.a wishes to "enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology […]"[33].

Anyway, the large number of Sustainable Development Goals related to sustainable transport should not wonder, because the seventeen Sustainable Development Goals were thought in fact as "integrated and indivisible, global in nature and universally applicable […]"[34]. Furthermore, the UN Secretary-General's High-level Advisory Group on Sustainable Transport attitude towards Sustainable Development Goals has been made clear, stating that "transport sits at the intersection of many SDGs" and that "a recent assessment of the SDGs commissioned by the High-level Advisory Group found that sustainable transport will be central to the implementation of many of the SDGs"[35].

---

[27] *Ibidem*, p. 19.

[28] *Ibidem*, p. 19-20.

[29] *Ibidem*, p. 20-21.

[30] *Ibidem*, p. 22-23.

[31] *Ibidem*, p. 23.

[32] *Ibidem*, p. 16.

[33] *Ibidem*, p. 19.

[34] *Ibidem*, par. 55. On this topic see also, for example: *Prajal Pradhan/Luís Costa/Diego Rybski/Wolfgang Lucht/Jürgen P. Kropp*, "A Systematic Study of Sustainable Development Goal (SDG) Interactions", Earth's Future 2017, p. 1169-1179; *Khanyisa B. Mantlana/Malebajoa A. Maoela*, "Mapping the interlinkages between sustainable development goal 9 and other sustainable development goals: A preliminary exploration", Business Strategy and Development 2020, Vol. 3, Issue 3, p. 344-355; *Mariia Kostetckaia/Markus Hametner*, "How Sustainable Development Goals interlinkages influence European Union countries' progress towards the 2030 Agenda", Sustainable Development 2022, p. 1-11.

[35] "Secretary-General's Advisory Group on Sustainable Transport welcomes new agenda", United Nations - Department of Economic and Social Affairs News, 25 September 2015.

3. *Some international agreements concerning (also) sustainable transport*

According to what was observed in the previous paragraph, from a general point of view sustainable transport looks primarily based on the 2030 Agenda and on many of its Sustainable Development Goals. It is certainly true that "Sustainable transport is fundamental to progress in realizing the promise of the 2030 Agenda for Sustainable Development and in achieving the 17 Sustainable Development Goals" [36]; but it looks equally true that sustainable transport could not properly advance without a synergic boost from the 2030 Agenda and from the Sustainable Development Goals as well.

From this point of view, one issue is that 2030 Agenda and the Development Goals seem very far to be achieved still nowadays. In this regard, it must be quoted what the Secretary-General of the UN declared in the Sustainable Development Goals Summit, held on September 2019 during the 74th session of the UN General Assembly: "we are making progress, but let us be clear: we are far from where we need to be. We are off track" [37].

The inertia of the international community to move forward the Development Goals at a faster pace is maybe due to the fact that such Goals – and the 2030 Agenda – are not strictly speaking legally binding, because they have been produced by a UN General Assembly non-binding resolution [38]. Once again, as we have seen for the definition of sustainable transport before [39], they could be at most considered as international soft law tools.

Anyway, it must be underlined that soft law is an important aspect of international law for many reasons, *inter alia* since it usually takes care of new trends of the international community. Additionally, soft law often arises when there is not a definitive will of the States to undertake an obligation yet, but there is some willingness of the States to go towards an obligation: for such reason, soft law is frequently able to induce States to create new treaties, or to give rise to new international customary law (thus soft law sometimes evolves in hard law) [40]. The 2030 Agenda and the Sustainable

[36] "Mobilizing Sustainable Transport for Development", p. 2.

[37] "Sustainable Development Summit: 'We must step up our efforts - now', Guterres declares", United Nations News, 24 September 2019.

[38] Except concerning UN budgetary matters (see art. 17 of UN Charter), as is well known, General Assembly resolutions are non-binding.

[39] *Supra* par. 2.

[40] The literature on international soft law is very wide; see, for example: *Winfried Lang*, "Die Verrechtlichung Des Internationalen Umweltschutzes: Vom 'Soft Law' Zum 'Hard Law'", Archiv des Völkerrechts 1984, Vol. 22 (3), p. 283-306; *Pierre-Marie Dupuy*, "Soft Law

Development Goals, as well as the role played by sustainable transport in and through them, must therefore not be underestimated.

Despite the relevance of such international soft law aspects of sustainable transport, are currently in force any international hard law rules on sustainable transport? It seems that apparently there are not any rules of international customary law on this matter, perhaps because the international customary law fundamental element of "State practice" is still far to be fulfilled on this subject. Similarly, there is not an international *ad hoc* agreement specifically regulating sustainable transport nowadays.

Sustainable transport, as we have seen also in the previous paragraph, is nonetheless a complex matter, composed of several elements, i.e. a safe, affordable, accessible, efficient, and resilient mobility of people and goods, which includes a mitigation of environmental impacts, and an advancement of economic and social development (also for the future generations) [41]. On closer inspection, some of such elements have been partially included in some treaties, which do not provide international rules specifically for sustainable transport, but still for related matters.

For example, Article 2 of the recent 2015 Paris Agreement [42] – underlining that the objectives of the treaty are put "in the context of sustainable development" [43] – aims to strengthen the response to climate change by

---

and the International Law of the Environment", Michigan Journal of International Law 1991, p. 420-435; *Jan Klabbers*, "The Redundancy of Soft Law", Nordic Journal of International Law 1996, p. 167-182; *Harmut Hillgenberg*, "A Fresh Look at Soft Law", The European Journal of International Law 1999, Vol. 10, No. 3, p. 499-515; *Kenneth W. Abbott/Duncan Snidal*, "Hard and Soft Law in International Governance", International Organization 2000, Vol. 54, Issue 3, p. 421-456; *Elena Pariotti*, "International Soft Law, Human Rights and Non-State Actors: Towards the Accountability of Transnational Corporations?", Human Rights Review 2009, Vol.10 (2), p.139-156; *Mauro Barelli*, "The Role of Soft Law in the International Legal System: The Case of the United Nations Declaration on the Rights of Indigenous Peoples", International and Comparative Law Quarterly 2009, Vol. 58, p. 957-983; *Martti Koskenniemi*, "The Politics of International Law – 20 Years Later", The European Journal of International Law 2009, Vol. 20, No. 1, p. 7-19; *Andrew T. Guzman/Timothy L. Meyer*, "International Soft Law", The Journal of Legal Analysis 2011, Vol. 2, No. 1, p. 171-225; *Giovanna Adinolfi*, "Soft Law in International Investment Law and Arbitration", Italian Review of International and Comparative Law 2021, p. 86-112. On soft law and sustainable development see, for example: *Alan Boyle/David Freestone* (ed.), International Law and Sustainable Development: Past Achievements and Future Challenges, 1999.

[41] *Supra* par. 2.

[42] The Paris Agreement was adopted by the Parties to the United Nations Framework Convention on Climate Change on 12 December 2015.

[43] Article 2.1 of the Paris Agreement states that "This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by […]".

making “finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development” [44] (among other means). Indeed, in doing so, the Paris Agreement could somehow concern also an important element of sustainable transport, i.e. “minimizing carbon and other emissions and environmental impacts” [45].

Even before the 2015 Paris Agreement and before the 2030 Agenda, it must be reminded the 1973 International Convention for the Prevention of Pollution from Ships, which enforced several duties to the State Parties in order to prevent pollution from ships [46]. Again, the sustainable transport essential component of “minimizing […] emissions and environmental impacts” could be seen as regulated in some manner throughout a related international convention, this time limited to a specific kind of transports: ships.

Similarly, the 1974 International Convention for the Safety of Life at Sea seems in some way concerning also one different element of sustainable transport – i.e. safeness – even in this case in the specific context of ship transport [47].

Lastly, it should be highlighted the large number of State Parties of the three treaties mentioned: 196 State Parties of the 2015 Paris Agreement; 156 State Parties of the 1973 International Convention for the Prevention of Pollution from Ships; 163 State Parties of the 1974 International Convention for the Safety of Life at Sea. Such numbers evidently attest a wide consent among States on these subjects.

4. *Concluding remarks*

As we have seen, there is no specific international *ad hoc* treaty on sustainable transport at the present time. There is currently a definition of sustainable transport given by the UN Secretary-General’s High-level Advisory Group in 2016, but it could be at most considered as an international soft law definition nowadays [48].

---

[44] Article 2.1 (c) of the Paris Agreement states what follows: “Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development”.

[45] *Supra* par. 2 (especially fn. 10 and 24).

[46] The International Convention for the Prevention of Pollution from Ships was adopted on 2 November 1973 at International Maritime Organization.

[47] The first version of the International Convention for the Safety of Life at Sea was adopted in 1914, in response to the Titanic disaster, the second in 1929, the third in 1948, the fourth in 1960, and the last one in 1974.

[48] *Supra* par. 2.

We have also observed that the 2030 Agenda could provide a meaningful base for sustainable transport, in order to make it progress. Moreover, Sustainable Development Goals of 2030 Agenda could also contribute to a significant advance in sustainable transport; and not just one or a few of Sustainable Development Goals, but a large number of them[49]. Apparently, this is because sustainable transport is a wide and complex matter: this could find confirmation also in the several United Nations agencies which cooperate for the purpose of developing it. For example, the Interagency Report on sustainable transport for the second Global Sustainable Transport Conference in 2021 was prepared by the United Nations Department of Economic and Social Affairs (DESA), in close collaboration with other UN agencies, including the International Civil Aviation Organization (ICAO), the International Labour Organization (ILO), the International Maritime Organization (IMO), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Development Programme (UNDP), the United Nations Economic Commission for Europe (UNECE), the United Nations Environment Programme (UNEP), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the United Nations Economic and Social Commission for Western Asia (UNESCWA), the United Nations Human Settlements Programme (UN-Habitat), the United Nations Industrial Development Organization (UNIDO), the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS), the World Tourism Organization (UNWTO), the World Health Organization (WHO), and the World Bank[50].

Notwithstanding several Sustainable Development Goals and many UN agencies are involved and engaged in sustainable transport, the lack of a specific international *ad hoc* treaty on this matter persists today: howbeit, these cited efforts - channelled into sustainable transport through United Nations - show some interest of the international community on this topic[51].

Such interest is even more evident if we look at some activities performed by a few of international regional organizations in this field; for example, the followings could be cited: the European Union White Paper "Roadmap to a Single European Transport Area – Towards a competitive and resource

[49] *Ibidem*.

[50] See "Sustainable Transport, Sustainable Development", Interagency Report - Second Global Sustainable Transport Conference, United Nations publication issued by the Department of Economic and Social Affairs, 2021.

[51] The efforts of the international community on this matter go on continuously; see, for example, recently: "Historic net-zero international flight goal agreed at UN conference", United Nations News, 9 October 2022.

efficient transport system"[52]; the European Union "Proposal for a Directive of the European Parliament and of the Council on the deployment of alternative fuels infrastructure"[53]; the "African Union Agenda 2063"[54]; or the 2018 "Agreement establishing the African Continental Free Trade Area"[55]. Even if there is no room here to discuss such efforts, it should be anyway mentioned that they could provide a substantial contribution to carry out sustainable transport in the international community[56].

Additionally, since sustainable transport is a complex matter, we have evaluated that it could be seen as composed of several elements. In this regard, we have surveyed some international agreements currently in force: even if they do not regulate specifically sustainable transport, nevertheless in these treaties we could also find some international rules somehow concerning (at least partially) some elements of sustainable transport too, particularly the mitigation of environmental impacts[57] and the element of safeness[58]. It has been also highlighted that each of such agreements counts a large number of State Parties, thus binding a vast part of the international community[59].

However, domestication could be a meaningful issue: the rules provided by such international agreements should be indeed adequately included in the domestic law of the State Parties in order to be fully effective and nowadays some of such State Parties have not satisfactory bring some rules of such treaties in their national laws yet[60].

---

[52] European Commission, White Paper "Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system", Brussels, 28.3.2011, COM(2011) 144 final.

[53] European Commission, Proposal for a "Directive of the European Parliament and of the Council on the deployment of alternative fuels infrastructure", Brussels, 24.1.2013, COM(2013) 18 final, 2013/0012 (COD).

[54] The African Agenda 2063 was adopted by the African Union Summit in January 2015 (its First Ten Year Implementation Plan was adopted in June 2015): it predates the 2030 Agenda and Sustainable Development Goals of September 2015.

[55] This agreement was adopted by the 10th extraordinary session of the African Union Assembly in Kigali, on 21 March 2018, and it currently counts 54 States Parties.

[56] It has been preliminarily pointed out that there would be no room in this chapter for a survey of sustainable transport in the law of international regional organizations: *supra* par. 1, fn. 6.

[57] In this regard we have seen the 2015 Paris Agreement and the 1973 International Convention for the Prevention of Pollution from Ships: *supra* par. 3.

[58] We have taken into consideration for this purpose the 1974 International Convention for the Safety of Life at Sea, even if restricted to ship transport only: *supra* par. 3.

[59] *Supra* par. 3.

[60] See, for example: *Isaac B. Kardon*, China's maritime interests and the law of the sea -

Domestication issue is even more critical for sustainable transport, especially if we consider that there is not a single international agreement harmonically regulating this matter: because of the lack of a unique treaty, States should domesticate disparate international rules, provided by different international agreements, without a ordered congruity.

Domesticating public international law, in: John Garrick/Yan Chang Bennett (ed.), China's Socialist Rule of Law Reforms Under Xi Jinping, 2016; *David A. Wirth*, "Cracking the American Climate Negotiators' Hidden Code: United States Law and the Paris Agreement", Climate Law 2016, p. 152-170; *Ekundayo Oluwaremilekun Babatunde/Mutiat Mobolanle Abdulsalam*, "Towards Maintaining Peacefulness of the Sea: Legal Regime Governing Maritime Safety and Security in Nigeria", Beijing Law Review 2021, 12, p. 529-559; *Vivek Sehrawat*, "Implementation of International Law in Indian Legal System", Florida Journal of International Law 2021, Vol. 31, p. 97-119.

Giammaria Famiglietti

GREENING THE INSURANCE INDUSTRY. PRODUCTS, DISTRIBUTION, AND OPERATIONAL IMPACTS

Table of contents: 1. The insurance industry and the transition to a more sustainable economy. – 1.1. Background. – 1.2. Regulatory framework overview. – 1.2.1. Taxonomy Regulation. – 1.2.2. Sustainable Finace Disclosure Regulation. – 1.2.3. Corporate Sustainability Reporting Directive (former Non-Financial Reporting Directive). – 1.2.4. Solvency II and Insurance Distribution Directive. – 1.3. EIOPA papers. – 1.4. International initiatives and alliances. – 2. Sustainable insurance products and distribution. – 2.1. Introduction. – 2.2. Insurance-Based Investments Products (IBIPs). – 2.3. P&C products. – 2.4. Impacts on distribution. – 3. Final considerations. – 3.1. Challenges and opportunities for insurers. – 3.2. Insurance products expected trends.

1. *The insurance industry and the transition to a more sustainable economy*

1.1. *Background*

The insurance sector plays a key role towards a sustainable transformation of the economy. By adopting the *UN 2030 Agenda for Sustainable Development*[1] in 2015 and the *EU Action Plan for the Financing of a Sustainable Growth*[2] in 2018, a more sustainable path for our planet and our economy was agreed at the international level. The 17 Sustainable Development Goals (SDGs), at the core of the UN 2030 agenda, will guide in preparing for a future that ensures stability, a healthy planet, fair, inclusive, and resilient societies, and prosperous economies. The actions encompassed in the EU Action Plan aim to reorient capital flows towards a sustainable and

[1] 2030 Agenda for Sustainable Development – *United Nations* – September 2015.

[2] Action Plan: Financing Sustainable Growth – *Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Region* – March 2018.

inclusive economy, to manage risks rising from environmental issues and to foster transparency and long-termism in financial and economic activities.

In 2020, the EU adopted the Green Deal [3] with the goal of transforming the European Union into a modern, resource-efficient, and competitive economy. The European Green Deal is an integral part of the Union's strategies for implementing the 2030 agenda and achieving zero emissions by 2050.

The insurance sector plays a key role towards a sustainable transformation of the economy, covering two main functions: as investors, insurers may redirect public and private investments through their investment strategies, and as providers of protection and risk managers, they may positively impact the transition through their underwriting policies and product design, as discussed further in this section.

Insurance entities must be fully aware of this pivotal role they play for the success of the transition. They are pressured by both the public opinion and their customers, and by a complex and intertwined evolving regulatory framework, to integrate sustainability into their strategy and operations.

A number of international initiatives and alliances have also developed over the last years (e.g. Principles for Sustainable Insurance, Principles for Responsible Investment, Net Zero Asset Owner Alliance, Net Zero Insurance Alliance, Task Force on Climate-related Financial Disclosure, etc.) [4], aiming at providing frameworks for specific commitments by market players on a voluntary basis.

The first Principle for Sustainable Insurance (PSI) [5] states that ESG (Environmental, Social, Governance) factors have to be *embedded in the whole decision-making process of insurance entities*. The way the ESG factors will be integrated, also with respect to the whole company's value chain, will represent a key success factor for shaping insurers' future.

Given the context, in this section we try to highlight how the insurance sector can contribute to the transition to a more sustainable economy. The first Chapter pictures an overview of the current European applicable regulatory framework and international initiatives and alliances, setting the foundation for a better understanding of Chapter 2, that focuses on sustainable insurance products and distribution, separately for investment and non-life products. The section ends with some final considerations regarding risks and opportunities for insurers, and an outlook to the mid-term perspectives.

---

[3] The European Green Deal – *Communication from the Commission* – December 2019.

[4] See *infra* § 1.4.

[5] PSI – Principles for Sustainable Insurance – *United Nations Environment Programme Finance Initiative* – June 2012.

1.2. *Regulatory framework overview*

At the time of writing, the European regulatory framework on sustainability affecting the insurance entities is rapidly evolving, although already pretty well structured and intertwined.

The abovementioned *Action Plan on financing sustainable growth* of the EU has been published in 2018 and it is structured upon three key objectives and ten actions, triggering new regulations development and/or review of existing ones. In July 2021, the European Commission published the new phase of the strategy for financing the transition to a sustainable economy[6] to achieve the goals of the Green Deal, which basically confirms the lines set out in the 2018 Action Plan.

The three objectives, the ten actions and related regulatory triggers of the Action Plan are represented in the following table:

Objectives	Actions	Regulatory triggers
I. Reorient capital flows towards sustainable investment	1. Establishing an EU classification system for sustainability activities	Taxonomy Regulation (and related Delegated Acts)
	2. Creating standards and labels for green financial products	Proposal for a Regulation on European Green Bonds
	3. Fostering investment in sustainable projects	
	4. Incorporating sustainability when providing investment advice	Amendments to IDD delegated regulations to introduce preferences, risks, and sustainability factors within conflict of interest and POG requirements
	5. Developing sustainability benchmarks	EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks

[6] Strategy for Financing the Transition to a Sustainable Economy – *Communication from the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions* – July 2021.

II. Integrate sustainability into risk management practices	6. Better integrating sustainability in ratings and research	ESMA Call for evidence on Market Characteristics for ESG Rating Providers in the EU
	7. Clarifying institutional investors and asset managers' duties	Sustainable Finance Disclosure Regulation – SFDR – (and related Delegated Regulation)
	8. Incorporating sustainability in prudential requirements	Amendments to Solvency II Delegated Acts to introduce sustainability risks within the prudential supervisory framework
III. Foster greater transparency and long-termism in financial and economic activities	9. Strengthening sustainability disclosure and accounting rule-making	Proposal for a Corporate Sustainability Reporting Directive (CSRD)
	10. Fostering sustainable corporate governance and attenuating short-termism in capital markets	Proposal for a Corporate Sustainability Due Diligence Directive (CSDDD)

Table 1. *Objectives, actions and regulatory triggers of the European Action Plan on Sustainable Finance*

We believe it's beneficial to provide the reader with some more details on key regulations applicable to insurance entities, that would help for a better understanding of the key aspects related to insurance sustainable products development and distribution, highlighted in Chapter 2.

1.2.1. *Taxonomy Regulation*

The European Taxonomy Regulation[7] (TR) and related Delegated Acts[8] introduce the criteria that an economic activity must fulfil to be considered

[7] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

[8] Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives; Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation; and Commission Delegated Regulation (EU).

sustainable and represents the cornerstone of the whole regulatory framework almost all other regulations relate to.

So far, the TR lists six environmental criteria:

1. climate change mitigation;
2. climate change adaptation;
3. sustainable use and protection of water and marine resources;
4. transition to a circular economy;
5. pollution prevention and control;
6. protection and restoration of biodiversity and ecosystems.

A list of *eligible* economic activities is reported according to their NACE code (statistical classification of economic activities in the European Community), as potential contributors to one or more of these objectives.

To be deemed as *sustainable*, an economic activity must *substantially contribute* to one of the objectives of the TR, while at the same time: i) do not create significant harm to any of the other objectives, ii) be in line with *minimum safeguards* regarding human right and labor laws and iii) fulfil certain performance criteria, the s.c. *Techcnical Screening Criteria* (TSC), described in the TR Delegated Acts.

Insurance *non-life underwriting* is listed in the TR among the economic activities that can potentially contribute to the climate change *adaptation* objective (more precisely as an *enabling* activity – i.e., an activity that helps other activities to contribute to a given objective), given it fulfils the three above mentioned criteria. This means, to make a concrete example, that the insurance coverage to low-emissions vehicles *cannot* be considered as *sustainable* under the TR, as it would refer to the climate change *mitigation* objective, while the coverage against certain climate-related perils (such as hail, storms, etc.) *would do so*, as it would refer to the *adaptation* objective[9].

The TR is therefore crucial for the overall sustainable finance strategy of redirecting investment flows, and for insurance entities specifically, as it:

- defines the extent to which an investment can be considered as *sustainable* from an asset owner perspective;
- defines the criteria under which the insurance non-life underwriting activity itself can be considered as *sustainable*; and
- provides information on the KPIs to be disclosed[10] both on invest-

2022/1214 of 9 March 2022 amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities.

[9] More on this in Par. 2.2.

[10] Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying

ments and non-life underwriting activity.

However, the Taxonomy is yet incomplete, as it both:

– only considers an activity as being *green* or not, according to a binary approach, therefore not allowing to consider the potential of the *transitional* economic activities towards greener performance; and
– only refers to *environmental* objectives, while the *social* ones are uncovered.

Work to include transitional activities and to extend the taxonomy to social aspects is in progress.

The following picture shows the pivotal role of the TR and how the regulatory framework applicable to the insurance sector is deeply connected, therefore requiring a holistic approach and a comprehensive strategy when approaching at it.

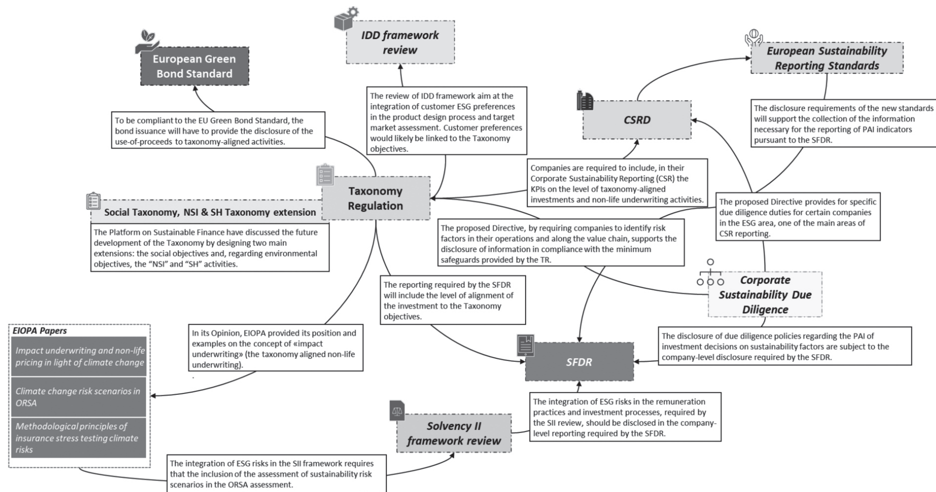


Fig. 1. S*ustainability regulatory framework applicable in Europe – Oliver Wyman*

---

the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation. See also *infra* § 1.2.3.

1.2.2. *Sustainable Finance Disclosure Regulation*

The Sustainable Finance Disclosure Regulation [11] (SFDR) establishes a disclosure framework for financial market participants, that place investment products on the market.

The SFDR introduces specific definition of *green* or *sustainable* investment products and new requirements for pre-contractual and periodic disclosure, and for information to be published on company's websites at the entity and product level, including in relation to the s.c. *Principal Adverse Impacts* (PAIs) of investments on ESG factors.

The definition of *sustainable* investment of the SFDR is wider compared to the TR one [12], although taxonomy-alignment information on investments is required in the disclosure to be provided to the public and the policyholder.

The SFDR introduces three product categories for investment products:

- *mainstream* products, which do not present any sustainability features;
- *light-green* (or *Article 8*) products, which promote, among other characteristics, environmental or social ones, or a combination of those two;
- *dark-green* (or *Article 9*) products, which have sustainable investment as their objective and an index has been designated as a reference benchmark for the objective.

Chapter 2 will further investigate what does this mean concretely for companies marketing Insurance-Based Investment Products (IBIPs) and what the market trends are.

1.2.3. *Corporate Sustainability Reporting Directive (former Non-Financial Reporting Directive)*

The Corporate Sustainability Reporting Directive [13] (CSRD) represents the proposed revision of the Non-Financial Reporting Directive [14] (NFRD, that introduced specific non-financial reporting requirements for large companies, which constitute public interest entities and had an average

[11] Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability related disclosures in the financial services sector.

[12] See *infra* § 2.2.

[13] Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting.

[14] Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups.

number of employees of more than 500 during the fiscal year).

The CSRD proposal would widen the NFRD scope of application and minimum content and will also provide for the development of common reporting standards on sustainability (European Sustainability Reporting Standards – ESRS), under development by the European Financial Reporting Accounting Group (EFRAG).

The non-financial information should be integrated as a separate section of the annual management report of the companies in scope, and will include, among others, information on the following KPIs defined by the TR[15]:

– share of taxonomy-aligned *investments*, i.e., the value of investments in entities that perform taxonomy-aligned economic activities, on the total value of company's investment portfolio;
– share or taxonomy-aligned *underwriting*, i.e., the gross written premiums (GWP) pertaining to taxonomy-aligned insurance non-life underwriting, on the total GWP of the insurance entity.

These two KPIs will be used by investors and other stakeholders to assess the degree of sustainability of the insurance entities' business, and are strictly interlinked – although not completely, as we'll further analyze in Chapter 2 – to their product design and underwriting activity.

1.2.4. *Solvency II and Insurance Distribution Directive*

The amendments to the Solvency II Delegated Acts[16] and Insurance Distribution Directive (IDD) Delegated Regulations[17] introduce new provisions, respectively: i) on sustainability risks within the Company's risk management system and compensation policy evaluation criteria, and ii) on preferences, risks and sustainability factors within the current customers' suitability assessment and Product Oversight and Governance (POG) requirements.

With specific regard to the integration of sustainability considerations in the IDD, customers' sustainability preferences must be considered by product manufacturer and distributors in all the different stages of the

[15] See *supra* § 1.2.1.

[16] Commission Delegated Regulation (EU) 2021/1256 of 21 April 2021 amending Delegated Regulation (EU) 2015/35 as regards the integration of sustainability risks in the governance of insurance and reinsurance undertakings.

[17] Commission Delegated Regulation (EU) 2021/1257 of 21 April 2021 amending Delegated Regulations (EU) 2017/2358 and (EU) 2017/2359 as regards the integration of sustainability factors, risks and preferences into the product oversight and governance requirements for insurance undertakings and insurance distributors and into the rules on conduct of business and investment advice for insurance-based investment products.

process: from the customers' suitability assessment, to the Target Market definition, the product test and monitoring, and the distribution activity. More details on the process are provided in Chapter 2 [18].

Please also note that European Insurance and Occupational Pension Authority (EIOPA) specifies that the scope of application of the IDD, and therefore the ESG considerations, should also include non-life insurance products.

1.3. *EIOPA papers*

The European Insurance and Occupational Pension Authority (EIOPA) has issued Discussion and Methodological Papers, and Opinions on sustainability-related matters, such as:

– climate risks stress testing methodology [19];
– climate change and scenario analyses in the Own Risk and Solvency Assessment (ORSA) process [20];
– potential inclusion of climate change in the NatCat Standard Formula [21];
– non-life *impact underwriting* and pricing [22].

With these documents EIOPA provided its view on different topics ranging from ESG risk management to sustainable underwriting (*impact underwriting*). Particularly interesting for our purposes is the EIOPA paper on *impact underwriting*, whereas the Authority considers the insurance underwriting activity as enabling *both* the climate change *mitigation* and the *adaptation* objectives (differently from the TR, that provides that the insurance underwriting activity can be considered as contributing to the climate change *adaptation* only). More on this is explained in Chapter 2 when we focus on sustainable P&C products [23].

---

[18] See *infra* § 2.4.

[19] *EIOPA* Methodological principles of insurance stress testing – Climate change component – January 2022.

[20] *EIOPA* Application guidance on running climate change materiality assessment and using climate change scenarios in the ORSA – August 2022.

[21] *EIOPA* Methodological paper on potential inclusion of climate change in the Nat Cat standard formula – July 2021.

[22] *EIOPA* European insurers' exposure to physical climate change risk – Potential implications for non-life business – May 2022.

[23] See *infra* § 2.3.

1.4. *International initiatives and alliances*

In addition to the applicable regulatory framework, a number of international initiatives and alliances have developed in recent years, aiming at providing frameworks for different type of commitments (e.g., on governance, emissions reduction, reporting, etc.) by the entities that would eventually join them on a voluntary basis.

As a non-exhaustive list, the following initiatives/alliances applies to insurance entities:

Initiative/Alliance	Description
PSI	The Principles for Sustainable Insurance (PSI) is a voluntary and aspirational framework for the insurance industry with the purpose to better understand, prevent and reduce ESG risks, and better manage opportunities to provide quality and reliable risk protection. Four high-level principles that signatory companies commit to apply within their sphere of influence are provided: 1. Embed in the decision-making ESG issues relevant to the insurance business; 2. Work together with clients and business partners to raise awareness of ESG issues, manage risk and develop solutions; 3. Work together with governments, regulators and other key stakeholders to promote widespread action across society on ESG issues, 4. Demonstrate accountability and transparency in regularly disclosing publicly our progress in implementing the Principles.
PRI	The Principles for Responsible Investment (PRI) has developed a Reporting Framework aiming at summarizing companies' responsible investment activities in a standardized manner, acting as an accountability mechanism. The PRI reporting cycle results in a public transparency report, published on the PRI website, and other reports.
NZAOA	The UN-convened Net Zero Asset Owner Alliance (NZAOA) is a member-led initiative of institutional investors committed to transitioning their investment portfolios to net-zero GHG emissions by 2050 – consistent with a maximum temperature rise of 1.5°C.
NZIA	The UN-convened Net-Zero Insurance Alliance (NZIA) is a group of over 29 leading insurers that have committed to transition their insurance and reinsurance underwriting portfolios to net-zero greenhouse gas (GHG) emissions by 2050, consistent with a maximum temperature rise of 1.5°C above pre-industrial levels by 2100, in order to contribute to the implementation of the Paris Agreement on Climate Change.
PCAF	The Partnership for Carbon Accounting Financials (PCAF) is a global partnership of financial institutions collaborating to develop and implement a harmonized approach to assessing and reporting greenhouse gas (GHG) emissions associated with their investment and loan portfolios.

TCFD	The Task Force on Climate-related Financial Disclosure (TCFD) disclosure recommendations are designed to help companies provide better information to support informed capital allocation. They are structured around four thematic areas that represent core elements of how organizations operate: Governance, Strategy, Risk Management, Metrics and Targets. The TCFD report may be published in a separate report or may be integrated into other reports (e.g., Annual Report, Sustainability Report).

Table 2. *Overview of key international initiatives and alliances*

Joining the PSI, PRI, NZAOA, NZIA, etc. implies for insurers to commit in reaching the different objectives and targets, indirectly impacting their product design and development, for both investment-based and P&C insurance products.

2. *Sustainable insurance products and distribution*

2.1. *Introduction*

The regulatory framework overview, the work of EIOPA and the snapshot of the key international initiatives and alliances form the basis for a better understanding of the implications of the ongoing transition path towards a more sustainable economy, for the insurance product offering.

As a summary of Chapter 1 and as a basis for the considerations further developed in Chapter 2, the following table provides a mapping between the two insurance products macro-classes and related applicable regulations/ initiatives:

Investment-based Insurance Products (IBIPs)	P&C (i.e. non-life) products
The SFDR provides that insurance entities can market *green* IBIPs, providing public and pre-contractual information.	The TR recognizes the non-life insurance underwriting activity can be considered as enabling the climate change *adaptation* objective.
The TR introduces a KPI regarding the share of sustainable investments of the entity, to be reported in their non-financial disclosure (under the current NFRD/ future CSRD). This is somehow connected with the sustainability features of the investment products the entity places on the market.	The TR introduces a dedicated KPI regarding the insurers' sustainable underwriting activity, to be reported in their non-financial disclosure (under the current NFRD/ future CSRD).

The IDD provides that customers' sustainability preferences must be considered when assessing the target market of the investment product and in the suitability assessment activity.	The IDD requirements, according to EIOPA interpretation, also apply to non-life products.
Insurers joining the PSI, PRI, NZAOA commit in specific provisions regarding their investment activitiy.	Insurers joining the PSI and/or NZIA commit in specific provisions regarding their product development and underwriting.
	EIOPA *impact underwriting* definition claims that the non-life insurance underwriting activity can contribute to *both* the mitigation *and* adaptation objectives.

Table 3. *Summary overview of applicable regulations/ initiatives mapped to investment and non-life insurance products*

This provides the general framework to be taken into account when approaching to the *sustainable* insurance products design and development.

2.2. *Insurance-Based Investments Products (IBIPs)*

The definition of *sustainable investment* under the SFDR provides that:

'Sustainable investment' means an investment in an economic activity that contributes to an environmental objective, as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, greenhouse gas emissions, etc., or an investment in an economic activity that contributes to a social objective, e.g. tackling inequality, social integration and labour relations, etc., provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices.

As mentioned in Chapter 1, this definition is wider than the one implicit in the TR, where an economic activity, to be considered as *sustainable* should contribute to one or more of the environmental objectives that are currently included in the TR, and at the same time must fulfil the different technical screening criteria. Furthermore, the SFDR definition includes social aspects too (currently not included in the TR)[24].

Given the definition of what a sustainable investment means, the SFDR classifies IBIPs into the three categories of *mainstream*, *light-green* and *dark-green* products (SFDR Art. 6, 8 and 9, respectively)[25].

A question arises with reference to the multi-options products, where the different underlying investment options could present different *greenness*

[24] See *supra* § 1.2.1.

[25] See *supra* § 1.2.2.

levels. A general approach for the classification of a multi-option investment product would be the following:

- if any of the investment options is neither *light* or *dark-green*, the product will be considered as *mainstream* (i.e., with no sustainability features);
- if one or more investment options are *light-green*, the product will be classified as *light-green*;
- if investment options are a mix of *light* and *dark-green* (and/or *mainstream*), the product will be classified as *light-green*;
- if all investment options are *dark-green*, the product will be classified as *dark-green*.

A 2021 study by Oliver Wyman, presents an overview of the IBIPs sustainability features on a significative sample of the Italian market:

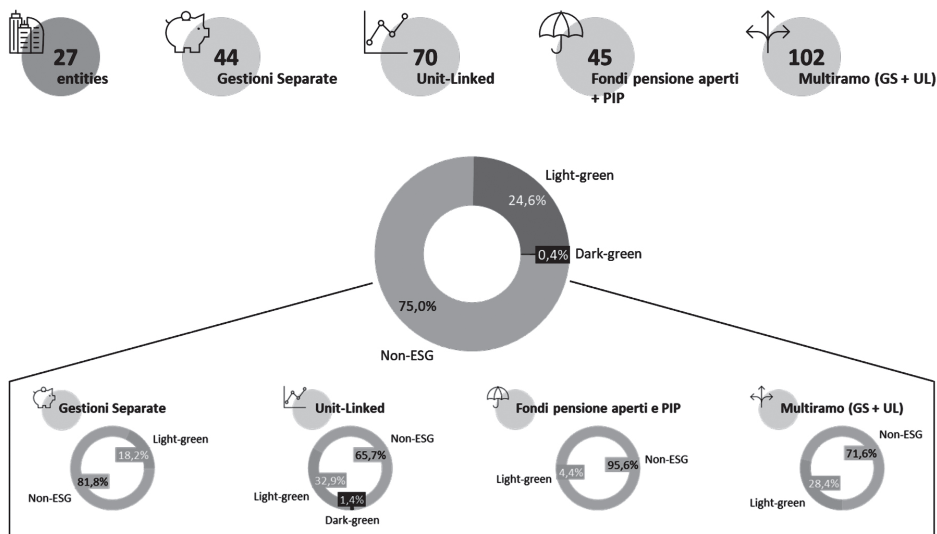


Fig. 2. *Green IBIPs on the Italian market in 2021 – OlivierWyman*[26]

A key topic when classifying a product into the *light* or *dark-green* categories, refers to the *thresholds* to be used to do so. Indeed, the SFDR does not provide any specific indication and a certain level of subjectivity is therefore unavoidable.

If on the one hand is clear that the *dark-green* products must only invest in sustainable investments (except for residual shares of liquidity and hedging

[26] *Oliver Wyman*, *https://www.oliverwyman.com/content/dam/oliver-wyman/europe/italy/insight/I-prodotti-green-del-mercato-assicurativo-in-Italia.pdf*.

instruments)[27], the same is not true for *light-green* ones, leading potentially to different market practices and therefore to a lack of comparability in the market. Some entities might even define different thresholds according to the target market defined under the POG[28].

These biases originate from a general misuse of the SFDR, that has been conceived as a reporting framework at product and entity level but turned out to be used as an investment product classification standard. If this is the case, possibly amendments to the Regulation text would be needed.

2.3 *P&C products*

According to the TR, as highlighted in Chapter 1, insurance non-life underwriting can be considered a sustainable economic activity – given it fulfils certain criteria – as it potentially enables the TR climate change *adaptation* objective.

At the same time, this does preclude insurance entities to market other P&C products that could potentially support the transition to a more sustainable economy from an environmental and social perspective, although not strictly being *taxonomy-aligned*.

We therefore have two classes of P&C *sustainable* products:

– Those that are considered *sustainable* under the TR as they contribute to the *adaptation* objective, given they:
  - cover specific climate-related perils for selected Lines of Business (LoB):
    - eligible LoBs: Medical expense, Income protection, Workers' compensation, Motor vehicle liability, Other motor insurance, Marine, aviation and transport, Fire and other damage to property, Assistance;
    - enabling perils: Temperature-related, Wind-related, Water-related, Solid mass-related;
  - fulfil the following *Technical Screening Criteria*:
    a. Leadership in modelling and pricing of climate risks;
    b. Product design;
    c. Innovative insurance coverage solutions;
    d. Data sharing;
    e. High level of service in post-disaster situation;
    do not significantly harm any other TR objective;

[27] Final Report on draft Regulatory Technical Standards of the Joint Committee of the European Supervisory Authorities– February 2021.

[28] See *infra* § 2.4.

– Those that might be considered *sustainable* in principle as they support the transition but are not *taxonomy-aligned* (See Table 4 below).

<table>
<tr><th colspan="2">Initiative</th><th colspan="2">Commercial offerings</th></tr>
<tr><td rowspan="5">Enabling the mitigation objective</td><td rowspan="5">Insurance offerings to help industries deliver the green transition</td><td>– Dedicated renewable energy generation coverage mitigating weather impact (e.g., ‘lack of wind’). Compensation of renewable energy providers when production is reduced or compensation of traditional energy providers when supply is high, and prices suffer</td><td rowspan="5">These products, although facilitating industries to deliver the green transition (i.e. the mitigation objective) cannot be included in the KPI on underwriting activity to be disclosed under the TR requirements</td></tr>
<tr><td>– Dedicated renewable energy generation (e.g., solar) coverage. Downside protection that guarantees the expected output of a solar farm up to 95% of expected production capacity</td></tr>
<tr><td>– Lower prices for Environmental Impairment Liability (EIL) coverage of companies with highly rated scores on environmental friendliness to incentivize better risk management</td></tr>
<tr><td>– Customized product enabling SMEs to build renewable energy facilities (e.g., Carbon Capture & Storage liability coverage, Renewable Energy Generation Equipment loss coverage)</td></tr>
<tr><td>– High ESG-rated businesses receive Trade Credit Product pricing benefits</td></tr>
<tr><td rowspan="4">Enabling the adaptation objective</td><td rowspan="4">Insurance offerings to mitigate the impacts of climate change</td><td>– ‘One Cat’ suite of products offers straightforward (‘cat-in-a-box’) parametric insurance solutions for natural disasters (e.g., storms, earthquakes)</td><td rowspan="4">These products only, as they enable the adaptation objective would account for the KPI on underwriting activity to be disclosed under the TR requirements</td></tr>
<tr><td>– Parametric rice yield insurance product (‘RIICE’) through satellite technology. Damages and rice production is determined automatically with a simplified claims pay-out process</td></tr>
<tr><td>– Parametric insurance schemes that directly provide financial protection for post-event reconstruction</td></tr>
<tr><td>– Ocean Risk Initiative provides mangrove insurance coverage</td></tr>
</table>

Table 4. *Examples of green non-life products, both aligned and non-aligned to the EU Taxonomy Regulation*

2.4. *Impacts on distributions*

The amendments to the IDD integrate the sustainability preferences within the customers' suitability assessment and the Product Oversight and Governance (POG)[29].

More concretely, this means that the insurers should:

- integrate *sustainability preferences* in the customer's suitability assessment;
- integrate *sustainability objectives* in the product approval process and in product testing and monitoring;
- integrate *sustainability factors* in the Target Market (TM) definition process;

Distributors should also take into account customers' sustainability preferences and be provided by the manufacturer with the necessary information.

As an illustrative example, the customers' suitability assessment questionnaire might include the following questions:

- *Would you like to consider sustainability preferences in your investment product? (Y/N)*
- *What should the investment product sustainability ambition be? (e.g. investing totally or partially in taxonomy-aligned investments, investing totally or partially in sustainable investments that are not necessarily taxonomy-aligned, etc.)*
- *What should the minimum thresholds of sustainable investments be? (e.g. 10% - 25% - 50% -75%, etc.;*
- *What sustainability factor(s) should the product pursue? (Environmental, Social, Governance)*

The Target Market definition, on the other hand, implies the product can only be distributed to the related identified target. To integrate sustainability preferences in the TM definition, the following considerations might be included:

- ESG characteristic or objective the client wants to achieve with the product (if any): e.g., *light-green* (Art. 8 SFDR), *dark-green* (Art. 9 SFDR);
- sustainability preferences satisfied: e.g., the product invests >25% in *taxonomy-aligned* investments;
- sustainability factor(s) covered: the product invests in *green* and *social* investments.

---

[29] See *supra* § 1.2.4.

It is worthwhile noting that customers must be provided with the necessary information on sustainability investment implications and the general applicable framework that defines how a sustainable investment is defined, in order to take informed decisions. On the other hand, distributors should be trained enough to play their role, advice and understand customers' sustainability preferences.

3. *Final considerations*

The transition to a more sustainable economy and the key role the insurance sector plays, imply taking actions by insurance companies to properly answer to social and regulatory expectations.

This is already having a disruptive impact on business, organization, and processes. Unlike other epochal regulatory impacts (e.g., IFRS 17, Solvency II), the integration of sustainability factors in the insurance entities and groups, involves the organization as a whole, impacting, albeit with different levels of depth, all business areas.

Such big changes generates as always both risks and opportunities for market players. It is up to them trying to face the challenges in timely and consistent manner, in order to get competitive advantage and don't get stuck in the past.

Expected efforts are material, but the cost of inaction would be far higher, potentially jeopardizing the very existence of the company.

3.1. *Challenges and opportunities for insurers*

Insurance entities should address some major challenges in the short term to integrate sustainability in their organization:

- the first step would be to create awareness and spread what the sustainability means for the business all over the organization, starting from the Board who owns the ultimate responsibility;
- sustainability-related risks should be embedded into the overall risk management framework, incl. the underwriting activities, given that ESG risks can only be addressed in a forward-looking perspective;
- current processes and data needs must be assessed and reviewed to integrate the sustainability aspects holistically, in doing so exploiting synergies and avoiding inefficiencies;
- the overall governance structure and remuneration policies must be

assessed/ reviewed, in light of the evolving regulatory framework and increasing responsibility profiles;
- public reporting and communication activities should be assessed and eventually enhanced – and related reputational risks & opportunities considered.

This would allow them to take actions to exploit the opportunities the context presents, such as new markets and customer's needs, new investment opportunities, better reputation and brand perception, better management of sustainability-related risks, increased reliability with stakeholders, opportunity for public-private partnerships, greater attractiveness for talent acquisition (and retention).

3.2. *Insurance products expected trends*

Although some issues are still open, we expect the sustainable offering of the insurance industry to increase rapidly in the coming years, along with the regulatory framework providing clearer guidance, data and tools, the growing sustainable investments opportunities and customers' awareness, and the insurers being more experienced in developing such kind of products.

Regarding the *investment products*, currently the availability of *green* IBIPs (especially the *dark-green* ones) is still limited. The market for sustainable investments may not be sufficiently developed to guarantee an adequate level of diversification of investments and/or of their risk/return profile. The availability of data as it relates to *sustainable* investments (under the SFDR and/or TR definitions) is also a relevant issue and uncertainties around the minimum thresholds to classify a product as *light* or *dark-green* do not help.

The work in progress to extend the Taxonomy in order to both a) overcome the current binary structure (i.e., *green* vs. *brown* activities) with regard to the environmental objectives, and b) extend the Taxonomy to Social objectives, will likely widen sustainable investments opportunities: more diversification options and better risk/return profiles are expected.

With reference to *P&C insurance products*, the TR only allows for an insurance product to be considered as enabling the climate change *adaptation* objective, for the purpose of the underwriting KPI calculation. The interpretation of the Technical Screening Criteria is still unclear in how it should be concretely implemented in order to qualify an insurance policy as *sustainable*. Regardless of the TR provisions, the industry believes that even some *non-aligned* products could contribute to the transition and therefore developed its offering accordingly.

The possible extension of the Taxonomy to social objectives could likely broaden the spectrum of *sustainable* insurance products, even significantly.

María Gómez Santos

INSURANCE, TRANSPORT AND SDGS: THE SPANISH AGENDA

Table of contents: 1. The crucial role that insurance plays as a primary tool to achieve six of the seventeen Sustainable Development Goals (SDG). – 1.1. Special remarks on climate change. – 2. How the insurance activity contributes to fight against climate change in the spanish agenda. – 2.1. The Consorcio de Compensación de Seguros risk pool. – 2.1.1. Functions to fight against climate change. – 2.2. The agricultural risk pool. – 2.2.1. Functions to fight against climate change. – 3. How the insurance sector can affect transport to jointly fight against climate change. – 4. Final remarks.

1. *The crucial role that insurance plays as a primary tool to achieve six of the seventeen Sustainable Development Goals (SDG)*

As a critical pillar of the global economy, the banking and insurance financial sector can positively impact many of the challenges of the 2030 Agenda. In particular, as it will be discussed below, the insurance sector can play a key role in six of the 17 SDGs.

In relation to "Goal 1: End Poverty", insurance provides a safety net for those who use it, preventing them from falling into poverty after suffering a shock. In relation to "Goal 2: Zero Hunger", the insurance sector can help foster sustainable, locally driven food production, opening up opportunities where there were none before and encouraging investment in improved agricultural practices. Insurance can also improve household food security by stabilising their financial situation after a crisis and, finally, insurance can assist people to respond and adapt to natural disasters, which might otherwise push them deeper into poverty.

The insurance sector can promote "Goal 3: Good health and well-being", as insurance and social protection can play complementary roles in covering a range of household health care costs and improving healthcare-seeking behaviour. As insurance can protect women working in the informal sector (who often fall outside the reach of public social protection schemes),

as well as generally maintain the financial stability of their household, the insurance sector can be useful in achieving “Goal 5: Gender equality”. As for “Goal 8: Decent work and economic growth”, the insurance sector protects assets, thereby unlocking loans and other funds for Micro, Small and Medium Enterprises (MSMEs), releasing private funds from MSMEs for productive investment, and supporting the development of MSMEs by protecting them from losses due to business-related risks, natural disasters or other catastrophes; all of them useful in achieving Goal 8. Finally, and the one that will be more deeply analised in this paper, the insurance sector can play a key role in achieving “Goal 13: Climate Action”.

1.1 *Special remarks on climate change*

The insurance industry is currently in a unique position globally about climate risk, as insurers are doubly exposed. On the one hand, their investments face climate risk on their balance sheet assets and, on the other hand, the so-called underwriting risk (particularly in the property and casualty line), meaning the potential financial loss that an insurer may experience if it agrees to provide cover to an individual or organisation.

As risk managers, insurance companies have an important role to play in the transition to a global net-zero economy. It is because of the importance of this role that the “Zero Net Emissions Insurance Alliance (NZIA)” was created at last year’s G20 summit in Venice to transition its existing insurance and reinsurance portfolios (insurance carried over or ceded from other insurers) to net GHG emissions [1]. In this regard, it is remarkable that, in less than a year, the NZIA has brought together twenty-five of the world’s largest and most important insurers representing more than 11% of global premium volume and more than $7 trillion in assets under management.

Definitely, the insurance sector plays an important role as a climate risk management tool which allows society to mitigate the losses caused by the occurrence of extreme weather events. In addition, this sector can also encourage the implementation of measures that reduce risk. In this sense, the European Union considers the insurance sector as a fundamental tool to compensate for the damage caused by extreme climatic events. For this

---

[1] The NZIA was launched at the G20 Climate Summit in Venice in July 2021 by its eight founding members: AXA, Allianz, Aviva, Generali, Munich Re, SCOR, Swiss Re and Zurich Insurance Group. These insurers are building on their climate leadership as investors through their membership of the UN-convened Net-Zero Asset Owner Alliance (NZAOA) established in 2019. For further information, please visit the following link: *https://www.unepfi.org/net-zero-insurance/* Last access: 20.07.22.

reason, it promotes the contracting of insurance to improve the management of risks derived from climate change or increase access to the natural disaster insurance and reinsurance market.

Through risk transfer, the insurance industry absorbs the damage caused by extreme weather events and prevents these losses from causing long-term economic damage. In this sense, the main role of the insurance industry in improving the adaptation and resilience of society in the face of the impacts of climate change is to absorb the impacts and to avoid economic damage to the people through several mechanisms. For example, providing financial compensation for those affected by disasters or playing an important role in the evaluation, communication and signalling of risks, through deductible premiums, franchises and payments (this way, those who are or may be at risk can have a better understanding of the threats to which they are subjected).

Finally, another mechanism is the introduction of incentives or requirements in risk management that can limit the potential impacts of an extreme weather event, such as applying reductions in the premiums of the insured that have measures to reduce the damage. For instance, in transport, having fire security systems or, simply, by not assuring the transport companies that do not comply with the established security minimums.

2. *How the insurance activity contributes to fight against climate change in the spanish agenda*

In Spain, there are two special pooling mechanisms based on solidarity and the near collaboration between public and private sector: the Consorcio de Compensación de Seguros risk pool and the Agricultural risk pool.

2.1. *The Consorcio de Compensación de Seguros risk pool*

The origins of the *Consorcio de Compensación de Seguros* (hereinafter the "CCS") go back to the year 1941 in which the *Consorcio de Compensación de Riesgos de Motín* was provisionally created as an adjuvant to the Spanish insurance market to deal with the losses caused by the Civil War[2]. Circumstantially, it was also used to deal with other major disasters: fire in

[2] *Youbarai Paudel*, "A Comparative Study of Public-Private Catastrophe Insurance Systems: Lessons from Current Practices", The Geneva Papers on Risk and Insurance. Issues and Practice April 2012, Vol. 37, No. 2, p.265.

Santander in February 1941; fire in Canfranc in April 1944; fire in El Ferrol in May 1944; landmines explosions in La Marina in Cádiz in August 1947; explosion of a powder magazine in Alcalá de Henares in September 1948. From 1954 onwards, the initiative took on a permanent and forward-looking character, giving rise to what is today the CCS.

Since that date, the Consortium has been closely linked to the coverage of extraordinary risks, as the central figure in a system of compensation for catastrophic damage that is unique in the world. However, throughout its history, it has taken on other tasks, such as those related to export credit insurance, combined agricultural insurance, compulsory motor liability insurance, compulsory passenger insurance, compulsory insurance for hunters and civil liability insurance for nuclear risks, in a range of activities of a subsidiary and guarantee fund nature. Furthermore, since the beginning of 1998, its activity has also extended to the field of environmental risks, having joined the Spanish Environmental Risk Pool. Finally, and by provision of Law 44/2002, of 22 November, the Consortium assumes the functions of liquidation of insurance companies that had been carried out by the CLEA (Comisión Liquidadora de Entidades Aseguradoras).

Nowadays, the CCS has its own legal personality and full capacity to act, and its specific framework for action is determined by its Legal Statute[3]. It has its own assets, distinct from those of the State, and its activity does not depend on the General State Budget. Its highest decision-making body is the Board of Directors, which, chaired by the Director General of Insurance and Pension Funds, is made up of 14 members, seven of whom are senior executives of private insurance companies and the other seven being senior government officials[4]. The CCS follows a solidarity system scheme as it does not penalize those affected by increasing the premiums of their personal or damage insurance, nor does it oblige the implementation of measures that reduce the risk.

The main risks covered by the CCS are identified with those caused by natural phenomena; those caused violently as a consequence of terrorism, rebellion, sedition, riot and civil commotion; and the acts or actions of the

[3] Ex. Art. 1 of the Legal Statute of the CCS.

[4] Operationally, the entity is organised into six functional areas at management level: Operations, Finance, Settlement and Reorganisation of Insurance Entities, Information Systems and Technology, Risk Management and General Secretary's Office. The Internal Audit Service, the Policyholder Service and the Agricultural Insurance Sub-Directorate are horizontal units that also report directly to the CCS Directorate General. For its part, the decentralised structure of the CCS is made up of 17 offices distributed in 13 territorial delegations throughout Spain, which fulfil the objective of bringing the management closer to policyholders.

Armed Forces or the Security Forces and Corps in peacetime. These are the so-called “extraordinary catastrophic risks”.

Referred to the coverage for damage caused by natural phenomena, the CCS includes extraordinary floods, earthquakes, tidal waves, volcanic eruptions, atypical cyclonic storms and the fall of sidereal bodies and aerolites. In this respect, it is important to point out that the risk that causes most damage in Spain is that of flooding and, for the purposes of coverage, this is understood as the flooding of land caused by rain or thawing; by water from lakes with a natural outlet, from estuaries or rivers, or from natural watercourses on the surface when they overflow from their normal channels. It also includes the impact of the sea on the coast, even if there is no flooding. However, this concept of flooding does not include rain falling directly on the insured risk, or that collected by its roof or rooftop, its drainage network or its patios, nor flooding caused by the bursting of dams, canals, sewers, collectors and other artificial underground watercourses, unless the bursting has occurred as a direct consequence of an extraordinary event covered by the CCS.

Damage cause by earthquakes, tidal waves, volcanic eruptions and fall of sidereal bodies and aerolites are covered with prior certification issued by the National Geographic Institute and other Public Organisations competent in the matter. In the case of atypical cyclonic storms, twisters and extraordinary winds, characterised by gusts of over 120 km/h, are included, among others, in accordance with the Regulation of the Insurance of Extraordinary Risks.

On the contrary, there shall be no cover for extraordinary risks if the cause of the damage is different from the extraordinary events included in the coverages mentioned before. In this sense, the CCS shall no cover damage produced by direct rainfall on the insured risk or that collected by its roof or flat roof, its drainage network or its patios; non-extraordinary winds, characterised by the non-existence of gusts of more than 120 km/h); hail; snow; leaks, filtrations or dampness; breakage of dams, sewers or artificial channels (except if the breakage occurs as a consequence of an extraordinary event); rise in the water table, movement of hillsides, landslides or settlement of land, rock falls and similar phenomena, unless these were caused by the action of rainwater which in turn caused an extraordinary flooding situation in the area and occurred simultaneously with such flooding; armed conflicts, even if not preceded by a declaration of war; riotous actions in the course of authorised demonstrations or legal strikes; nuclear energy (although damage caused to nuclear installations as a consequence of an extraordinary event is covered); waves or ordinary currents when they affect totally or partially submerged property on a permanent basis; the mere passage of time or the lack of maintenance of the insured

property and, finally, any event that, due to its magnitude and seriousness, is qualified by the Spanish Government as a "catastrophe or national calamity", in which case the appropriate public State aid will come into play[5].

2.1.1. *Functions to fight against climate change*

In addition to providing cover for the so-called extraordinary risks, the CCS works in collaboration with other organizations to design strategies that can help citizens to reduce the damage caused by the mentioned extraordinary risks. An example are the recommendations made to protect buildings from flooding, as reflected by the CCS in its *Guide to reducing building vulnerability to flooding*, whose main objective is to help to reduce the damage to buildings caused by floods, through the implementation of a series of measures such as the installation of protective barriers, the relocation of equipment in dry areas or the redistribution of uses in the buildings, etc. In other words, they offer advice to improve territorial planning and reduce the risk of flooding.

Floods are the natural phenomena hazard with the greatest consequences in Spain. Every year, an average of ten serious episodes of flooding occurs in this country. According to the CCS and the Directorate General for Civil Protection and Emergencies, floods have caused the death of more than 300 people in the last twenty years and material damage of around 800 million euros per year. According to maps from the Ministry of Agriculture and Fisheries, Food and Environment (MAPAMA)[6], it is estimated that around 3 million Spaniards live in areas at high risk of flooding identified in the work to implement the European Commission's Directive 2007/60/EC on the assessment and management of flood risks.

The referred Directive was transposed into Spanish law by *Royal Decree 903/2010 on the assessment and management of flood risks* and obliges Member States to draw up, approve and implement flood risk management plans. One of the main objectives of this regulation is to achieve coordinated action by all public administrations and society to reduce the negative consequences of floods on the health and safety of people and property, as well as on the environment, cultural heritage, economic activity and infrastructures. In this context, on 1 June 2016, the collaboration agreement was signed between CCS and the Directorate General for Water of the Ministry of Agriculture and Fisheries, Food and Environment for the development of risk prevention and mitigation measures included in the flood risk management plans.

[5] Art. 6 of the Extraordinary Risks Insurance Regulation.

[6] *https://www.mapa.gob.es/en/default.aspx*. Last access: 28.07.22.

As a result of this new agreement, one of the actions carried out has consisted of the development of the mentioned *Guide to reducing building vulnerability to flooding*. The overall objective of this Guide is to increase understanding of the behaviour and consequences of floods, to encourage society's commitment to self-protection and thus to risk reduction by reducing the vulnerability of people and property and increasing the resilience of buildings in flood-prone areas. The guide is a tool to materialise this risk reduction through the recommendation of guidelines and solutions that can be undertaken to minimise losses caused by floods. It does not aim to resolve all the possible cases that may arise, but it does provide a catalogue of possible solutions by providing references to other sources of information [7].

Other similar guides have been consulted for the drafting of the *Spanish Guide to reducing building vulnerability to flooding*. At the European level, those published in France and the Netherlands, which have several years of experience in this type of work, were reviewed. Other important sources of information, on which almost all the documents analysed rely, are the guidelines of the Federal Emergency Management Agency (FEMA) [8] of the United States of America, a pioneer in flood risk reduction.

The effects of flooding and the search for solutions have evolved with the level of development of the country and the value that citizens place on safety. This gradual change in the level of risk assumed, its management and mitigation are reflected in legislation, both at European, national and autonomous community level, which is why the main laws and regulatory texts in these areas that are applicable in Spain have been analysed in terms of water and coasts, insurance coverage for flood risk, civil protection and land and urban planning.

Another example of the CCS's role in the prevention of natural hazards is that it contributes to different projects to introduce the perspective of climate change at the local level. In any case, taking out insurance can lead to moral hazard, a false sense of security against climate risks that can result from investing in protective measures, leading to increased vulnerability. Therefore, moral hazard could be an obstacle to climate change adaptation,

---

[7] Some of the specific actions addressed in this Guide and in the work carried out within the framework of the agreement between the CCS and the Directorate General for Water of the Ministry of Agriculture and Fisheries, Food and Environment are: raising awareness of the need to live with floods and the unavoidable challenge of mitigating their effects; identifying the flood risk to which one is exposed and carrying out a diagnosis of the current situation; determining actions to protect oneself from floods and deciding on the most appropriate method; or assessing possible actions to recover from a flood and the importance of having insurance.

[8] *https://www.fema.gov/*. Last access: 28.07.22.

and it will be essential for the insurance sector to take measures to mitigate it in collaboration with institutions.

2.2. *The agricultural risk pool*

In the Spanish agricultural sector, the role of agricultural insurance is essential to boost the adaptation of the sector to the new conditions of climate change. The economic impact derived from the claims in the sector is of such magnitude that, were it not for the contracting of agricultural insurance policies, many farms would be economically unviable and would not be able to continue their activity, generating a significant impact on the Spanish economy, in the shortage of some kind of food, in the abandonment of productive farmland or the exodus of rural areas.

The Agricultural risk pool in Spain arises because of the mandate of the legislator contained in article 41 of the Regulation of Law 87/1978, presenting some peculiarities that make it unique. Currently, the Agricultural risk pool offers numerous coverages to protect agricultural production against the vast majority of natural risks, being an institution of reference at an international level; it is the only existing risk pool in this sector in the European Union.

The Agricultural risk pool is dedicated exclusively to the direct underwriting of agricultural insurance and lacks. It owns a minimum of permanent funds; however, more *ad hoc* funds would be provided by all the members of the pool if circumstances require it[9]. For setting the insurance premiums, it should be noted that its pricing does not fully meet the criteria of the free market since there is a mandatory minimum price (the so-called "technical premium") from which the final amount to be paid cannot be lowered. Likewise, it is necessary to be aware of the specific provisions regarding the pricing of the premium in the specific case of combined agricultural insurance[10], as well as the subsidy granted to producers/insurance holders for the payment of the premiums based on various factors[11].

[9] European Commission, DG for Competition, *Study on co(re)insurance pools and on ad-hoc co(re)insurance agreements on the subscription market: new edition July 2014*, Chevalier, F.(editor), Buccellato, T.(editor), Smith, J.(editor), Veyssiere, L.(editor), Publications Office, 2014, *https://data.europa.eu/doi/10.2763/76809*, p. 389.

[10] Provisions contained in art. 21 of Royal Decree 2329/1979, of September 14, which approves the Regulations for the application of Law 87/1978, of December 28, on Combined Agricultural Insurance.

[11] Factors such as greater protection for farmers, ranchers and forest owners with a modest economy or the staggering of the subsidy based on the intensity of the risk that is intended to be covered. Ex. Art. 57.2 of the aforementioned Royal Decree 2329/1979, of September 14.

The activity of the Agricultural risk pool and its management are carried out by a company whose partners chime with the insurance entities that take part in the risk pool [12]; a company named *Agrupación Española de Entidades Aseguradoras de los Seguros Agrarios Combinados, S.A. (Agroseguro, S.A.)* [13], incorporated in 1980 with an initial capital of one million pesetas subscribed by the twenty-five insurance companies that initially formed it. According to article 41 of *the Regulations for the development of the Combined Agricultural Insurance Law*, the insurance companies that decide to operate in the Spanish agricultural insurance must be grouped in any of the forms permitted in the legal system and have legal personality. Moreover, both its Statutes and its Regulations must be authorized by the Ministry of Finance [14].

The long-term nature of this risk pool does not imply that the identity of its members must be the same or that each of them is required to always participate with the same intensity. Thus, both entry and exit from the pool are possible, but respecting a series of requirements that respond to a legal and conventional nature.

Regarding the legal conditions of access to the Agricultural risk pool and its permanence, it should be pointed out that only those insurance entities duly authorized to operate in the agricultural insurance may be incorporated, except for the *Consorcio de Compensación de Seguros*, which, by legal mandate, will also be a member of the pool network when it participates in the coverage of this type of risk [15]. In this sense, the referred Consortium has been assigned a series of functions concerning agricultural insur-

[12] Art. 8 of the Statutes of the Spanish Association of Combined Agrarian Insurance Entities, S.A. (Text approved by the entity's Extraordinary General Shareholders' Meeting held on December 23, 2015, modified by Agreement of the Ordinary General Meeting of shareholders as of March 30, 2016).

[13] *Gabriel Tortella Casares*, "Historia del Seguro en España", Mapfre, 2nd edition, 2014, p. 335. Established on April 17, 1980, the main corporate purpose of Agroseguro, S.A. is the administration of combined agricultural insurance through the performance of various activities (Art. 3.1 of the Agroseguro Statutes). The share capital of Agroseguro, S.A. is distributed in fifty thousand registered shares with a nominal value of one hundred and eighty euros, all of them from the same series and without any type of privileged share. Shareholders may only be insurance entities authorized to operate in agricultural insurance. For its part, it is importante to highlight the duty imposed on all shareholders to assume the risks of agricultural insurance, configuring this, rather than as na accessory benefit as a duty in order to acquire such qualification. (José *María Muñoz Paredes*, "El coaseguro", Ed. Civitas, 1996, p. 203)

[14] Art. 41, sections 1 and 2, of Royal Decree 2329/1979, of September 14.

[15] Art. 10 of the Statute of the Insurance Compensation Consortium. In this sense, it should be noted that in the first four years of the pool's life (1980-1984), its participation was non-existent, this being the only period in which the Consorcio de Compensación de Seguros has not been part of either the pool or Agroseguro, S.A. *Vid. Gabriel Tortella Casares*, op.cit., p. 335.

ance [16], namely, controlling the appraisals of claims, assuming coverage for personal injuries in forest fires or acting as reinsurer or co-insurer of the pool risk where appropriate [17].

Regarding the exit of the risk pool, the loss of the administrative authorization enabling to operate in the agricultural insurance will determine the automatic expulsion of any of the member entities. Likewise, under certain circumstances, the General Directorate of Insurance may agree to prohibit certain members of the pool to continue being part of it when they act irregularly [18]. Said irregular behaviours are, for instance: the refusal to cover certain risks, the lack of adequate diligence in the subscription of insurance, when there is no sufficient economic capacity to cover the risks included in the Agricultural Insurance Plan or if the insurance company systematically and seriously does not comply with the rules of the Agricultural Insurance Plan [19]. Finally, it should be noted that, whenever a member leaves, the remaining entities must absorb the participation that they had in the risk pool since its coverage cannot be affected by the changes produced in the coinsurance table [20].

2.2.1. *Functions to fight against climate change*

By legal mandate, the functions that must be carried out by the Agricultural risk pool are imposed. Namely, they are the following: insurance contracting in the name and on behalf of all the entities that are part of the pool; the distribution of risks among the members of the pool in the proportion that is established annually, taking into account as an important factor to carry out the distribution the volume of business that each entity has contributed; the legal representation of each and every one of the entities of the pool; the administration of the insurance, claims assess-

[16] The functions of the Consortium in this field are established in article 10 of its Legal Statute.

[17] The Consortium acts as a reinsurer, compensating, in the years in which excess claims are incurred, most of the said excess. The conditions of the reinsurance contract will be established annually in a Ministerial Order. As a co-insurer, it participates in the co-insurance table assuming a part of the risk of the agricultural insurance system like any private co-insurance company.

[18] Hence, together with these circumstaces, it is necessary to consider the particularities included in the multilateral contracts that serve as the basis for the risk pool.

[19] Art. 43 of Royal Decree 2329/1979, of September 14, which approves the Regulations for the application of Law 87/1978, of December 28, on Combined Agricultural Insurance.

[20] This obligation is expressly contemplated in Art. 43 of Royal Decree 2329/1979, of September 14, but it seems extensible to the rest of the assumptions of exit by any member, whatever the cause.

ment, payment of compensation, statistical studies, research and, in general, whatever results in the promotion of this insurance and, lastly, the obligation to collaborate with the public administrations involved in agricultural insurance for whatever this is required[21].

Carrying out studies to deep into the risks covered by the pool is included within the functions attributed to it by law. In this sense, the Agricultural risk pool is perfectly aware of the risks that affect it and develops scientific studies in search of solutions. For example, studies to find new varieties of crops, to get improved livestock breeds, to improve the knowledge about sustainable management techniques, etc. Nevertheless, the Agricultural risk pool does not have to perform it alone: since 2017, it works closely to the CEIGRAM (Research Centre for the Management of Agricultural and Environmental Risks)[22] and has signed numerous agreements with the main Universities of Spain that investigate in sustainability and agricultural sector.

3. *How the insurance sector can affect transport to jointly fight against climate change*

Freight and passenger transport entail 30% of the CO2 emissions generated in Spain, more than industry and electricity production, which reflects the urgency and the importance of accelerating the sustainable transformation of the sector, prioritizing the train over the road and public transport over the private car[23]. In this sense, the Spanish Ministry of Transport manages more than 11 million euros from the Recovery, Transformation and Resilience Plan to decarbonise and digitize mobility and to

[21] Art. 41.3 of Royal Decree 2329/1979, of September 14.

[22] The CEIGRAM is a Joint Research Centre of the Universidad Politécnica de Madrid (UPM), which was founded in 2007. It was established thanks to the collaboration agreement signed between the Spanish National Agency for Agriculture Insurance (ENESA, an Independent Body of the Ministry of Agriculture, Fisheries and Food), AGROMUTUA (a mutual insurance company specialised in agricultural insurance, with almost 30 years of experience) and the UPM. Since 2017, the Agricultural risk pool has taken the place of AGROMUTUA in CEIGRAM. Both entities stand out for their research work in 15 of the 17 SDGs. The collaboration between both organisations has also made it possible to promote training activity in agricultural and environmental risk management, supporting technicians and university graduates from different countries in agricultural and environmental risk management.

[23] This problem is not new in Spain, since at least since 2010, the percentages have remained unchanged. *Pedro Perez-Martínez et Andrés Monzón*, “Transport Energy Use and Emission Trends in Spain”, 2010, *doi 10.1007/978-90-481-3043-6_42,* p. 406.

promote the sustainable transformation of transport focused on the train and the sea sector.

The program to support sustainable and digital transport, included in the Component Number 6 of the Recovery, Transformation and Resilience Plan (PRTR), is made up of 15 measures and has a budget allocation of 800 million euros from European Next Generation EU funds. One of the 15 measures, which has a credit of 120 million euros, aims to encourage the use of rail and maritime freight transport by establishing two eco-incentive programs that reward the savings in external environmental and socio-economic costs [24] generated by the use of both modes compared to road transport. Specifically, the maritime eco-incentive has an initial budget of 60 million euros to subsidize the development and use of maritime freight transport in proportion to a socio-economic and environmental merit, measured as the reduction of external transport costs when using the maritime mode as opposed to road [25]. Thus, its purpose is twofold: to consolidate and increase the share of maritime freight transport and to promote the shift from road to maritime mode to help decarbonize the economy, respond to climate change and reduce air pollution and the social and economic impact of transport activity. In this sense, and focused on the fight against change from the maritime transport sector, the insurance industry can contribute significantly to achieving the objectives of the 2030 Agenda.

Throughout history, maritime transport is one of the main sectors that has promoted the development of insurance to provide a service adapted to the particularities of the sector. In the event of a breakdown and loss of merchandise, maritime transport insurance allows that the economic loss is shared jointly and severally among all shippers and shipowners. For this reason, the worsening of navigability conditions makes insurance an essential tool in managing the risk that affects the maritime transport sector, both regarding the coverage of the cargo being transported, as well as the different responsibilities of the shipowner boat.

Given its long existence, the insurance sector development and evolution have a wide portfolio of products insurers adapted to each sector and need that allows providing financial stability and ability to development to the different economic sectors. Climate change will generate new needs

[24] The external costs of transport considered in defining this aid are climate change (greenhouse gases), air pollution, congestion, accidents and noise.

[25] Order TMA/391/2022, of 26 April, approving the regulatory bases for the award of grants in non-competitive competition for the eco-incentive for the promotion of maritime freight transport based on environmental and socio-economic merit within the framework of the Recovery, Transformation and Resilience Plan, and the procedure and call for the selection of collaborating entities that will participate in its management (*BOE-A-2022-7384*).

for which they must create specific products that allow the strengthening of economic activities as happens today.

The maritime transport will be affected by climate change, both due to the increase in the number of days in which the navigability conditions are not appropriate due to adverse meteorological phenomena, and due to the alterations the ports will suffer in their operational conditions. For this reason, in the short to medium term, considering that in Spain 60% of exports and 85% of imports are carried out by sea, the Spanish Agenda is mainly oriented to introduce public policies in this type of transport. Moreover, the rise in temperature and heat waves could cause problems in the operation of equipment and industrial machinery causing claims in the form of machinery breakdown that could paralyze some activities and produce economic losses. In this case, the loss of benefits insurance becomes essential for those economic activities that require the proper functioning of their activity of machines or equipment, and that may be affected by increased temperatures.

In this context, on 24 July 2017, the Directorate General for Coast and Marine Sustainability resolved to approve the Strategy for Adaptation to Climate Change on the Spanish Coast to increase the resilience of the Spanish coast to climate change and climate variability and to integrate adaptation to climate change in the planning and management of the Spanish coast[26].

According to the Strategy for Adaptation to Climate Change, the rise in sea level will produce a general reduction in the number of hours available to carry out operations in all ports in Spain in the near future. Likewise, the projection of the changes in the waves observed to date make foreseeable that, in 2040, there will be an important reduction in the operability in the ports of the Bay of Biscay, the southeast of the Canary Islands, north of Mallorca and the Mediterranean ports if adaptation measures are not taken. Regarding the port structures, the rise in sea level will reduce the reliability of most of the maritime works in the ports of Spain, an effect that is offset in some cases by changes in the waves. The complications in the ports, which will have to adapt to the rise in the sea level through the construction of protections that allow the safe entry of ships and the performance of loading and unloading operations, could mean a decrease in the number of exports and imports made through maritime transport, reducing the number of international transactions, and may generate problems in the supply of certain goods in the Mediterranean ports.

The worsening of navigability conditions and the increase in waves, which reduce the operability of ports, are factors that dramatically affect

---

[26] *https://www.miteco.gob.es/es/costas/temas/proteccion-costa/estrategiaadaptacionccaprobada_tcm30-420088.pdf.* Last access: 20.07.22.

the accident rate of ships that transport merchandise, and may give rise to accidents that result in spills of fuel, chemical products, minerals, containers, etc. These accidents not only cause a loss of merchandise but can also be accompanied by spills that generate a significant environmental impact that requires actions to clean up and restore the ecosystem, with a very high associated cost and implications in the field of civil liability and environmental.

4. *Final remarks*

The proper achievement of the SDGs is undoubtedly one of the most important challenges facing all countries globally. In this sense, in both the insurance industry and the transport sector, it is possible to undertake certain changes that facilitate the transition towards a fairer, more egalitarian, and environmentally friendly world.

Specifically, the activity carried out by the insurance industry can make a significant contribution to the achievement of 6 of the 17 SDGs, namely "Goal 1: End Poverty", "Goal 2: Zero Hunger", "Goal 3: Good health and well-being", "Goal 5: Gender equality", "Goal 8: Decent work and economic growth", and "Goal 13 Climate Action".

Focusing on the last Goal, it has been analysed that the insurance sector can play an important role in the fight against climate change. The reason is simple: currently, this industry is in a unique position globally about climate risk, as insurers are doubly exposed. On the one hand, their investments face climate risk on their balance sheet assets and, on the other hand, the so-called underwriting risk, meaning the potential financial loss that an insurer may experience if it agrees to provide cover to an individual or organisation.

Concerning the Spanish case, it has been highlighted how two special pool schemes –the *Consorcio de Compensación de Seguros risk pool* and the *Agricultural risk pool*–help in protecting the impact of extreme climate risks and agricultural risks. Moreover, in relation to the Spanish Agenda in transport and the SDGs, it has been pointed out how the Next Generation Funds from the European Commission can foster innovation and sustainability in this sector.

The challenge posed by achieving the SDGs set out in the 2030 Agenda cannot be ignored by any operator, whether belonging to the public or private sector. Only through close collaboration between both spheres is it possible to achieve the SDGs; a collaboration in which, as has been analysed throughout this work, the insurance industry and the transport sector can contribute a lot.

Anna Montesano

THE SOCIAL DIMENSION OF SUSTAINABILITY IN NAVIGATION: RECENT TRENDS AND CHALLENGES IN THE MARITIME LABOUR MARKET

Table of contents: 1. Introduction. – 2. Multidimensional orientation towards sustainability. – 3.The UN 2030 Agenda for sustainable development: the goal n. 8 on decent work and economic growth. – 4. The role of the IMO and the ILO in a Sustainable Maritime Labour System. – 5. International response and cooperation to increase the protection of seafarers' rights. – 5.1. Has shore leave become "luxury" for seafarers? – 5.2. Seafarers as essential workers. The campaign of the "Day of the Seafarer" – 6. Concluding remarks.

1. *Introduction*

The process of taking into account the environment as a protagonist when considering safety in navigation activities has led to a considerable debate about the implications that the shift towards the so called "circular economy" might have on the maritime labour market, in terms of work conditions and professional skills of seafarers.

Discussions have encouraged the international authorities and worker representation bodies to review their strategies on work regulation in order to make workplaces more environmentally friendly, raising seafarers' awareness about environmental issues and sustainability-oriented practices.

Making the economy more sustainable will influence the current job market in the maritime sector, as well as require that the skills of the workers become more aligned with the new challenges thereby arising.

The social and health standards in the maritime labour market are among the most ambitious in the world, protecting labour rights and promoting safe, secure working environments for all workers.

In the light of the foregoing considerations, significant progress and changes have been made in the EU's and international labour policies in order to meet the new trends in the market and the needs of workers.

In the UE context, Article 3 of the Treaty on European Union enumerates the overall objectives of the European Union, listing, amongst others, the urgency of attaining high levels of employment, sustainable growth, and economic and social cohesion [1].

Therefore, the Treaty expressly recognizes the importance of a high level of employment, both for economic and social progress [2].

The objectives of improving quality and productivity at work, and strengthening social cohesion and inclusion are particularly significant in the light of the serious challenges arising from the phenomena of economic globalization and the Covid pandemic, which have widely affected the labour market and the rights of seafarers.

2. *Multidimensional orientation towards sustainability*

The transition towards sustainability in the maritime sector is not simply limited to the implementation of global standards for pollution prevention and protection of the marine environment, but also covers a wide-ranging spectrum of important issues to be addressed, including the health, safety and training of seafarers.

The strategy for economic growth needs to focus not only on economic performance and competitiveness in the labour market but also on other social issues, such as improving the working conditions of seafarers in order to minimize safety risks.

The social dimension of sustainability is, therefore, essential in achieving economic development in the maritime sector.

As known, the elaboration of the principle of "*sustainable development*" has been reached in 1987 by the *World Commission on Environment and Development (*WCED) in the Report "*Our Common Future*", better known

---

[1] Article 3 of the Treaty on the European Union reads as follows: "*1. The Union's aim is to promote peace, its values and the well-being of its peoples. […] 3. The Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. […]*".

[2] In 1997 the *European Employment Strategy* (EES) was launched at the Luxembourg European Council for coordinating EU countries' reform efforts to establish a set of common objectives and targets in the labour market and social policies. The EES is now part of the "Europe 2020 growth strategy".

See *Felix Syrovatka*, "The emergence of a new European labour policy regime: continuity and change since the euro crisis", Competition & Change, 26(5), 2022, p. 575-602.

as the Brundtland Report [3], in the following terms: "*Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs*".

This definition is based on ecological and social balance [4], which interprets the concept of sustainable development as not limited to environmental protection, but extended also to the protection of human rights and fundamental freedoms, taking into account the principle of "intergenerational responsibility" [5].

At the *United Nations Conference on Environment and Development*, held in Rio de Janeiro in 1992 [6], the ever-growing need to create a strong link between economic development and environmental and social needs reached worldwide recognition. On this occasion, therefore, the principle of sustainable development was enshrined in the legal international framework.

Another significant step for the purpose of cementing the principle of sustainable development is represented by the *United Nations World Summit on Sustainable Development* (*WSSD*) [7], held in Johannesburg in 2002.

This *Summit* represented an opportunity to reaffirm the commitment to achieve the development goals set out in the Rio Declaration (especially those concerning the Agenda 21 [8]), as well as to respect the agreements reached during the *International Conference for Financing for Development* (Monterrey, Mexico) [9] and the Summit of the World Trade Organization

---

[3] *United Nations – Report of the World Commission on Environment and Development: Our Common Future. Transmitted to the General Assembly as an Annex to document A/42/427 – Development and International Cooperation: Environment*. See: *https://www.un.org/ga/search/view_doc.asp?symbol=a/42/427&lang=e).*

[4] See *Francesca Pellegrino*, "Sviluppo sostenibile dei trasporti marittimi comunitari", 2010, p. 40.

[5] See *Raffaele Bifulco/Antonio D'Aloia* (ed.), "Un diritto per il futuro. Teorie e modelli dello sviluppo sostenibile e della responsabilità intergenerazionale", 2008; *Julia M. Puaschunder* (ed.), "Intergenerational Responsibility in the 21st Century", 2019.

[6] Cfr. *Sergio Marchisio*, "Gli atti di Rio nel diritto internazionale", Rivista di diritto internazionale, 1992, p. 584; *Vincenzo Pepe*, "Lo sviluppo sostenibile tra diritto comunitario e diritto interno", Rivista giuridica dell'ambiente, 2002, p. 212. See also *Sergio Marchisio*, "Italy's Membership in the UN Security Council and Peacekeeping, New Models of Peacekeeping Security and Protection of Human Rights. The Role of the UN and Regional Organizations", 2018.

[7] *Johannesburg Summit, 26 august – 4 September 2002 (cfr. https://sustainabledevelopment.un.org/milesstones/wssd).*

[8] *https://www.mite.gov.it/pagina/lagenda-21.*

[9] The International Conference on Financing for Development was held in March 2002.

in Doha (WTO-Doha Development Agenda, also known as the *Doha Round*) [10].

3. *The UN 2030 Agenda for sustainable development: the goal n. 8 on decent work and economic growth*

In September 2015, at the United Nations General Assembly, the 2030 Agenda for Sustainable Development (United Nations 2030 Agenda) and its "Sustainable Development Goals" (SDGs) were signed up, agreeing on a concrete "*to-do list for people and planet*" [11].

This Agenda is an expression of how the environment is now viewed as of primary importance. This program in itself has 17 objectives for sustainable development, but it is set within a much broader framework for action, outlining 169 goals, all to be achieved in the relevant environmental, economic, social and institutional spheres by 2030.

The SDGs, together with the *Paris Agreement on Climate Change* [12], are the roadmap to create a global framework for international cooperation on sustainable development and its economic, social and environmental dimensions.

For the purpose of the present analysis, it is worth mentioning that during the 2015 UN General Assembly, decent work and the pillars of the ILO "Decent Work Agenda" (see *infra* [13]) became key aspects of the Agenda.

The goal no. 8 is specifically aimed to promote "*sustained, inclusive and sustainable economic growth, full and productive employment and decent*

It "*was the first United Nations-sponsored summit-level meeting to address key financial and related issues pertaining to global development*" (*https://www.un.org/esa/ffd/overview/monterrey-conference.html*).

[10] The United Nations Conference on Financing for Development took place in Doha (Qatar) from 29 November to 2 December 2008. See the "final text of agreements and commitments adopted at the Follow-up International Conference on Financing for Development to Review the Implementation of the Monterrey Consensus" (available at *https://www.un.org/esa/ffd/wp-content/uploads/2014/09/Doha_Declaration_FFD.pdf*).

[11] The 2030 Agenda for sustainable development, signed by the governments of the 193 United Nations member countries on 25 September 2015 and approved by the UN General Assembly.

[12] The Paris Agreement of 2015 "is the first global accord on climate change that contains policy obligations for all countries" (*Radoslav S. Dimitro*, "The Paris Agreement on Climate Change: Behind Closed Doors. Global Environmental Politics", 2016; 16 (3), p. 2). See also: *Joanna Depledge*, "The Organization of Global Negotiations: Constructing the Climate Regime", 2005.

[13] See para. 4

work for all" [14]. Furthermore, the relevant aspects of decent work are widely featured in the targets in other goals of the UN Agenda, namely: goals 4 (on quality education), 5 (on gender equality and women's empowerment) and 16 (on peace, justice and strong institutions).

The new approach to the labour market is all the more significant in the light of the serious challenges arising from the phenomena of economic globalization and the Covid pandemic, which widely affected the labour market in general and, particularly, the rights of seafarers.

4. *The role of the IMO and the ILO in a Sustainable Maritime Labour System*

The *International Maritime Organization* (IMO), which is the United Nations Specialized Agency responsible for setting global standards for the safety, security and prevention of pollution caused by ships, plays a very important role in the creation of a more effective regulatory framework for the maritime transport industry.

The activity of the IMO, supported by the efforts of the European entities operating in the field of maritime safety, has been directed to both the establishment of safety standards relating to the construction and equipment of the ships, as well as to the development of a more general "safety approach" concerning the management and workers involved in the operation of the ship.

Specifically, the relevant resolutions dealing with all matters related to maritime safety, e-navigation, and with the "social dimension" of the navigation are adopted by the Maritime Safety Committee (MSC) [15], including amendments to the STCW Convention on training and certification of seafarers [16].

---

[14] The "*2030 Agenda for Sustainable Development*" was adopted in September 2015 by the United Nations (UN), together with 17 sustainable development goals (SDGs).

See also: *Lawrence Sciberras/Joaquim Ramos Silva*, "The UN's 2030 Agenda for sustainable development and the maritime transport domain: the role and challenges of IMO and its stakeholders through a grounded theory perspective", WMU Journal of Maritime Affairs 17(2), 2018, p. 435-459; *Desai Shan/Pengfei Zhang*, "Sustainable Maritime Labour Governance: The Role of Transformative Partnership in Seafarers' Welfare", in: *Angela Carpenter, Tafsir M. Johansson, Jon A. Skinner* (eds.), "Sustainability in the Maritime Domain. Strategies for Sustainability", 2021, p. 257-270.

[15] *https://www.imo.org/en/MediaCentre/MeetingSummaries/Pages/MSC-Default.aspx*

[16] The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW Convention). For an in-depth analysis on the *STCW Convention* see: *Christopher Young*, "Comprehensive Revision of the STCW Convention: An Overview", Journal of Maritime Law and Commerce 26, no. 1 (January 1995): pp.

The IMO has the responsibility to provide support to its Member States through policy advice and technical cooperation, particularly during the implementation of the SDGs within Member States' national strategies.

In particular, the IMO activity led to the "*International Maritime Organization's new strategic framework for 2018–2023 for a more concrete approach towards meeting the goals of the 2030 Agenda*". The reference is the Resolution A.1110(30), adopted on 6 December 2017, entitled *"Strategic plan for the organization for the six-year period 2018 to 2023"*[17].

In the maritime labour market, the *International Labour Organization* (ILO) is the United Nations agency that has a regulatory function in seeking to protect seafarers.

The primary goal of the ILO is to set international labour standards, promote rights at work and encourage fair employment opportunities. Furthermore, ILO insists on the enhancement of social protection and the strengthening of dialogue on work-related issues, absolutely central to the achievement of full and productive employment and decent work for all.

The ILO *Declaration on Social Justice for a Fair Globalization*, adopted on 10 June 2008, stresses the significance of fundamental rights in the labour market as outlined in the following: freedom of association and the effective recognition of the right to collective bargaining, the elimination of forced or compulsory labour, the effective abolition of child labour, and the elimination of discrimination in respect of employment and occupation. This Declaration was updated in 2022[18] in order to include a safe and healthy working environment within in the ILO framework of fundamental principles and rights at work.

In order to support its member States and social partners to reach their goals, the ILO pursues a "*Decent Work Agenda*"[19], which comprises four interrelated areas: respect for workers' rights and international labour standards, employment promotion, social protection and social dialogue[20].

1-3; *Maximo Q. Mejia,* "The STCW Conference in Manila", WMU Journal of Maritime Affairs 9, 2010, p. 231-234.

[17] The IMO has developed seven strategic directions (SDs) under its Strategic Plan for the period 2018–2023, in order to facilitate the achievement of its vision statement: "*SD 1 – Improve implementation; SD 2 – Integrate new and advancing technologies in the regulatory framework; SD 3 – Respond to climate change; SD 4 – Engage in ocean governance; SD 5 – Enhance global facilitation and security of international trade; SD 6 – Ensure regulatory effectiveness; SD 7- Ensure organizational effectiveness*".

[18] *https://www.ilo.org/global/about-the-ilo/mission-and-objectives/WCMS_099766/lang--en/index.htm*

[19] *https://www.ilo.org/global/topics/decent-work/lang--en/index.htm*

[20] *Ibidem.*

5. *International response and cooperation to increase the protection of seafarers' rights*

In the maritime sector, reaching goal no. 8 of the 2030 Agenda is only made possible by the implementation of the Maritime Labour Convention[21] (MLC, 2006).

The MLC was adopted by the ILO on 23 February 2006[22], in order to create a coherent and comprehensive instrument embodying, as far as possible, all standards, as well as the fundamental principles, enshrined in other international labour conventions.

The MLC was, therefore, recognized as the Seafarers' Bill of Rights[23].

In particular, Article IV, MLC, reads as follows: "1. *Every seafarer has the right to a safe and secure workplace that complies with safety standards. 2. Every seafarer has a right to fair terms of employment. 3. Every seafarer has a right to decent working and living conditions on board ship […]".*

In this context, equally worthy of mention is the fundamental right of seafarers "*to health protection, medical care, welfare measures and other forms of social protection*", as embodied in Article IV(4) of MLC.

This provision reflects Art. 35 of the EU Charter of Fundamental Rights, which establishes that "e*veryone has the right of access to preventive health care and the right to benefit from medical treatment under the conditions established by national laws and practices*".

With the purpose to fully protect the minimum standards for the protection of seafarers' rights, the EU has transposed large parts of the MLC in its legislation[24] through the sectoral social dialogue Committee in maritime transport[25].

The Agreement on *Maritime Labour Convention* concluded on 19 May 2008 between the organisations representing management and labour in the maritime transport sector – the European Community Shipowners' Association, the European Community Shipowners' Associations (ECSA)

---

[21] *Olga Fotinopoulou Basurko*, "European Social Law of Seafarers: between common market and substantive law", in: *Patrick Chaumette* (coord.), "Seafarers: an international labour market in perspective", 2016, p. 393-414; *Jose Riola/Myriam García De Arboleya*, "Habitability and personal space in seakeeping behaviour", Journal of Maritime Research 3(1), 2006, p. 41-54.

[22] Entered into force on 20th August 2013.

[23] *Nihan Senbursa (ed.)*, "Handbook of Research on the Future of the Maritime Industry", 2022, p. 168 et seqq.

[24] *https://transport.ec.europa.eu/transport-modes/maritime/seafarers/employment-and-working-conditions_en.*

[25] *https://ec.europa.eu/social/main.jsp?catId=480&intPageId=1844&langId=en*

and European Transport Workers' Federation (FTS) – was implemented with Directive 2009/13/EC [26].

The Directive 1999/63/EC of 21 June 1999, as amended, should also be mentioned. It deals with the Agreement on the organisation of working time of seafarers concluded by the already mentioned ECSA and FST.

The COVID-19 pandemic caused relevant disfunctions in the implementation of the Maritime Labour Convention, putting seafarers in precarious situations.

COVID related measures imposed by Governments (travel bans, embarkation and disembarkation restrictions or suspension in the issuance of travel documents) severely strained the working and living conditions at sea of seafarers, resulting in a humanitarian and safety crisis [27].

This situation seriously affected their rights to physical and mental health [28], increasing the level of stress and tension of seafarers [29].

As the IMO noted, "*At the height of the pandemic some 400,000 seafarers were stranded on ships beyond the end of their original contracts and*

---

[26] See Art. 1, Directive 2009/13/EC of 16 February 2009 implementing the Agreement concluded by the European Community Shipowners' Associations (ECSA) and the European Transport Workers' Federation (ETF) on the Maritime Labour Convention, 2006, and amending Directive 1999/63/EC.

In order to ensure the effective enforcement of the international provisions, two Directives were introduced regarding flag State responsibilities and port State obligations for the Member States: Directive 2013/54/EU on flag State responsibilities for compliance and enforcement of MLC 2006, ensuring that the Member States concerned effectively discharge their obligations as flag States with respect to the implementation of the relevant parts of MLC 2006; Directive 2013/38/EU, amending Directive 2009/16/EC on port State control, which obliges Member States to ensure, through their inspections, that the treatment of ships and its crew, flying the flag of a State which is not a MLC ratifying State is not more favourable than that of a ship, and its crew, of a ship flying the flag of a State party to the Convention.

[27] UN Secretary General message on World Maritime Day. SG/SM/20274 (23 September 2020).

[28] ILO Committee of Experts (2020), General observation on matters arising from the MLC 2006 during the COVID-19 pandemic (Adopted by the Committee of Experts on the Application of Conventions and Recommendations (CEACR) at its 91st session, Nov-Dec. 2020), p. 5.

[29] See *Dr. Alex Bowen/Dr. Bob Hancké*, "The social dimensions of 'greening the economy': developing a taxonomy of labour market effects related to the shift toward environmentally sustainable economic activities", June 2019 (*https://data.europa.eu/doi/10.2767/448791). The study conducted in 2019 by the Itf Seafarers' Trust and Yale University show dangerous levels of stress in seafarers (20% of seafarers have contemplated suicide or self-harm, 25 % had suffered from depression and 17 % from anxiety)*, available at:*https://seafarerstrust.org/sites/default/files/node/publications/files/ST_MentalHealthReport_Final_Digital-1.pdf.*

unable to be repatriated, due to COVID-related travel restrictions. A similar number of seafarers were stuck at home, unable to join ships and provide for their families" [30].

The studies reveal a wide gap in the implementation of the MLC during the covid outbreak, reflecting the wider-ranging difficulties of the States to fulfil their obligations under the Maritime Labour Convention.

In 2020, IMO, alongside other organizations like the International Labour Organization (ILO), the International Transport Workers' Federation (ITF) and the International Chamber of Shipping (ICS), established a *Seafarer Crisis Action Team* (SCAT) to resolve the crew change crisis.

The SCAT team works with representatives from national governments, NGOs, trade unions or relevant associations, or orienting seafarers towards the right organization, to find solutions.

Many protocols have been issued in order to set out general measures and procedures that should, so far as practicable, be implemented by Governments and all stakeholders concerned to facilitate safe ship crew changes during the COVID-19 pandemic.

The reference is, *inter alia*, to the "*Recommended framework of protocols for ensuring safe ship crew changes and travel during the coronavirus (COVID-19) pandemic*" [31], addressed to maritime administrations and relevant national authorities (including, *inter alia*, health, customs, immigration, border control, seaport and civil aviation authorities) involved in the process of facilitating travel for the purpose of crew changes [32].

---

[30] *https://www.imo.org/en/MediaCentre/HotTopics/Pages/Support-for-seafarers-during-COVID-19.aspx#:~:text=The%20COVID%2D19%20pandemic%20put,to%20COVID%2Drelated%20travel%20restrictions.*

[31] IMO Circular Letter No.4204/Add.14 5 May 2020, addressed to all IMO Member States, United Nations and specialized agencies, intergovernmental organizations and non-governmental organizations in consultative status with IMO.

[32] Worth of mention is also the UN General Assembly resolution on "International cooperation to address challenges faced by seafarers as a result of the COVID-19 pandemic to support global supply chains", adopted on 1 December 2020 (A/RES/75/17), calling upon "*international organizations and other relevant stakeholders, including relevant workers and employers organizations, to support Governments, upon their request, in the design and implementation of their responses and policies aimed at ensuring the integrity and increasing the resilience of global supply chains, decent working and living conditions and human rights of seafarers*".

5.1. *Has shore leave become "luxury" for seafarers?*

Seafarers are undoubtedly a special category of workers, subject to life conditions aboard ship that put them at various risks and force them to be far from home for many months.

In this context, shore leave is the deciding factor allowing seafarers to restore contact with their territory and family.

The right of seafarers to shore leave "*existed in customary maritime law long before the right was recorded in the earliest written maritime codes dating from in the earliest written maritime codes dating from the Middle Ages*"[33].

The traditional rule is that shore leave is essential not only for the specific well-being of the seafarer but also, in general, for the safety of shipping.

This principle is clearly reflected by the decision of the U.S. Supreme Court in the case *Aguilar v. Standard Oil Co.*[34]: "*the assumption is hardly sound that the normal uses and purposes of shore leave are 'exclusively personal' and have no relation to the vessel's business. Men cannot live for long cooped up aboard ship without substantial impairment of their efficiency, if not also serious danger to discipline. Relaxation beyond the confines of the ship is necessary if the work is to go on, more so that it may move smoothly. No master would take a crew to sea if he could not grant shore leave, and no crew would be taken if it could never obtain it. […]. In short, shore leave is an elemental necessity in the sailing of ships, a part of the business as old as the art, not merely a personal diversion*"[35].

The right to shore leave is enshrined in Regulation 2.4, Paragraph 2, MLC, which reads as follows: "*Seafarers shall be granted shore leave to benefit their health and well-being and consistent with the operational requirements of their positions*".

---

[33] *Douglas B. Stevenson*, "Maritime Labour Law", in: *David Joseph Attard/Malgosia Fitzmaurice/Norman A. Martínez Gutiérrez* (ed.), "The IMLI Manual on International Maritime Law: Shipping law," 2016, p. 228; see also *Robert Force, A. N. Yiannopoulos, Martin Davies*, Admiralty and Maritime Law, 2006, p. 383 et seqq.

[34] *Aguilar v. Standard Oil co. of New Jersey. Waterman S. S. Corporation V. Jones* (decided on April 19th, 1943), 318 U.S. 724, 731.

[35] *Aguilar v. Standard Oil Co.*, para. 14.

The U.S. Supreme Court also added that: "*The voyage creates not only the need for relaxation ashore, but the necessity that it be satisfied in distant and unfamiliar ports. If in those surroundings the seaman, without disqualifying misconduct, contracts disease or incurs injury, it is because of the voyage, the shipowner's business. That business has separated him from his usual places of association. By adding this separation to the restrictions of living as well as working aboard, it forges dual and unique compulsions for seeking relief wherever it may be found. In sum, it is the ship's business which subjects the seaman to the risks attending hours of relaxation in strange surroundings. Accordingly, it is reasonable that the business extends the same protections against injury from them as it gives for other risks of the employment*" (para. 15).

This is in line with the *Resolution 11* (*Human Element Related Aspects and Shore Leave for Seafarers*)[36], adopted by the 2002 SOLAS Conference[37], which urged contracting governments to focus on the human element and on the need to afford special protection to seafarers, granting them shore-leave, when implementing the relevant provisions of SOLAS (chapter XI-2) and the *International Ship and Port Facility* (ISPS) Code[38].

In this regard, it should be noted that the ISPS Code, which has become mandatory under chapter XI-2 of the SOLAS Convention[39], incorporated the protection of the fundamental human rights of seafarers.

Indeed, it clearly states that the Code shall be interpreted in a manner consistent with existing international instruments protecting the rights and freedoms of maritime and port workers, calling to the attention of contracting governments that in approving security plans they should be aware of the need for seafarer's shore leave and access to shore-based welfare facilities and medical care[40].

The ISPS Code requires, in its mandatory part[41], Part A, para. 16.3.15, that a *Port Facility Security Plan* (PFSP) must contain procedures for facilitating shore leave, crew changes and access for visitors including representatives of seafarers' welfare and labour organizations.

The guidance contained in Part B[42], para. 16.8.14, of the ISPS Code reinforces this requirement by providing that the PFSP should contain such procedures relating to all security levels[43].

---

[36] Available at: *https://www.imorules.com/GUID-BD283CAE-612E-4A15-8393-BB25EF312130.html*

[37] SOLAS/CONF.5 – Resolutions of the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974 – (December 2002).

[38] Adopted by the 2002 SOLAS Conference. See also Resolution MSC.196(80) – Adoption of Amendments to the International Code for the Security of Ships and of Port Facilities (International Ship and Port Facility Security (ISPS) Code) – (Adopted on 20 May 2005).

[39] International Convention for the Safety of Life at Sea (SOLAS), 1974, ratified in Italy with No. 313 of 23 May 1980.

[40] See Circular Letter MSC/Circ.1112 – *Shore leave and access to ships under the ISPS Code* (7 June 2004), Annex- "Shore leave and access to ships under the ISPS Code".

[41] Part A (*Mandatory requirements regarding the provisions of Chapter XI-2 of the annex to the International Convention for the Safety of Life at Sea, 1974, as amended*). Part B of the ISPS Code is not mandatory, providing recommendatory guidelines on how to meet the requirements and obligations set out in Part A.

[42] Guidance regarding the provisions of Chapter XI-2 of the Annex to the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, and Part A of the ISPS Code.

[43] See Regulation (EC) No 725/2004 of the European Parliament and of the Council

However, the social rights established for seafarers have been substantially eaten away due to the impossibility for them to go ashore in order to avoid the risk of infection during the pandemic.

For this purpose, at international level, further measures were introduced to accelerate the Covid-19 vaccinations for seafarers: in April 2021, the ILO passed the resolution concerning COVID-19 vaccination for seafarers, through which governments, in establishing their national vaccination programmes, have also been urged to establish an international programme for seafarers to facilitate access to vaccination ashore.

In addition, a joint IMO/ILO statement [44] was issued in September 2021 on upholding medical assistance obligations to seafarers and accelerating seafarer vaccination programs, with the aim of offering WHO-approved Emergency Use Listing (EUL) vaccines and, therefore, ensure their internationally recognized vaccination status.

These objectives have been reiterated by IMO/ILO/UNCTAD/WHO with a recent joint statement in February 2022, with the specific purpose of limiting the effects of emerging variants on crew changes and to safeguard the health and wellbeing of seafarers [45].

With the purpose of guaranteeing that shore leave be the key to seafarers' physical and mental health, the ILO Committee of Experts, through the "*Information note on maritime labour issues and coronavirus (COVID-19) Revised version 3.0*", issued in February 2021 [46], requested flag States to ensure that seafarers are granted shore leave and access to shore-based welfare facilities [47].

---

of 31 March 2004 on enhancing ship and port facility security, implementing international standards of port security, including information exchanges prior to the entry into the port, as well as security checks performed by the States. This Regulation "*respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union*" (whereas 6).

Moreover, Regulation (EU) 2017/352 sets out minimum requirements for the provision of port services, including compliance with port safety discipline and training of staff on health and safety matters.

[44] Circular Letter No.4204/Add.42, dated 17 September 2021.

[45] Circular Letter No.4204/Add.44, issued on 28 February 2022 by the International Maritime Organization (IMO), the International Labour Organization (ILO), the United Nations Conference on Trade and Development (UNCTAD) and the World Health Organization (WHO) (*Subject: Coronavirus (COVID-19) – Joint IMO/ILO/UNCTAD/WHO statement urging continued collaboration to address the crew change crisis, safeguard seafarer health and safety, and avoid supply chain disruptions during the ongoing COVID-19 pandemic*).

[46] This information note includes the General Observation of the Committee of Experts on the Application of Conventions and recommendations and joint statements of the Officers of the Special Tripartite Committee of the MLC.

[47] The reference is to Regulation 4.4.– *Access to shore-based welfare facilities*, MLC.

ILO also urged States to take measures to support the seafarer's well-being on board, in particular during extended periods of service on board, including arrangements to contact family and friends[48].

Concerning the Port state responsibilities, it should be mentioned Regulation 5.2.1, paragraph 1, MLC, which provides that every foreign ship calling in the port of a Member may be subject to inspections for the purpose of reviewing compliance with the requirements of the Convention (including seafarers' rights) relating to the working and living conditions of seafarers on the ship[49]. Moreover, Regulation 5.2.1, paragraph 4, provides that inspections "*shall be based on an effective port State inspection and monitoring system to help ensure that the working and living conditions for seafarers on ships entering a port of the Member concerned meet the requirements*" of the MLC.

With this in mind, the IMO, in the already mentioned "*Information note on maritime labour issues and coronavirus (COVID-19) Revised version 3.0*", noted the challenges faced by port State control authorities to carry out inspections during the pandemic, especially in identifying where conditions on board were clearly hazardous to the safety, health and well-being of seafarers due to the disruption caused by covid.

Despite this, the ILO Committee of Experts requested ratifying countries, in their capacity of port States, to promptly adopt the necessary and appropriate measures to fully comply with their obligations under the Convention. In this regard, "*Paris MoU guidance on COVID-19 – Temporary Guidance related to Covid-19 for Port State Control Authorities (REV.6)*"[50], issued on 23 April 2021, provided support and clarifications for the Port States activities.

[48] ILO "*Information note on maritime labour issues and coronavirus (COVID-19) Revised version 3.0*", issued in February 2021.

[49] Linked to this provision, Standard A2.7, paragraph 2, MLC, is aimed to ensure that seafarers work on board ships with sufficient personnel for the safe, efficient and secure operation of the ship, highlighting the need to avoid or limite excessive hours of work to ensure sufficient rest and to limit fatigue.

[50] *https://www.parismou.org/paris-mou-covid-19-publications*.

5.2. *Seafarers as essential workers. The campaign of the "Day of the Seafarer"*

In the light of the serious challenges caused by the covid pandemic, IMO urged its Member States to recognize seafarers as "*key workers*" [51], in order to facilitate crew changes and repatriation of seafarers, on one hand, and comply with international safety and employment regulations, on the other hand.

The purpose is to remove any barriers to seafarers' documentation and to lift travel restrictions so that they can return home at the end of their contracts of employment and rejoin their families.

In this perspective, a specific resolution was adopted in December 2021 by the IMO Maritime Safety Committee (MSC), entitled "*Assembly resolution on seafarers' designation as 'key workers' and seafarers' prioritization for COVID-19 vaccination*" [52].

More recently, IMO issued a Circular Letter [53] that encourages Member States that have not yet done so "*to take action to address this issue and designate seafarers as key workers as a matter of urgency*" [54].

The *status* of seafarers, now defined as "key workers", represents a great step forward in ensuring that their rights are protected.

The significant challenges faced by seafarers worldwide during the COVID-19 pandemic has also led to the creation of the "Day of the Seafarer", inaugurated this year on 25 June [55], which intended to celebrate the importance of their work.

---

[51] See "Personal message from IMO Secretary-General Kitack Lim to seafarers", 20 April 2020 (*https://www.impahq.org/system/files/2021-05/personal-message-from-imo-secretary-general-to-seafarers.pdf*).

[52] The resolution was adopted at the IMO Assembly, 32nd session (A 32), 6-15 December 2021.

[53] IMO Circular letter dated 22 March 2022 (No.4204/Add.35/Rev.11). IMO referred, in particular, to the provisions of: 1. resolution MSC.473(ES.2) – *Recommended action to facilitate ship crew change, access to medical care and seafarer travel during the COVID-19 pandemic*, adopted by the MSC on 21 September 2020; Resolution A/75/L.37 – *International cooperation to address challenges faced by seafarers as a result of the COVID-19 pandemic to support global supply chains*, adopted by the UN General Assembly on 1 December 2020; and resolution GB.340/Resolution (Rev.2) – *Resolution concerning maritime labour issues and the COVID-19 pandemic*, adopted by the Governing Body of the International Labour Office on 8 December 2020. By the date of the Circular Letter, the Secretary-General has received 65 notifications from Member States and two from Associate Members that they have designated seafarers as key workers, as per its annex.

[54] *Ibidem.*

[55] *https://seafarersrights.org/world-celebrates-day-of-the-seafarer/*.

As mentioned above, the hurdles seafarers had to overcome ranged from extended contracts either long beyond their expiry dates to challenges related to vaccinations and access to medical care or shore-leave.

Indeed, the invaluable contribution of the seafarers was voiced in the UN Secretary General's message on June 25 "Seafarers Day", stating: "*This year's theme — "Your Voyage, Then and Now" — is an opportunity to recognize the vital role seafarers play, and look to the future. Above all, this means listening to seafarers themselves. They know better than anyone their needs and what this industry needs to do to address key challenges*"[56].

The International Day of the Seafarer represents an invitation to reinforce the necessity of social protection and better working conditions, and to address the crew-change crisis, adopting new digital tools so as to enhance safety, efficiency making this industry greener and more sustainable.

The UN Secretary-general has renewed the commitment to supporting seafarers everywhere, and honouring "*the knowledge, professionalism and experience they bring to this essential industry*"[57].

6. *Concluding remarks*

The recent recognition of the synergy between economic, environmental and social concerns in the maritime sector has raised awareness that there is a pressing need to radically improve the strategy of sustainable working conditions in this sector, both at national and international level.

This new sustainable approach led the governments and the UN agencies to put in place some of the most ambitious labour policies to protect the well-being in the maritime industry, so as to improve seafarers' overall health both physically and psychologically.

As part of the path towards the achievement of the 2030 Agenda for Sustainable Development, States and other relevant stakeholders should, in consultations on seafarers' issues at the IMO and ILO, keep the relevant legal framework under review, with the combined aim of encouraging marine commerce and assuring that international obligations under the MLC are completely fulfilled.

In order to achieve these objectives, social investment policies will be

---

[56] *https://wwwcdn.imo.org/localresources/en/About/Events/Documents/UN%20Secretary%20General%20message%20DOTS%202022/FINAL%20Seafarers%20Day%20Message.pdf*

[57] *Ibidem*.

necessary. Furthermore, State aids[58] can encourage governments to continuously strive for more safety in navigation, while providing a regulatory framework in an attempt to enable more sustainable working conditions for seafarers.

[58] In this regard, it should be noted that aid measures have been approved by the Commission under the "Temporary Framework for State aid measures to support the economy in the current COVID-19 emergency", adopted on 19 March 2020 and last amended on 18 November 2021.

Marilena Bacci

THE GERMAN NEW FRONTIER OF SUSTAINABILITY LAW: THE *LIEFERKETTENSORGFALTSPFLICHTENGESETZ*. ANY IMPACT ON THE TRANSPORT SECTOR?

Table of contents: 1. Why an Act on Corporate Due Diligence Obligations in Supply Chain?. – 2. Legal background and first Reactions in Europe so far. – 3. The German response: The *Lieferkettensorgfaltspflichtengesetz (LksG)*. – 4. The Proposal for a EU Directive on Corporate Sustainability Due Diligence, COM (2022) 71 final, 2022/0051 (COD). – 5. The impact on the market with a special view towards the transport sector. – 6. Final concerns: how to enforce a change of perspective.

1. *Why an Act on Corporate Due Diligence Obligations in Supply Chain?*

Business enterprises often produce abroad to benefit of cheaper labour a/o production costs for the whole supply chain, exploiting weak legal systems as an "engine for growth". For a long time and generally speaking, this way of doing business seemed a "legitimate" and "rational path" to follow in the globalized production process. More or less, this has been at least for some part of the world "tolerated" and "blindly looked away", till the day the world has been periodically confronted with and awaken by news where innocent people have to pay with their life for the economical choices made and imposed by others a/o the upcoming problems due to the global warming as well as other environmental disasters [1].

---

[1] As examples of the undermining of basic environmental and social minimum standards in the outsourcing of production with devastating effects, some out of unfortunately many examples can be remembered here: the Triangle Shirtwaist Factory Fire, which occurred in 1911 in NY, USA and where 150 needlewomen lost their lives, the Rana Palace collapse in 2013 in Bangladesh, where 1100 women died. The tanker "Exxon Valdez" environmental disaster of 1989 in Prince William Sound of Alaska, where 40,000 tonnes of oil spilled into the sea and contaminated the coastline over a length of 2000 kilometres (glued seabirds and seals). The progressive environmental destruction of the Aral Sea as well as the melting of the glaciers are not caused by a single event but as a result of the human behaviour of the last centuries as well as of the present.

With the upcoming of a modern, more sustainable culture, the "traditional old way" of doing business is nowadays not more compatible with the new consciousness of a social and environmental focused culture: people's consciousness to no longer tolerate the permanent violation of human rights as well as the environmental destruction has significantly increased.

In this regard *sustainability* is becoming a primary benchmark to measure the way of doing business. Aware of the fact that a very large part of the worldwide business system still profits from producing (abroad) as well as offering services under "predatory" conditions as well as in the light of a growing conscious sustainability *credo* spread around the world, governments are becoming aware that people expect a more effective proactive reaction. Therefore, in the last years it can be observed that laws are more frequently passed to bear business companies the responsibility to ensure in a more strikingly way that human rights and the environment are respected in their supply chains. As the 1983 established UN World Commission on Environment and Development (UCED) stated, "*sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs*" [2].

As a response to these needs, the German Government passed in 2021 the "*Lieferkettensorgfaltspflichtengesetz*" or „*Gesetz über die unternehmerischen Sorgfaltspflichten in Lieferketten*" [3], the so called „Act on Corporate Due Diligence Obligations in Supply Chain" [4], which will come into force on January 1st, 2023.

The aim of the Act is to educate, induce, up to bind German companies to effectively apply a due diligence process; feel responsible towards their whole supply chain in terms of respect of people as well as the environment

---

[2] Legal Source: The UCED's 1987 *Brundtland* report on "*Our Common Future*", transmitted to the General Assembly as an Annex to document A/42/427 – Development and International Co-operation: Environment.

Legal source: *https://www.netzwerk-n.org/wp-content/uploads/2017/04/0_Brundtland_Report-1987-Our_Common_Future.pdf*

[3] The Act is published in the *Bundesgestzblatt* (the German federal Law Gazette), 2021 Teil 1 Nr. 46, issued in Bonn on the 22nd of July, 2021 and has been also published online: *https://www.bgbl.de/xaver/bgbl/start.xav?start=//*%5B@attr_id=%27bgbl121s2959.pdf%27%5D#__bgbl__%2F%2F*%5B%40attr_id%3D%27bgbl121s2959.pdf%27%5D__1657199222708*

The *Bundesministerium für Arbeit und Soziales* (BMAS, The German Federal Ministry of Labour and Social Affairs) has published in the meanwhile also an English Version of the Act, which you can find here: *https://www.bmas.de/EN/Services/Press/recent-publications/2021/act-on-corporate-due-diligence-in-supply-chains.html* or *https://www.bmas.de/SharedDocs/Downloads/DE/Internationales/act-corporate-due-diligence-obligations-supply-chains.pdf?__blob=publicationFile&v=3*

[4] NOTE: *hereinafter also briefly referred to as* LksG

and hence to prevent and fight against violations from occurring in their supply chain. In fact, the German law – also in the light of the upcoming EU Directive – will have a major impact to the whole supply chain and therefore to *each* business partner involved.

2. *Legal background and first Reactions in Europe so far.*

(a) The UN Guiding Principles on Business and Human Rights 2011 (UNGPs)

In its introduction paper to the UN Guiding Principles on Business and Human Rights (UNGPs) of 2011, the Working Group of the UN on Business and Human Rights pointed out i.e. that "*Business enterprises can profoundly impact the human rights of employees, consumers, and communities wherever they operate. These impacts may be positive, such as increasing access to employment or improving public services, or negative, such as polluting the environment, underpaying workers, or forcibly evicting communities… protect, respect, remedy. Each of these simple terms hides a complicated reality. In 2011, the UN Human Rights Council unanimously endorsed the UN Guiding Principles on Business and Human Rights… define the key duties and responsibilities of States and business enterprises with regard to business-related human rights abuses…. The Guiding Principles clarify what is expected of business enterprises…To meet the responsibility to respect, business enterprises must have the necessary policies and processes in place.*" [5]

The UNGPs [6] consists of 31 principles, the three most important outlines are the protection of human rights; the corporate responsibility to respect human rights; the possibility for business related abuses to access remedy.

These outlines have been implemented in the German *Lieferkettensorgfaltspflichtengesetz.*

b) EU

The sustainable development has been put on the agenda of the EU in 2001 and updated in 2006 "*providing 'a long-term vision for sustainability in which economic growth, social cohesion and environmental protection go hand in hand and are mutually supporting*'. By 2009 the European Com-

[5] Legal source: *https://www.ohchr.org/sites/default/files/Documents/Issues/Business/Intro_Guiding_PrinciplesBusinessHR.pdf*

[6] Legal source: *https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf*

mission ascertained that if on one side “unsustainable trends” still existed, on the other side upcoming policies were dedicated to fight or at least reduce these trends, so that the concept of “sustainable development” was indicated as a further “long-term goals under Article 3 (3) of the Treaty on European Union”.[7]

In the light of the upcoming LksG, the following EU measures can be cited – out of many others – to give a brief overview of the contribution at EU level, so far:

- *Regulation (EU) 2017/821*[8] of the European Parliament of the Council of 17th, May 2017 laying down supply chain due diligence obligations for EU importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas, valid since 2021;
- Regulation (EU) 2021/1119[9] of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009[10] of the European Parliament and of the Council of 23 April 2009 on the European Environment Agency and the European Environment Information and Observation Network and Regulation (EU) 2018/1999[11] (European Climate Law), providing a binding target to cut domestic net greenhouse gas emissions by at least 55% compared to 1990 levels by 2030.

The most important awaited commitment of the EU legislator is the currently discussed proposal of the EU Parliament on a Directive on Corporate Sustainability Due Diligence and amending Directive[12], which will be briefly introduced in this paper.

[7] Legal source: *https://eur-lex.europa.eu/EN/legal-content/glossary/sustainable-development.html*

[8] Legal source: *https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex-%3A32017R0821*

[9] Legal source: *https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX-%3A32021R1119*

[10] Legal source: *https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX-%3A32009R0401*

[11] Legal source: *https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AO-J.L_.2018.328.01.0001.01.ENG*

[12] Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937 of the EU Commission, COM(2022) 71 final, 2022/0051 (COD); legal source: *https://ec.europa.eu/info/sites/default/files/1_1_183885_prop_dir_susta_en.pdf*

(c) The European response by some MS

France

adopted in 2017 the *„Loi de vigilance“* (Monitoring Act), which obliges French companies to identify and prevent human rights risks along their supply chains as well as in their subsidiaries (with more than 5,000 employees).

The Netherlands

adopted in 2019 the "*Wet zorgplicht kinderarbeidm*" (Child labour Due Diligence Law), *which o*bligates companies to go against child labour and to report and sanction if found in supply chains.

United Kingdom

adopted in 2015 the *„Modern Slavery Act“,* 2015: the law goes against modern forms of slavery and implies the obligation of reporting human rights abuse in work places.

Where France and Germany have introduced a so called "horizontal" due diligence law, other Member States, i.e., *Belgium, the Netherlands, Luxembourg,* and *Sweden* are planning to do so in the near future. [13]

3. *The German response:* The Lieferkettensorgfaltspflichtengesetz (LksG)

(a) Introduction

On December 16th, 2016, the German Federal Government adopted a *Nationaler Actionsplan zur Umsetzung der VN-Leitprinzipien für Wirtschaft und Menschenrechte* (NAP, *National Action Plan on the Implementation of the UN Guiding Principles on Business and Human Rights*) issued by the *Bundesministerium für Arbeit und Soziales* (German Federal Ministry of Labour and Social Affairs) to describe how it intends to implement the Guiding Principles in Germany within the agenda 2016-2020.

Up to ca. 2020, the Federal Republic of Germany relied on a *voluntary* commitment by companies, but the conclusion was that not enough companies followed, in particular, the 2011 guidelines of the UNGPs. [14]

---

[13] Cf. Footnote 3 to the Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937 of the EU Commission, COM(2022) 71 final, 2022/0051 (COD); Legal source: *https://ec.europa.eu/info/sites/default/files/1_1_183885_prop_dir_susta_en.pdf*

[14] Legal source: *https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf*

For this reason, the German legislator passed in July 2021 the *Lieferkettensorgfaltspflichtengesetz*, the so called „Act on Corporate Due Diligence Obligations in Supply Chain", which will come into force in January 1st, 2023 for companies with at least 3,000 employees and in January 1st, 2024 for companies with more than 1,000 employees [15].

(b) Involved parties

(i) The "German based enterprise" [16]

In first place the LksG will immediately affect the German companies as well as subsidiaries and Branch Offices of German companies abroad. [17] By means enterprises

- regardless of their legal form that have
  - their central administration
  - principal place of business
  - administrative headquarter
  - statutory seat in Germany
  - enterprises regardless of their legal form that have a domestic branch office pursuant to Section 13d of the *Handelsgesetzbuch.* [18]/[19]
- furthermore, enterprises that have: [20]
  - employees posted abroad
  - temporary agency workers, if the duration of the assignment exceeds six months

---

[15] Section 1 (1) LksG

[16] *Terminus* used by the author.

[17] Section 1(1) LksG.

[18] HGB: German Commercial Code

[19] Section 13d (1) HGB (Seat or Main Office Abroad)

(1) If the main office of a sole trader or of a legal person or the seat of a commercial company or partnership is located abroad, all applications, submissions and entries concerning a domestic branch office shall be made at the court in whose district the branch office exists.

(2) The registration of establishment of a branch office shall also indicate the place and the domestic business address of the branch office; if an addition is appended to the business name of the branch office, the addition shall also be registered.

(3) Otherwise, the provisions concerning main offices or offices at the seat of the commercial entity shall, to the extent that foreign law does not necessitate divergence, apply mutatis mutandis to applications, submissions, entries, publications and changes of registered facts which concern the branch office of a sole trader, of a commercial company or partnership, or of a legal person, with the exception of stock corporations, public partly limited partnerships and limited liability companies.

Legal Source for the English Version of the HGB: *https://www.gesetze-im-internet.de/englisch_hgb/englisch_hgb.pdf*

[20] Section 1 LksG.

• within affiliated enterprises, after Section 15 of the German *Aktiengesetz*[21], the employees of all enterprises belonging to the group who are employed in Germany, when calculating the number of employees of the parent company; employees posted abroad.

(ii) Direct and indirect suppliers

Besides, the LksG will have a – no less – crucial impact towards the legally defined *direct* as well as *indirect* suppliers involved in the supply chain:

As *direct supplier* is considered "*a partner to a contract for the supply of goods or the provision of services whose supplies are necessary for the production of the enterprise's product or for the provision and use of the relevant service.*" (Section 2 (7) LksG). Whereas an *indirect supplier* is "*any enterprise which is not a direct supplier and whose supplies are necessary for the production of the enterprise's product or for the provision and use of the relevant service.*" (Section 2 88) LksG)[22].

The requirements for direct suppliers are at least equivalent to those ones for the own area of business of the German based enterprise in regard to the due diligence obligations to "*lay down appropriate preventive measures*" (Section 3, (1) 5 as well a shortlist in Section 6 (4) LksG); the risk management compliance (Section 5 (1) LksG), to take without delay appropriate remedial action to prevent, end or minimize the extent of the violation (Section 7 (1) and (2) LksG); the complaints procedure (Section 8 (1) LksG),

All of them, to be "*reviewed at least once a year and on an ad hoc basis if the enterprise must expect a significantly changed or significantly expanded risk situation in its own business area or at its direct supplier*" (cfr. respectively Section 6 (5), Section 7 (4), Section 8 (5) LksG).

Whereas for the *indirect* suppliers the German based enterprise is asked in first place to "*implement due diligence obligations with regard to risks*" (Section 3, (1) 8 LksG); furthermore, to set up the complaints procedure (Section 9 (1) LksG), to act without undue delay in case actual indications suggest that a violation of an obligation at indirect suppliers may be possible (substantial knowledge), and carry out a risk analysis, lay down appropriate preventive measures, support in the prevention and avoidance of a risk or the implementation of sector-specific or cross-sector initiatives to which the

---

[21] AktG: German Stock Corporation Act.

[22] Cf. Provisions explicitly mentioning the *direct* supplier: Section 2 (7) and (8), Section 3 (1) 5, Section 5 (1), Section 6 (4) and (5), Section 7 (1) and (2), Section 8 (1) and (54), Section 17 (1) LksG); and those mentioning the indirect supplier: Section 2 (8), Section 3 (1) 8, Section 5 (1), Section 9, Section 17 (1) LksG.

enterprise is a party, draw up and implement a prevention, cessation or minimisation concept and update its policy statement, if necessary (Section 9 (1) to (3) LksG)[23].

In cases where the supply chain has been structured "*in an improper manner* or *has engaged in a transaction in order to circumvent the due diligence obligations with regard to the direct supplier, an indirect supplier is deemed to be a direct supplier*" (Section 5 (1) LksG).

(c) Protected values

The *Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung*[24] stressed out by presenting the Act, that first and foremost, "*the aim of the Act is to improve the protection of human rights in global supply chains. It is not about implementing German social standards everywhere in the world, but about compliance with basic human rights standards such as the prohibition of child labour and forced labour*"[25].

Furthermore, the German *Bundestag* remarked in the Preamble to the Act of April 19th, 2021[26] i.e. the following: "*The results of the representative survey conducted in July 2020 as part of the National Action Plan showed that only between 13% and 17% of the companies surveyed comply with the requirements of the National Action Plan* (page 2 of the cited Preamble to the Act). *This is intended on the one hand to strengthen the rights of people affected by company activities in supply chains, and on the other hand to take account of the legitimate interests of companies in legal certainty and fair competitive conditions* (page 2 of the cited Preamble to the Act). *Environmental protection and the fight against corruption are also covered (page 24 of the cited Preamble to the Act). The law establishes an obligation to make efforts, but neither an obligation to succeed nor a guaranteed liability* (page 2 of the cited Preamble to the Act)".[27]

---

[23] After Section 9 (4) LksG, "*The Federal Ministry of Labour and Social Affairs is authorised to regulate the details of paragraph (3) by statutory instrument in agreement with the Federal Ministry for Economic Affairs and Energy without the consent of the Bundesrat*".

[24] German Federation Ministry for economic cooperation and development

[25] Source: *https://www.bmz.de/de/entwicklungspolitik/lieferkettengesetz*

[26] Gesetzesbegründung vom 19.04.2021 Drucksache 19/28649: Explanatory Memorandum of 19.04.2021 n. 19/28649.

Legal source: *https://dserver.bundestag.de/btd/19/286/1928649.pdf*

[27] *Die Ergebnisse, der im Rahmen des Nationalen Aktionsplans durchgeführten repräsentativen Umfrage im Juli 2020 haben gezeigt, dass lediglich zwischen 13 und 17 Prozent der befragten Unternehmen die Anforderungen des Nationalen Aktionsplans erfüllen (page 2); Dadurch sollen zum einen die Rechte der von Unternehmensaktivitäten betroffenen Menschen in den Lieferketten gestärkt, zum anderen den legitimen Interessen der Unternehmen an der*

In addition, the regulation contributes to the reduction of global poverty, gender equality, including the decrease of the earning gap between women and men, better access to drinking water and sanitation worldwide, decent work for all and the increase of sustainable production and procurement.

Hence, the compliance of human rights must be assured by companies among their entire supply chain. They must provide, i.e., a risk-management, a complaint mechanism for consumer as well as for employees and a regular reporting.

Section 2 of the LksG defines the meaning of the protected legal positions by differentiating between (i) human rights violation risks and (ii) environmental-related risks.

The due diligence will apply towards "*conditions* in which, on the basis of *factual circumstances,* there is a *sufficient probability* that a *violation of one of the* – on a non-exhaustive basis – listed *prohibitions is imminent*" (Section 2 (2) and (3), respectively first sentence LksG).

(i) Human rights violation risks

Regarding human rights violation risks the Act refers to the Conventions on the protection of human rights listed in nos. 1 to 11 of the Annex as well as defining in Section 2 (2) LksG further circumstances which can be briefly summarized as follows:

- the prohibition of child labour (Section 2 (2) no. 2 LksG)
- the protection against slavery and forced labour (Section 2 (2) no. 3 LksG)
- the right to form trade unions or employee representative bodies (Sec. 2 (2) no.6, LksG)
- the freedom from discrimination (Section 2 (2) no. 6b LksG)
- the prohibition of withholding a fair wage (Section 2(2) no.8 LksG)
- the occupational health and safety and related health hazards (Section 2 (2) no. 9d LksG)
- the prohibition of causing harmful soil or water pollution (Sec. 2 (2) No. 9 LksG)
- the prohibition of land confiscation (Section 2 (2) no. 10 LksG)
- the protection against torture (Section 2 (2) no. 11 LksG)

Rechtssicherheit und fairen Wettbewerbsbedingungen Rechnung getragen werden (page 2). Erfasst sind auch der Umweltschutz und die Korruptionsbekämpfung (page 24). Das Gesetz begründet eine Bemühenspflicht, aber weder eine Erfolgspflicht noch eine Garantiehaftung (page 2). Zudem trägt die Regelung zur Verringerung weltweiter Armut, der Geschlechtergleichstellung, einschließlich der Verringerung des Verdienstatbestandes zwischen Frauen und Männern, dem besseren Zugang zu Trinkwasser und Sanitärversorgung weltweit, der menschenwürdigen Arbeit für alle sowie der Steigerung nachhaltiger Produktion und Beschaffung (Indikatoren 1, 5, 6, 8, 12.2., 12.3. der Deutschen Nachhaltigkeitsstrategie) bei (page 24).

(ii) Environmental-related risks

Regarding the environmental protection the Act defines the risks ("*sufficient probability"*) in Section 2 (3) LksG, which can be briefly summarized as follows:

- the prohibition of the manufacture and/or use and/or treatment of mercury-added products pursuant to the s.c. *Minamata Convention* of 2013 (§ 2 (3) no. 1-3 LksG)
- the prohibition of the production and use of chemicals as well of the handling, collection, storage, and disposal of waste in a manner that is not environmentally sound pursuant to the s.c. *POPs Convention* of 2001 in the version of Regulation (EU) 2019/1021 on persistent organic pollutants (§ 2 (3) no. 4-5 LksG)
- the prohibition of exports of hazardous waste pursuant to the s.c. *Basel Convention* of 1989 within the meaning of Regulation (EC) No 1013/2006 on shipments of waste in the listed cases (§ 2 (3) no. 6-8 LksG).

(d) What companies must expect and prepare for

(i) The Obligations catalogue with the aim to prevent, minimise or end any risks to human rights or environment-related risk

After the LksG in first instance it appears that the "German based" company must comply with the following obligations, "*with the aim of (a) preventing, (b) minimising or (c) ending any risks to human rights or environment-related risk*" (Section 3 (1) LksG):

- due diligence (Section 3 LksG)
- risk management and designation of a responsible person *within* the enterprise (Section 4 LksG)
- regular risk analysis, at least once a year (Section 5 LksG)
- preventive measures and policy statement (Section 6 LksG)
- remedial action (Section 7 LksG)
- complaints procedure (Section 8 LksG)
- documentation and reporting obligation (Section 10 LksG)

As a result of the upcoming law, a proper analysis of the newly imposed legal standards should lead *each* involved enterprise to prepare itself for the implementation by providing in first instance a transparency supply chain. By means,

- check the own internal compliance system and prepare a to do list of open points
- identify and provide an accurate list of stakeholders and (direct as well as indirect) suppliers

– check how far the indirect list should go as well as how to act with an indirect supplier
– evaluate and identify methods to outline (substantial arguments):
  • definition of risks
  • measures to prevent, minimise and eliminate risks (priority list)
  • check methods and parameters of supplier certifications a/o compliance and production transparency
  • review of the supply chain (also in case of necessary change of supplier who does not comply with the regulation)

(ii) Legal consequences

Given that after Section 3 (3) LksG, "a *violation of the obligations under the LksG does not give rise to any liability under civil law* and *that any liability under civil law arising independently of the LksG remains unaffected",* the Act provides on the other hand a special capacity to sue (Section 11 LksG) as well as financial penalties (Section 23 LksG), administrative fines (Section 24 LksG) and the exclusion from the award of public contracts (Section 22 LksG).

Special capacity to sue (Section 11 LksG)

In case of a claimed violation pursuant to section 2 (1) LksG *"of paramount importance"* a domestic trade union or a non-governmental organisation [28] may be authorised by the damaged person to bring proceedings to enforce his or her rights in its own capacity.

Financial Penalties, administrative fines and exclusion from the award of public contracts (Division 6, Sections 22-24 LksG)

In case of an *intentionally or by negligence committed violation*, financial penalty in administrative enforcement proceedings (*Zwangsgeld*) [29] might be imposed up to 50,000 € (Section 23 LksG), fines (*Bußgeld*) between 100.000 € and 800.000 € (Section 24 (2) LksG) or up to 2% of the annual turnover (for companies with a turnover of more than 400Mill €/year, Section 24 (3) LksG) as well as an exclusion from awarding public contracts can be imposed in case of a violation established by a final and binding decision (Section 22 LksG [30]). The Act indicates different requirements to take in considera-

[28] Active legitimacy for the right to sue: a trade union or non-governmental organisation may only act/claim if it maintains a permanent presence of its own and, in accordance with its statutes, is not engaged commercially and not only temporarily in the realisation of human rights or corresponding rights in the national law of a state (Section 11 (2) LksG).

[29] Further financial penalties might arise out of Section 11 (3) of the German Administrative Enforcement Act (*Verwaltungsvollstreckungsgesetz*) – Section 23 LksG.

[30] Section 22 LksG – *Exclusion from the award of public contracts*

tion in order to define the severity of the violation (Section 24 (4) LksG).

(iii) Monitoring and Enforcement by the authorities

Report audit (Section 10, 12-13 LksG)

The German based enterprise has a duty to *continuously document* the taken measures as well as prepare *in a comprehensible manner* an annual *report* on the fulfilment of its due diligence obligations and make it *publicly* available free of charge on its *website* as well as submit it electronically to the competent authority, who will then check.

Risk-based control by the authorities (Section 14-18 LksG)

The competent authority can take action either ex officio or upon substantiated request in order:

– to monitor compliance with the obligations
– to detect, end and prevent violations of obligations (authorisation to issue statutory instruments, *Section 14 LksG*)[31]
– to order and take the appropriate and necessary measures to detect, end and prevent violations.

---

(1) Enterprises that have been fined in accordance with Section 24 (2) for a violation under Section 24 (1) that has been established by final and binding decision shall, as a rule, be excluded from participation in a procedure for the award of a supply, works or service contract by the contracting authorities referred to in Sections 99 and 100 of the Act against Restraints of Competition (Gesetz gegen Wettbewerbsbeschränkungen) until they have proved that they have cleared themselves in accordance with Section 125 of the Act against Restraints of Competition. The exclusion pursuant to sentence 1 may only take place within an appropriate period of up to three years.

(2) An exclusion according to par. (1) requires a violation that has been established by final and binding decision carrying a fine of at least one hundred and seventy-five thousand euros. Notwithstanding sentence 1.,

1. in the cases of Section 24 (2) sentence 2 in conjunction with Section 24 (2) sentence 1 no. 2, a violation that has been established by final and binding decision carrying a fine of at least 1 million five hundred thousand euros,

2. in the cases of Section 24 (2) sentence 2 in conjunction with Section 24 (2) sentence 1 no. 1, a violation that has been established by final and binding decision carrying a fine of at least two million euros and 3. in the cases of Section 24 (3), a violation that has been established by final and binding decision carrying a fine of at least 0.35 per cent of the average annual turnover is required.

(3) The applicant is to be heard before the decision on exclusion is taken.

Legal source: *https://www.bmas.de/SharedDocs/Downloads/DE/Internationales/act-corporate-due-diligence-obligations-supply-chains.pdf?__blob=publicationFile&v=3*

[31] The German Federal Ministry of Labour and Social Affairs is authorised to regulate in more detail the procedure for risk-based control pursuant to par. (1) and sections 15 to 17 by statutory instrument in agreement with the Federal Ministry for Economic Affairs and Energy without the consent of the Bundesrat (Section 14 (2) LksG).

It may in particular
- summon people
- order the enterprise to submit, within three months a corrective action plan, including clear timelines for its implementation and
- require the enterprise to take specific action to fulfil its obligations (Orders and measures, *Section 15 LksG*).

If necessary, the competent authority is authorised to enter and inspect the enterprise's premise, offices and commercial buildings, documents, and records from which it is possible to deduce whether the due diligence obligations have been complied with (Access rights, *Section 16 LksG*).

The Enterprises[32] and persons summoned are obliged to provide information and surrender documents[33] (*Section 17 LksG*) as well as tolerate the measures of the competent authority and cooperate with them in the implementation of the measures (*Section 18 LksG*).

Nonetheless,
- the person obliged to provide information is to be informed of his/her right to refuse to provide information and other statutory rights to refuse to provide information or to give evidence as well as statutory duties of confidentiality remain unaffected.

Hence, any person obliged to provide information may refuse to provide it, if the response would expose them or one of the relatives to the risk of criminal prosecution or proceedings under German Criminal law (*Section 17 (3) LksG*);
- due consideration is to be given to the protection of business and trade secrets (*Section 10 (4) LksG*).

Tasks of the monitoring authority BAFA (Section 19 ans 24 LksG)

In accordance with Section 19 and Section 24 (5) LksG, the *Bundesamt*

---

[32] The obligation also extends to the information duties *on affiliated enterprises (Section 15 of the German Stock Corporation Act), direct and indirect suppliers and the surrender of documents of these enterprises insofar as the enterprise or person obliged to provide information or surrender documents has the information at its disposal or is in a position to obtain the requested information due to existing contractual relationships* (Section 17 (1) LksG).

[33] *The obligation to inform and provide documents pursuant to par. (1) include in particular*

1. information and evidence to determine whether an enterprise falls within the scope of this Act,

2. information and evidence on the fulfilment of the obligations according to sections 3 to 10(1) and

3. the names of the persons responsible for monitoring the enterprise's internal processes for fulfilling the obligations under sect. 3 to 10 (1). (Section 17 (2) LksG).

für Wirtschaft und Ausfuhrkontrolle[34] has been given the task to implement the Act and to monitor whether the companies concerned adequately fulfil the statutory due diligence obligations.

Specific tasks in this regard include:

- publication of cross-sectoral or sector-specific information on compliance with the Act (*Section 20 LksG*)
- verification of the compliance adopted by the companies in regard to their reporting obligations (*Section 21 LksG*)
- inspection in order to detect, eliminate and prevent violations
- imposition of coercive penalties and fines in accordance with Sections 23ss LksG
- request of information and documentation in order to carry out the duties assigned, also extends to information on affiliated enterprises, direct and indirect suppliers and the surrender of documents of these enterprises insofar as the enterprise or person obliged to provide information or surrender documents has the information at its disposal or is in a position to obtain the requested information due to existing contractual relationships (Section 17 LksG).

Handouts of BAFA

In order to support companies in implementing their due diligence obligations, the BAFA develops and publishes handouts (*Section 20 LksG*) and reports once a year on its monitoring and enforcement activities (*Section 21 LksG*): the first handout concerning the risk analysis for German companies has been published in German on the website of the BAFA on August 17th, 2022[35]

(e) Critical notes

(i) General notes

The purpose of the LksG is indisputable honourable and such a step was overdue. Nevertheless, the implementation of the law seems to be difficult, if not hardly practicable.

A *strict* and *effective* application of the LksG requires that each involved company – bym. in fact *direct* as well as *indirect* supplier (cf. i.e., Section 9 LksG) – is asked to comply with the given obligations; with the result of a quite tricky if not impossible to dealt with, never ending check list.

A further main critical aspect can be seen in the vagueness of the provisions. Rules should clearly indicate the rights and the duties of the

[34] BAFA: German Federal Office of Economics and Export Control

[35] For more details see below under (e-(ii).

addressee, in order to not be devoided of meaning and value. On the contrary, not a few of the provisions in the Act are characterised by general, vague expressions, criteria or concepts that do not allow a clear, sole and purposeful interpretation of the duties as well as key criteria for the application of sanctions or justified claims: to cite some out of many terms like "*sufficient probability of an imminent violation*" (*Section 2 (2) and (3)*, respectively first sentence LksG); "*with the aim of preventing, minimising or ending any risks* (Section 3 (1) LksG); "*The appropriate manner of acting in accordance with the due diligence obligations is determined according to the nature and extent of the enterprise's business activities…. the ability of the enterprise to influence the party directly responsible for a risk .. the severity of the violation that can typically be expected.."(Section 3 (2) LksG); due consideration is to be given to the protection of business and trade secrets* (Section 10 (4) LksG); *any person claiming to have been violated in a legal position … that is of paramount importance may authorise a domestic trade union or non-governmental organisation to bring proceedings to enforce his or her rights in its own capacity* (*Section 11 (2) LksG*).

The determination of the entrepreneur's scope, role a/o obligation of action is neither clear nor objectively nor legally defined. It is most likely that in the practice the evaluation of the circumstances compared to those criteria will lead to uncertainty, in first place, for the entrepreneur to decide how far a/o deep action must be taken and, secondly, by the monitoring authority, to evaluate on a narrow or broad basis the circumstances for a violation of the provisions. This again could lead to unfair disparities of each parties' responsibility.

The adopted Act resembles more a "directive", the outcome of a political compromise, than a direct applicable law and will lead – if strictly implemented – to different legal (mis-) interpretations and discussions in and out of Court. This again is clearly not compatible with the scope of the Act, either for the entrepreneur, who might be asked to be cautious in a manner that no effective business could take place, since it would require an unprofitable waste of resources, time and money or lead to a present impossibility to cooperate with commercial partners. On the other hand, also the monitoring authority might be asked to invest a lot of time and personal capacities to research and evaluate the circumstances on its own, i.e., without any/few neutral criteria.

By the end, as long as there is no consolidate case law, both parties could be forced to appeal the Courts to receive a reliable, or at least uniform, interpretation, which would have present as well as long term serious effects on the already worldwide affected trade, due to the Pandemic, the Ukraine Crises and the increasing gas and electricity costs.

Besides, it must be considered that foreign direct and indirect supplier

may be themselves already subject to (different) strict regulations that are not or only partially compatible with the German Law. This situation might bring some companies to work closer but other to fall apart, if neither the German legislator nor the German enterprises will find an effective compromise to deal with the scope of the Act.

Furthermore, the *publication* of the Report on the *website* of the German entrepreneur might introduce different problems concerning the data protection as well as arise further competition issues among the involved parties, since competitors could analyse the information and use them to their privilege. Even if the Act mentions the right of confidentiality, again it does not provide a logical structure to balance the different aspects and interests involved.

Hence the German legislator as well as the monitoring authority are urgently invited to clear these aspects and give concrete devices on how to operate in the practice. The goal of the Act is surly not intended to sanction the business but to enable a more sustainable trade, so that the provisions must be interpreted and applied in the most effective way, keeping in mind all the different involved interests. Otherwise, its whole remarkable purpose might fail.

(ii) Does BAFA's first 'Handout on risk analysis' help?

As aforementioned, in application of *Section 20 LksG*, BAFA released its first handout concerning the risk analysis for German companies on August 17th, 2022. The handout is understood to be, in fact, not more than a *recommendation* of the authority and is therefore not binding. Hence, the German companies are given some tolerance in the application (*how much?*), whereas German judges might come to a different conclusion as BAFA does. It is furthermore expected that the latter will devolp and redefine its own interpretation after having made some more practical experience. This clearly, again, does not help effectively.[36]

The first handout has two main purposes: (a) summarizing and schematizing the essential legal requirements as well as giving an interpreting definition of some legal aspects and wording, and (b) a practical explaining four implementation procedures.

(a) Interpreting definition of legal requirements

The handout aims to offer some explaning remarks of the criticised vague (legal) terms used in the LksG but has by far a clear and comprehensive

[36] Source:*https://www.bafa.de/SharedDocs/Pressemitteilungen/DE/Lieferketten/2022_06_handreichung.htmlandhttps://www.bafa.de/SharedDocs/Downloads/DE/Lieferketten/handreichung_risikoanalyse.pdf;jsessionid=16D34CCBA0AB61CF48A47FCFF4125273.1_cid381?__blob=publicationFile&v=6.*

systematic: one can find interpreting definitions in the explanations of the procedures, some footnotes (which sometimes refers to separatly Q&A of BAFA) or in the Appendix. Moreover, some of the aimed clarifications more or less reproduce the legal definition.

What seems to be very clear is the fact that the German government is focused to reach out as far as possible the violations as well as the responsibility of the industry, in the handout it is repeatedly pointed out that the supply chain subject to the risk analysis includes the delivery to end customers, as direct suppliers are concerned, as well as companies with significant influence in the Group, as the own business dynamic is concerned.

(b) Practical implementation procedures

The handout moreover identifies two main implementation procedures and for each of them, further two different constellations that German companies will have to comply with. BAFA distinguishes after the LksG between:

b.1.) Regular – at least once per year – risk analysis (*Section 5 LksG*)
- in the *own* business and
- for *direct* suppliers

b.2.) Occasion-related risk analysis
- at more substantiated knowledge for *inidirect* suppliers (Section 9 (3) LksG)
- at extention of the risk situation (Section 5 (4) LksG) for evry involved party

As for the (b.1.) *regular* risk analysis the Handout recomends the following – briefly summerized procedure: 1) data acquisition of the own company as well of the supply chain, preparing an organized overview, 2) abstract risk analysis by country and trade sector, 3) concret risk analysis by weighting and prioritizing single situations, 4) evaluation and further action.

As for the (b.2.) *occasional-related* risk analysis the steps to follow are similar to (b.1) the regular risk analysis procedure, but are mainly based either on the further element a "*substantial knowledge of a concrete risk*" or an "*extention of a risk situation due to change of whatever manner in the supply chain*".

Also, in this regard it must be pointed out, that the Handout fails to define the criteria of "*substantial knowledge*" as well as i.e. indicating up to *when* one is obliged to follow *a* risk analysis or in *which terms* a risk analysis is *objectively* fulfilling the law.

Further handouts should follow soon, i.e., topics of the appropriateness of measures taken by companies and complaints procedures. It would be

reasonable to provide a more clear and specific outline for legal certainty and an easier and more effective way to apply the law and gain the honorable goals.

The most important indicator will be, unfortunately and not surprisingly, as usual the practical approach and interpretation of the German authorities as well as the following jurisprudence of German courts. On the other hand, it must also be considered that, generally speaking, the German – legal – culture, especially in regard to relationships between executing authorities and industry or citizens – compared to other legal systems – often allows to engage in an open, constructive dialogue in order to prevent more than to defend some risky situations. It is therefore desirable that there will be room for dialogue here as well as allowing the industry to follow up in the most effective way and with a minimum of sanctions.

4. *The Proposal for an EU Directive on Corporate Sustainability Due Diligence, COM (2022) 71 final, 2022/0051 (COD)*[37]

(a) The Proposal of a Directive

As advertised on its official website, the European Commission adopted, *on the 23rd of February 2022, "a Proposal for a Directive on corporate sustainability due diligence. The aim of this Directive is to foster sustainable and responsible corporate behaviour and to anchor human rights and environmental considerations in companies' operations and corporate governance. The new rules will ensure that businesses address adverse impacts of their actions, including in their value chains inside and outside Europe".* [38]

It is expected that the Directive will bring benefits to the citizens Europe-(world-)wide as well as to the enterprises and developing countries. The interests of all involved parties should be equally represented and protected, by ensuring i.e. an increased transparency and therefore trust towards enterprises; as well as lighter access in case of violation for citizen, an increased harmonization of the law systems and therefore more transparency and certainty for the enterprises; and finally by contributing to achieve a more effective protection of human (labour) rights and the

---

[37] Legal source: *https://ec.europa.eu/info/sites/default/files/1_1_183885_prop_dir_susta_en.pdf.* See also the Annex under: *https://ec.europa.eu/info/publications/proposal-directive-corporate-sustainable-due-diligence-and-annex_en*. As referred to hereinafter: The Proposal

[38] Source: *https://ec.europa.eu/info/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence_en*

environment also in order to make this countries more attractive for future business and better life standards.[39]

The goals and the core elements are similar to those provided in the LksG, so that some of the *differences* to the latter are hereinafter briefly emphasized. Other than the LksG, the directive first distinguishes the affected enterprises not only after their legal form as specified in further cited directives[40] but also on a geographically basis in those which are (Article 2 of the Proposal),

(i) independent of the market sector

(ii) EU-Enterprises
- to enterprises with more than 500 employees[41] *and* a worldwide net turnover of more than 150 million €;
- in case at least 50% of the net turnover was generated in one or more of the s.c. "high-impact sectors" (e.g., textiles, agriculture, extraction of minerals), to enterprises with more than 250 employees and a worldwide net turnover of more than 40 million €

(iii) Non–EU companies
- independent of the market sector, to enterprises with more than 150 million € in the Union;
- in case at least 50% of the net turnover was generated in one or more of the s.c. "high-impact sectors" (e.g., textiles, agriculture, extraction of minerals), to enterprises with a worldwide net turnover of more than EUR 40 million €.

Again, also in the Proposal s.c. micro companies and SMEs are not concerned. However, the Proposal provides *supporting measures for SMEs*, which could be indirectly affected.

Furthermore, the Proposal

- covers a *broader spectrum of risks*: not only by referring to further specific Conventions but embracing also obligations towards those risks that *should* and *could* have been identified
- covers a *broader spectrum* of the involved *enterprises* as well as of the definition of the *value chain*
- asks companies to "*purse efforts to bring to an end or minimize the extent*

[39] Source: *https://ec.europa.eu/info/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence_en*

[40] Art. 3 and 2 of the Proposal. Legal source: *https://ec.europa.eu/info/sites/default/files/1_1_183885_prop_dir_susta_en.pdf*

[41] Regardless of full-time or part-time employees (Art. 1, (3) of the Proposal). Legal source: *https://ec.europa.eu/info/sites/default/files/1_1_183885_prop_dir_susta_en.pdf.*

of the adverse impact" [42] In this regard it is proposed, that for the assessment and extent of liability." "*due account is to be taken of the company's efforts, to comply with any remedial action required by a supervisory authority, any investments made and any targeted support provided as well as any collaboration with other entities to address adverse impacts in its value chains"* [43- 44].

In the meanwhile, on the 14th of July, 2022 the *European Economic and Social Committee* (EESC) gave its Opinion [45] on the Proposal by stating i.a. that "*after some Member States issued national corporate due diligence legislation, a growing desire emerged to create a European level playing field for companies within the Union and avoid fragmentation. Against this background, the European Commission set out this proposal for a horizontal framework to encourage businesses to do their bit to respect human rights and the environment* [46]. As already underlined for the LksG, the EESC stresses out that the Proposal "*contains numerous unclear legal concepts that are open to interpretation and may be applied differently by national authorities and courts*" and that "*it is necessary to better define the terms...*" [47].

Lastly, on the 1st of December, 2022, the *EU Council* released, after plural meetings and discussions during the current year, its *General Approach* on the Proposal of the Directive [48].

After the the EU Council's intervention, some clarifications of different legal terms where done: i.e. a new defintion of "*business partner*", of "*chain of activities*", also by relocating the list of activties; furthermore an exemption for products subject to export control (i.e. dual-use items and weaponry) was added in relation to the distribution, transport, storage and disposal of such product; and the liabilty provision as well as the definitions of "*adverse environmental and human rights impacts*" have been clarified. Likewise, for the Annex I to the Proposal it was stresses out, that

---

[42] Explanatory Memorandum to the Proposal, Considerandum Nr. 41

[43] Explanatory Memorandum to the Proposal, Considerandum Nr. 57 and Articles 20, 22 (2) of the Proposal.

[44] Lieferkettensorgfaltspflichtengesetzt: Kommentar, Martin Rothermel, Compliance Berater Schriftenreihe, R&W Fachmedien Recht und Wirtschaft, dfv Mediengruppe, 2022, margin nr. 33ss.

[45] Document: EESC 2022-01327. Legal source: *https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52022AE1327&from=EN*

[46] Pt. 2.2. of the Opinion of the EESC.

[47] Pt. 4.1. of the Opinion of the EESC.

[48] Legal source: *https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CONSIL:ST_15024_2022_REV_1&from=EN*

it mentions only those international instruments that were ratified by all Member States, with further specifications for the human right as well as the environmental sector.

The "*right of victims to full compensation*" has been expressly provided, but with the specification, that punitive damages should not be included.

Furthermore, the EU Council *aligned* the provision on combating climate change "as much as possible" with the news Corporate Sustainability Reporting Directive (CSRD).

On the other hand, the EU Council opted for the removal of arms exports, a limitation of due diligence requirements for the financial services sector as well as an exclusion of exporters, in so far that they would not have to deal with the use of their products abroad. Finally, companies would not have to link the remuneration of their board members to whether they have implemented their own climate plans or not.

(b) Critical notes

Hence, likewise the Germank LksG, the EU Council's decision is not without criticism and different voices urge improvements in order to more effectively ban human rights violations and environmental destruction from corporate supply chains[49].

On the other hand, the practice of the LksG will show if the amendements on the definitions of general terms will be effective for the enforcement of the future Directive.

Due to the fact that the German LksG will come into force in a few months, whereas it is not clear when and how the directive will pass, it is unclear how German based companies will lates on be able to comply with two different rule systems and especially why an after EU standards "middle-sized" German-based company could be more "penalised" and undergo more or other prescriptions then a large sized Company in Germany or i.e. its sister company based in another MS: instead of achieving a true harmonization, chaos maybe the consequence.

This might also provoke or lead to consistent negative impacts on the market and especially in terms of unequal/unfair competition, since for instance some middle-sized companies with headquarter in a different MS could be more competitive due to lower costs for not having to comply with sustainability rules, whereas – especially foreign – German based companies might consider transferring the headquarter in another MS in order to avoid the maybe partially stricter rules after the German

[49] Source: Press statement dated 01.12.2022 of the "Initiative Lieferkettengesetz"; *https://lieferkettengesetz.de/pressemitteilung/statement-zum-beschluss-des-eu-ministerrats/*

LksG [50]. This of course would have a big impact not only towards the German market but also the labour sector in Germany.

Moreover, it doesn't seem to make sense to undergo on one hand a sustainability concept and on the other hand to focus only on large sized companies. One can imagine that of course, especially regarding the expenses and costs due to the compliance imposed towards all companies, respectless of their size, some companies might incur in more difficulties. On the other hand, the harmonization between national governments and the EU should go so far as to create a common system that encourages sustainability at each level and applies financial inputs or tax relief, since often enterprises of different size are inevitably connected in order to satisfy the market (ie the German-Italian fashion market or the global transport sector). Otherwise, again, the already fragile trade system due to the pandemic as well as the Ukraine crisis might get even more unstable, and with the opposite effect of leaving the rights unprotected.

5. *The impact on the market with a special view towards the transport sector*

(a) Premise

The Act will have a direct impact not only on companies headquartered in Germany, but also on subsidiaries and branches of foreign companies in Germany as well as for each commercial *partner* dealing with a German company: if a supplier refuses to cooperate and comply with the legal requirements, the company subject to the German law will be obliged to exert pressure on the single supplier, introduce regular, more intrusive audits, up to the point of replacing them.

The Act aims in a very conscious and determined way to involve *all* contractual partners worldwide, as *suppliers* of *goods* as well as of *services*: thus, it is most likely that each commercial partner to a supply chain dealing with Germany will – sooner or later – be obliged to check and monitor the entire supply chain, under penalty of heavy contractual fines and/or exclusion from the awarding of public contracts.

Both domestic and foreign companies are called upon to come to terms with this law without further delay and to adapt their compliance, since it is likely that in the future the companies concerned will inevitably be

[50] After Art. 2 (4) of the Proposal: *"As regards the companies referred to in paragraph 1, the Member State competent to regulate matters covered in this Directive shall be the Member State in which the company has its registered office"*. Legal source: *https://ec.europa.eu/info/sites/default/files/1_1_183885_prop_dir_susta_en.pdf.*

obliged to give preference to those contractual partners who (already) meet the requirements.

Particularly affected are economically important sectors such as the automotive industry, mechanical engineering, the metal industry, chemicals, textiles[51], food and luxury goods, pharmacy[52], wholesale and retail trade, the electrical industry and energy suppliers. As part of the implementation of the aforementioned NAP, the Federal Ministry of Labour and Social Affairs conducted a lot of sectoral research. Furthermore, the Premises to the Act (p. 26ss) distinguish the extent to which the individual sectors are affected:

- the sectors mining and minerals, waste disposal, forestry, real estate and water supply take place predominantly in the Federal Republic of Germany, whereby the human rights risks in this sector are rather low
- the sectors construction, agriculture and fisheries, personnel, cleaning and security services and *transport and logistics* also have a low level of international integration, *but higher human rights risks*
- the *remaining business sectors* are considered to have *severe human rights risks*
- *import goods from outside Europe* are assumed to be very *severely* affected
- all remaining companies are classified in the category of severely affected companies

(b) The transport and logistic sector

Also, in these sectors a frequent “modern slavery” can be observed worldwide[53]: examples of the very bad working conditions i.e. of truck

[51] To cite some out of many: in future, representatives of the industry, the United Nations, politics, science and public life are to meet once a year at the “*Frankfurt Fashion SDG Summit*” “to further raise awareness of the Sustainable Development Goals”. Source: *https://www.sueddeutsche.de/wirtschaft/lieferkettengesetz-unternehmen-ausland-textilindustrie-1.5336393*

[52] To cite some out of many: at the *Bundesverband der Arzeneimittelhersteller* (BAH, German Association of Pharmaceutical Manufacturers), working groups have been formed to address issues related to the sustainable design of supply chains. Among other things, workshops are offered to members on how to improve environmental management in companies. The US-founded non-profit Pharmaceutical Supply Chain Initiative (PSCI) organisation – of about 30 companies from the pharmaceutical and healthcare industries – pursues the goal of continuous improvement of social, ecological and economic as well as occupational health and safety conditions along the entire supply chains in the pharmaceutical industry. Source: *https://www.deutsche-apotheker-zeitung.de/news/artikel/2021/03/18/eu-bringt-lieferkettengesetz-auf-den-weg*

[53] As pointed out by the German *Bundestag* in the Preamble to the Act of 19th of April 2021by evaluating the extent to which the individual sectors are affected, it remarks that “the sectors … *transport and logistics* also have a low level of international integration, *but*

drivers emphasized during the Pandemic as well as due to the cabotage; but also in the logistic sector, short time work, fixed-term employment, clandestine employment, unpaid overtime work, disrespect of rest period are important agenda items. Further examples concerning the environment can be found in the hauling of (hazardeous) waste as well as in the type of vehicle used.

On the other hand, one can positively observe that, for instance, due to the social and political pressure as well as the rollover effect of the diesel scandal, the use of environmentally friendly vehicles (i.e., electric truck) has increased considerably. In different countries, i.e., in Germany and Italy, the governments have introduced different measures to shift for instance the traffic of persons and goods from road to rail as well as to ease the electrification of ports or by recognising incentives for the purchase of environmentally friendly vehicle, both for the private as well as for the public transport. Similarly with the introduction of environmental offenses, entrepreneurs are necessarily becoming sensitive to create internal as well as external procedures and introduce effective measures to prevent them from civil as well as criminal responsibilities.

Therefore, the LksG will and should, as the EU Directive will later, have a direct impact also in this service sector, since trade is made up of an interwoven and complex systems of different services and each sector is directly or indirectly inevitably affected with the sustainability issue.

Yet, as a side effect of the war in the Ukraine, electricity costs have increased considerably, so that the government are asked to intervene now in an effective way to sustain the effort maid in this sector so far [54]. Otherwise, the already existing cleft of costs will lead to an unpayable transport service.

---

higher human rights risks". Gesetzesbegründung vom 19.04.2021 Drucksache 19/28649, pag. 26ss. Legal source: *https://dserver.bundestag.de/btd/19/286/1928649.pdf*

[54] In September the Sustainability Days 2022 took place in Bolzano (Italy) with the aim to create a platform for exchange between politics, science, business, associations and civil society, making sustainable development accessible to a wide audience, especially young people. Renewable Energy & Energy Efficiency. Source: *https://www.fierabolzano.it/en/event/sustainability-days-sudtirol-alto-adige*. There the Italian Minister of Infrastructure and Sustainable Mobility (Mims), Mr. Enrico Giovannini, focuses also on the achievement in the transport sector, so far. Source: *https://www.trasporti-italia.com/mobilita-infrastrutture/sustainability-days-bolzano-giovannini-italia-modello-di-buona-pratica-nel-contesto-internazionale/53233*

6. *Final concerns: How to enforce a change of perspective*

A legislation on such an important, globalized and therefore complex issue as sustainability in its various aspects is, inevitably evokes applause in the susbstance as much as criticisms in its demanded application.

The German Act is praised to be a real game changer in sustainable production, to “advertise democracy” and having a pioneering role for the acceptance and implementation of international standards on fair trade, human rights and environment. It is furthermore seen as an effective legal instrument to offer new possibilities on the labor market as well as promote business and development.

At the same time, it is criticized to generate further ongoing costs (higher staff costs as well as significant time investment for periodical review) for an already struggling economy, more than beeing a one-time investment for future possibilities; to raise production costs and turn into a disadvantage for fair competition; to poorly or unfairly define and distribute the responsibility issue (not only within the supply chain but also in regard to the company size, since small business are without commitment); to be really effective and enforceable (will companies really be able to enforce the law, without breaking down? will employees really be able to report irregularities or violations without prejudice? will consumer really be able to verify and put further social and economical pressure?).

But by the end, one must also consider that more and more countries are moving in a similiar direction and will hence have to follow similar requirements, so it would eventually lead to joint improvements in working conditions, sustainable and smarter production; consumers as well as investors already pay high attention to sustainability in supply chains.

The German LksG *is* exisiting law, German companies *are* already working on its implementation, their suppliers *are or will soon* be concretely involved. The EU Directive *is* in progress and the moral, social, and legal pressure for a sustainable globalized supply chain has never been so immense and on everybody’s agenda.

Keeping this in mind and in the light of its generic character, the German LksG should be seen and used as a first legal instrument to set the sustainablity machinery in motion, allowing the industry to adjust in due time and manner, more than beeing used to sanction companies. Companies should not feel to be obliged to comply with the law to avoid penalizing a/o paralyzing legal actions, but should see it as the right way to invest in the present for the future. Therefore, sustainability should not only be the goal but also the way to pursue.

Daniele Buoncristiani

THE EU TAXONOMY REGULATION AND THE CORPORATE SUSTAINABILITY REPORTING DIRECTIVE

Table of Contents: 1. Introduction. – 2. The Non-financial statement in the Taxonomy Regulation. – 3. The new Corporate Sustainability Reporting (CSR). – 4 Directors' Liability and Corporate Social Responsibility. – 5. Conclusions.

1. *Introduction*

With the Regulation (EU) 2020/852 (the so-called "Taxonomy Regulation") the European Union has provided – among other things – some new rules about the non-financial information that certain undertakings have to publish. And, shortly afterwards, on April 21 2021 the European Commission adopted a proposal for a Directive that aims to change radically (in a more sustainable way) the non-financial reporting itself. If the European Parliament and the European Council will endorse the Directive, it will also change the name of the reporting. It will no longer be called "Non-Financial Reporting", but "Corporate Sustainability Reporting" (hereinafter "CSR" and "CSRD" for the proposal for a directive)[1].

Primarily, it is useful to remember that the Non-Financial Reporting Directive 2014/95/EU (hereinafter "NFRD"), implemented by Italy with the d.lgs. 254/2016 and that amends Directive 2013/34/EU, establishes that large undertakings which are public-interest entities with an average number of 500 employees during the financial year have to publish a non-financial statement, including information about environmental, social and employee matters[2]. The NFR must be contained in the management report

[1] See *Alice Briguglio*, "Riflessioni sulla natura giuridica della dichiarazione non finanziaria", Corporate Governance 2022, 202 et seqq..; see also Assonime feedback on the European Commission Proposal for a Directive on Corporate Sustainability Reporting, available at *www.assonime.it* (last accessed Oct. 25, 2022); see *infra* par. 3.

[2] See Article 19a; see also Article 29a about parent undertakings of a large group. Other large undertakings are also required to publish non-financial statements (see *infra* par. 2).

unless Member States authorize (as Italy did) a separate report that must be published together with the management report or published on the undertaking's website (and mentioned in the management report itself) [3].

Article 8 of the Taxonomy Regulation introduces some changes in the non-financial statement. In particular, it is stated that the undertakings which have to publish the annual NFR must include information about how and to what extent their economic activities are sustainable. The same article states also that the non-financial undertakings must specify (*i*) how much turnover comes from products or services associated with sustainable activities; (*ii*) the expenditure for environmentally sustainable economic activities [4].

On December 10 2021 the European Commission also published a delegated act supplementing article 8 of Taxonomy Regulation.

Therefore, it is evident that the Corporate Reporting is going to change rapidly, and some issues need to be analysed and clarified, as: (*i*) how should the Reporting (as provided for in Article 8 of Taxonomy Regulation) be structured and how accurate it must be; (*ii*) how the Non-Financial Reporting Directive should be coordinated with the new Corporate Sustainability Reporting; (*iii*) what happens in case of false statement or misrepresentation, as well as in the event of Greenwashing, and which are the directors' liabilities.

2. *The Non-financial statement in the Taxonomy Regulation*

As stated, Article 8 of the Taxonomy Regulation – and the Commission Delegated Regulation (EU) 2021/2178 – regulates and amends the non-financial statement provided for by Directive 2013/34/EU. Before the entry into force of the Taxonomy Regulation (even though the last Commission delegated Regulation has not yet been published) [5] there were no unique definitions of the ESG objectives. One of the main aims of the Taxonomy

---

[3] On this subject, also with reference to the problems that have arisen regarding the so-called *Società Benefit*, see *Paolo Butturini*, "La relazione annuale della società benefit nel sistema del bilancio d'esercizio", Giurisprudenza Commerciale 2020, 572 et seqq.

[4] Which are all the undertakings that are not "financial" as defined in the Recital (8) of the Commission Delegated Regulation (EU) 2021/2178.

[5] The last Commission Delegated Regulation will concern four environmental objectives listed in Article 9 of the Taxonomy Regulation: "the sustainable use and protection of water and marine resources"; "the transition to a circular economy"; "pollution prevention and control"; "the protection and restoration of biodiversity and ecosystems".

Regulation, indeed, is to uniform the criteria for establishing whether an economic activity is or not environmentally sustainable. Uniform criteria can help the investors, thanks to the possibility of comparison, to choose which companies to invest in [6].

In the European Union, in fact, there is an increasing attention to harmonisation and to transparency. In this perspective, it has recently been introduced the EU Taxonomy Compass. It is an online platform that provides a visual representation of the Taxonomy Regulation and of its delegated acts, helping people, such as retail investors, to understand the contents of the Regulation itself. There is also a growing interest on sustainability for institutional investors. Although the issue of institutional investors' fiduciary duties is still open and current [7], the trend looks towards a sustainable investment policy. Part of the doctrine states that institutional investors should act only by pursuing the economic interests of their clients, without being able to pursue further interests, such as ESG [8]. In other terms, for institutional investors it would not be possible to take into account the environmental, social and governance factors in deciding when and how to invest. By doing so, indeed, there would be a contrast between the (fiduciary) duty to maximize profits of the clients and the need to consider additional and potentially non-economic interests [9]. Another current of thought, however, states that institutional investors could – and in some cases should – take ESG interests into account [10]. There would be no con-

[6] See Recital (12) of the Taxonomy Regulation.

[7] See *Alessandra Daccò*, "Il ruolo degli investitori nella governance delle società", in: *Mario Cera/Gaetano Presti* (ed.), Il Testo Unico Finanziario, II, 2020, p. 1794-1802.

[8] For a complete examination, also comparative, see *James P. Hawley/Andreas G. F. Hoepner/Keith L. Johnson/Joakim Sandberg/Edward J. Waitzer*, "Cambridge Handbook of Institutional Investment and Fiduciary Duty", 2014, p. 1 et seqq.

[9] See *Mattew J. Kiernan*, "Investing in a Sustainable World. Why GREEN is the New Color of Money on Wall Street", 2009; *Alan Lewis/Carmen Juravle*, "Morals, Markets and Sustainable Investments: A Qualitative Study of "Champions"", Journal of Business Ethics 2009, 93, 483-494; *Carmen Juravle/Alan Lewis*, "Identifying Impediments to SRI in Europe: A Review of the Practitioner and Academic Literature", Business Ethics: a European Review 2008, 17, 285 et seqq.; *Axel Hesse*, Long-Term and Sustainable Pension Investments: a Study of Leading European Pension Funds, p. 1 et seqq.; *David Hess*, "Public Pensions and the Promise of Shareholder Activism for the Next Frontier of Corporate Governance: Sustainable Economic Development", Ross School of Business Paper Series 2007, 1080, 1 et seqq.

[10] See *Freshfields Bruckhaus Deringer*, "A Legal Framework for the Integration of Environmental, Social and Governance Issues into Institutional Investment. Report produced for the Asset Management Working Group of the UNEP Finance Initiative", 2005, available at *www.unepfi.org* (last accessed Oct. 25, 2022). For a critical perspective see *Joakim Sandberg*, "Socially Responsible Investment and Fiduciary Duty: Putting the Freshfields Report into Perspective", Journal of Business Ethics 2011, 143 et seqq.

flict between economic interests and the pursuit of ESG interests: the Social Responsible Investment (SRI) could lead to economic returns [11].

It is important to underline that the European directives on ESG disclousure are directives on *transparency*. In other words, they do not require companies to pursue sustainable activities, but they require transparency on these activities through the annual disclousure [12]. Article 19a of the Directive 2013/34/EU, introduced by the Directive 2014/95/EU, indeed, states that if the undertakings do not pursue the ESG policies – and that means they are not required to do it – they only have to explain, in a clear and reasoned way, why they don't do it.

But at the same time many European Corporate Governance Codes state that the corporate strategy should pursue not only economic objectives but also ecological and social ones. It is the case, for example, of the German Corporate Governance Code 2022 [13] and of Article 1, Principle I of the Italian Corporate Governance Code 2020 where it is asserted that the board of directors shall pursue the "sustainable success" [14]. And even

---

[11] See *infra* in this paragraph.

[12] See *Sabrina Bruno*, "Dichiarazione "non finanziaria" e obblighi degli amministratori", Rivista delle società 2018, p. 979 et seqq.; *Briguglio* (fn. 1), 195.

[13] The recommendation A1 states that "in addition to long-term economic objectives, the corporate strategy shall also give appropriate consideration to ecological and social objectives. Corporate planning shall include corresponding financial and sustainability-related objectives". See also Principle 24 of the 2020 *Código de buen gobierno de las sociedades cotizadas* (the Spanish Corporate Governance Code): "The company should deploy an appropriate environmental and social sustainability policy, as a non-delegable board power, and report transparently and in sufficient detail on its development, application and results". See also *Georgina Tsagas*, "A proposal for reform of EU Member states' corporate governance codes in support of sustainability", Sustainability 2020, 18 et seqq.; *Guido Ferrarini/Michele Siri/Shanshan Zhu*, "The EU sustainable governance consultation and the missing link to soft law", ECGI Law Working Paper No. 576/2021, available at *www.ssrn.com* (last accessed on October 25, 2022).

It is also interesting to see that the Portuguese Corporate Governance Code (*Código das Melhores Práticas de Governança Corporativa*) links the sustainability goals with the economic ones. In particular, the board of directors must "*garantir que os temas de sustentabilidade estejam vinculados às escolhas estratégicas, aos processos decisórios, aos impactos na cadeia de valor e aos relatórios periódicos*".

[14] About the "sustainable success" in the Italian Corporate Governance Code see *Giovanni Strampelli*, "*Soft law* e fattori ESG: dai codici di corporate governance alle corporate e index guidelines", Rivista delle società 2021, 1100 et seqq.; *Paolo Montalenti*, "Il nuovo Codice di Corporate Governance", Corporate Governance 2021, 39 et seqq.; *Mario Stella Richter Jr.*, "Il "successo sostenibile" del Codice di corporate governance. Prove tecniche di attuazione", available at *https://www.dirittobancario.it/art/il-successo-sostenibile-del-codice-di-corporate-governance-prove-tecniche-di-attuazione*, 5 febbraio 2021, (last accessed on October 25, 2022); Id., Long-Termism, in: Concetto Costa/Aurelio Mirone/Roberto

in this case, since the Codes represent soft law, the undertakings can deviate from the recommendations using the "comply or explain" principle [15].

Pennisi/Pierpaolo M. Sanfilippo/Ruggero Vigo (ed.), Studi di diritto commerciale per Vincenzo Di Cataldo, 2021, v. 2, t. 2, p. 901 et seqq.; *Piergaetano Marchetti*, "Il nuovo Codice di Autodisciplina delle società quotate", Rivista delle società 2020, 272 et seqq.; *Marco Ventoruzzo*, "Il nuovo Codice di Corporate Governance 2020: le principali novità", Le Società 2020, 440 et seqq.

The issue of sustainability recalls that of Corporate Social Responsibility. On this topic see *Luigi Papi*, "Crisi del sistema "volontaristico" e nuove frontiere europee della responsabilità sociale d'impresa", Rivista del Diritto Commerciale e del Diritto Generale delle Obbligazioni 2019, 109 et seqq.; *Guglielmo Bevivino*, La responsabilità sociale delle imprese, Strumenti attuativi e rimedi, 2018; *Mario Stella Richter Jr.*, "Corporate Social Responsability, Social Enterprise, Benefit Corporation: Magia delle parole?", Vita Notarile 2017, 953 et seqq.; *Mario Libertini*, "Economia sociale di mercato e responsabilità sociale dell'impresa", in *Vincenzo Di Cataldo/Pierpaolo M. Sanfilippo* (ed.), "La responsabilità sociale dell'impresa. Scritti in ricordo di G. Auletta", 2013, p. 9 et seqq.; *Elena Bellisario*, "La responsabilità sociale delle imprese fra autonomia e autorità privata", 2012; *Carlo Angelici*, "Responsabilità sociale dell'impresa, codici etici e autodisciplina", Giurisprudenza Commerciale 2011, 159 et seqq.; *Vincenzo Calandra Buonaura*, "Responsabilità sociale dell'impresa e doveri degli amministratori", Giurisprudenza Commerciale 2011, 526 et seqq.; *Mario Libertini*, "Impresa e finalità sociali. Riflessioni sulla teoria della responsabilità sociale dell'impresa", Rivista delle società 2009, 1 et seqq.; *Renzo Costi*, "La responsabilità sociale dell'impresa e il diritto azionario italiano", in VV.AA., "La responsabilità dell'impresa, Atti del Convegno per i trent'anni di Giurisprudenza Commerciale", Bologna 8-9 ottobre, 2004, 2006, p. 83 et seqq.

[15] About Corporate Governance Codes see *Nicola Brutti*, "Codici di comportamento e società quotate", Giurisprudenza Commerciale 2007, 236; *Lorenzo De Angelis*, "La borsa, gli affari, e il Codice di Autodisciplina delle società quotate", Rivista di diritto dell'impresa 2000, 465 et seqq.; *Luca Enriques*, "Codici di "corporate governance", diritto societario e assetti proprietari: alcune considerazioni preliminari", Banca Impresa Società 2003, 97 et seqq.; *Piergaetano Marchetti*, "Il nuovo codice di autodisciplina delle società quotate", Rivista delle Società, 2012, 37 et seqq.; *Paolo Montalenti*, "Amministrazione e controllo nella società per azioni: riflessioni sistematiche e proposte di riforma", Rivista delle Società 2015, 68 et seqq.; Id., Società per azioni. Corporate governance. Mercati finanziari, 2011, p. 17 et seqq.; *Mario Stella Richter Jr.*, "Il nuovo codice di autodisciplina delle società quotate e le novità in materia di autoregolamentazione", Rivista del Diritto Commerciale e del Diritto generale delle Obbligazioni 2007, 1499. *Guido Rossi*, "Le c.d. regola di «corporate governance» sono in grado di incidere sul comportamento degli amministratori", in Rivista delle Società, 2001, 6 et seqq.

It is therefore clear that the issue of corporate social responsibility is becoming increasingly important. On this theme see *Laura Marchegiani*, "Piccole e medie imprese societarie con scopo lucrativo e responsabilità sociale. Spunti per una riflessione", Rivista delle Società 2020, 1481 et seqq. and in particular p. 1488-1495. About the comply or explain principle see *Jennifer G. Hill*, "Transnational Migration of Laws and Norms in Corporate Governance: Fiduciary Duties and Corporate Codes", ECGI Law Working Paper No. 597/2021, available at *https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3885195* (last accessed on October 25, 2022); Org. For Econ. Co-Operation And Dev. (OECD), Corporate Governance Factbook, 2019, p. 29 et seqq., available at *https://www.oecd.org/daf/ca/OECD-Corporate-Governance-Factbook-2019.pdf* (last accessed on October 25, 2022).

At this point the question that arises spontaneously is why businesses should incur costs for sustainable activities when they are not obliged to do so. From an economic point of view the organization and the undertakings that apply policies of sustainable development have two sets of economic benefits: a direct one and an indirect one.

Primarily, using a sustainable production method can lead to a reduction, for example, in the expenditure of energy, materials and water, resulting in a reduction in costs. We can think of reduction in energy consumption or of replacing non-hazardous materials with hazardous ones. This last replacing, for example, can reduce the company's liability – and therefore the costs – from spills [16]. The non-financial statement can help in this direction: in addition to being useful for informing the market about company policies, it can help companies understand what the economic advantages are – in tight monetary terms – in having a sustainable production policy; and, therefore, it is useful to re-orient the economic activity itself [17].

Secondly, there is an indirect economic advantage to companies that publish the non-financial statement. Pursuing environmental, social and governance interests – and declaring this in the annual report – could lead to a return of image and, therefore, to economic advantages. This is similar to what happens in the Italian *Società Benefit*, *i.e.* those companies, introduced by law 28.12.2015, n. 208, that pursue other interests besides the strictly lucrative one [18]. Having goals that are not merely lucrative also in

---

[16] For this and other similar considerations see *Gwendolen B. White*, *Sustainability Reporting: Getting Started*, 2nd ed., 2015, p. 19 et seqq.

[17] See *White* (fn. 16), *ibidem*. The A. stresses the importance for companies to collaborate with an Energy Service Company (ESCo) in order to improve the efficiency of production processes.

[18] On this theme see *Gabriella Iermano*, "Suitable business legal structures for sustainable transport. The benefit corporation", in this Volume; *Alessandra Daccò*, "La società *Benefit* tra interesse dei soci e interesse dei terzi: il ruolo degli amministratori e i profili di responsabilità in Italia e negli Stati Uniti", Banca Borsa Titoli Credito 2021, 40 et seqq.; *Michele Squeglia*, "Il welfare aziendale tra CSR e trasformazioni d'impresa. Le società benefit e il welfare aziendale. Verso una nuova dimensione della responsabilità sociale delle imprese", Diritto delle Relazioni Industriali 2020, 61 et seqq.; *Daniela Caterino*, "Denominazione e labeling della società benefit, tra marketing "reputazionale" e alterazione delle dinamiche concorrenziali", Giurisprudenza Commerciale 2020, 787 et seqq.; *Lauren Cooper/Jill Weber*, "Does Benefit Corporation Status Matter to Investors? An Exploratory Study of Investor Perceptions and Decisions", Business & Society 2020, 1 et seqq.; *Stefano Prataviera*, "Società benefit e responsabilità degli amministratori", Rivista delle Società 2018, 919 et seqq.; *Alberto Gallarati*, "Incentivi e controllo del mercato nella società benefit. Un'analisi economica e comparata", Contratto e Impresa 2018, 806 et seqq.; *Paolo Guida*, "La «Società benefit» quale nuovo modello societario", Rivista del Notariato 2018, 501 et seqq.; *Nancy Kurland*, "Esop Plus Benefit Corporation: Ownership Culture With Benefit Accountability", California Management Review 2018, 51 et seqq.;

non-benefit companies can lead to a reputational advantage in long-term perspective[19]. And therefore, on the contrary, not having ESG policy could lead to a *reputational damage*[20]. The requirement for non-financial reporting entails also costs, particularly in the short-term perspective[21]. But in a

---

Carlo Angelici, "Società *Benefit*", in: *Barbara De Donno/Livia Ventura* (ed.), "Dalla *benefit corporation* alla società benefit», 2018, p. 19 et seqq.; *Serenella Rossi*, "L'impegno multi-stakeholder della società benefit", Orizzonti del Diritto Commerciale 2017, 1 et seqq.; *Marco Palmieri*, "L'interesse sociale: dallo shareholder value alle società benefit", Banca Impresa Società 2017, 201 et seqq.; *Giorgio Marasà*, "Scopo di lucro e scopo di beneficio comune nelle società benefit", Orizzonti del Diritto Commerciale 2017, 1 et seqq.; *Aldo Frignani/Paolo Virano,* "Le società benefit davvero cambieranno l'economia?", Contratto e Impresa 2017, 503 et seqq.; *Mario Stella Richter jr.*, "Società benefit e società non benefit", Orizzonti del Diritto Commerciale 2017, 1 et seqq.; *Andrea Zoppini*, "Un raffronto tra società *benefit* ed enti *non profit* implicazioni sistematiche e profili critici", Orizzonti del Diritto Commerciale 2017, 1 et seqq.; *Diletta Lenzi*, "Le società benefit", Giurisprudenza Commerciale 2016, 894 et seqq.; *Silvia Corso*, "Le società benefit nell'ordinamento italiano: una nuova "qualifica" tra *profit* e *non-profit*", Le Nuove Leggi Civili Commentato 2016, 995 et seqq.; *Gianluca Riolfo*, "Le società «benefit» in Italia: prime riflessioni su una recente innovazione legislativa. Prima parte", Studium Iuris 2016, 720 et seqq.; Id., "Le società «benefit» in Italia: prime riflessioni su una recente innovazione legislativa. Seconda parte", Studium Iuris 2016, 819 et seqq.; *Kim Suntae/Matthew J. Karlesky/Christopher G. Myers/ Todd Schifeling*, "Why Companies are Becoming B Corporations, Harvard Business Review 17 June 2016; *Alberto Lupoi*, "L'attività delle "società benefit" (l. 28 dicembre 2015, n. 208)", Rivista del Notariato 2016, 811 et seqq.; *Giovanni Castellani/Dario De Rossi/Andrea Rampa*, "Le società benefit, La nuova prospettiva di una Corporate Social Responsability con Commitment", 2016, available at *www.fondazionenazionalecommercialisti.it* (last accessed on October 25, 2022); *Dana Brakman Reiser*, "Benefit Corporations – A sustainable Form of Organization?", Wake Forest Law Review 2012, 591 et seqq. See also Linee Guida sul Reporting delle Società Benefit, Network Italiano Business Reporting (NIBR), 2019, available at *https://www.fondazioneoibr.it/linee-guida-e-documenti/* (last accessed on October 25, 2022).

[19] See *Diletta Lenzi*, "La gestione del rischio di danno ambientale per le società di capitali", in: *Stefano A. Cerrato* (ed.), "Impresa e rischio. Profili giuridici del risk management", 2019, p. 243 et seqq., who emphasizes the reputational advantages of a sustainable management of the company. Similarly, *Paolo Montalenti*, "Impresa, società di capitali, mercati finanziari", 2017, p. 216. *Contra Carlo Angelici*, "Divagazioni sulla responsabilità sociale d'impresa", Rivista delle Società 2018, 12 et seqq., which points out that in the Italian legal system there is no preference for the long-term; according to the A., the dialectic between long-term and short-term is reduced to a dialogue among the shareholders, as in the case of the decision on the distribution of profits. On this topic see also *Pratima Bansal/Kendall Roth*, "Why companies go green. A model of ecological responsiveness", Academy of Management Review 2000, 4, 717 et seqq.; see also *Bruno* (fn. 12), 1014 et seqq.; *Sabino Fortunato*, "L'informazione non-finanziaria nell'impresa socialmente responsabile", Giurisprudenza Commerciale 2019, 418 et seqq.

[20] See *infra* paragraph 4.

[21] On the contrary, a selective disclosure of only positive sustainability information (thus integrating a greenwashing hypothesis) entails a lower cost. See *Alessio M. Pacces*, "Will the

long-term perspective, if revenue exceeds costs, a company might have an interest in a more sustainable production.

The Taxonomy Regulation contains more stringent rules for the non-financial declaration. The companies required to make the declaration are the same indicated in Directive 2014/95/EU, and more specifically in the articles 9a and 29a[22]. The undertakings that are to publish the non-financial statement shall be those that have the following requirements *jointly*: (*i*) they must be large undertakings pursuant to the Directive 2013/34/EU[23], (*ii*) they must be public-interest entities pursuant to the Directive 2013/34/EU, (*iii*) they must have an average number of 500 employees during the financial year[24].

The peculiarity of the taxonomy regulation, however, is to be able to standardize the content of the various non-financial declarations. In fact, until now the issue of the various declarations was the lack of common standards[25]. The non-financial statement, in accordance with Directive 2014/95/EU, required only the *criterion of necessity* and the *criterion of materiality*[26]. The first one states that it is sufficient to publish the environmental information necessary to understand the situation of the undertaking and the environmental impact of its activity. The second one, instead, has no definition, but we can deduce it from the Directive 2013/34/EU[27], from

EU Taxonomy Regulation Foster Sustainable Corporate Governance?", Sustainability 2021, 13, 7, available at *https://doi.org/10.3390/su132112316* (last accessed on October 25, 2022). See also *Aneesh Raghunandan/Shivaram Rajgopal*, "Do Socially Responsible Firms Walk the Talk?", available at *https://ssrn.com/abstract=3609056 (last accessed on October 25, 2022).*

[22] Thus, as mentioned *supra* par. 1, the non-financial statement has to be published by "*Large undertakings which are public-interest entities exceeding on their balance sheet dates the criterion of the average number of 500 employees during the financial year*" (art. 19a) and by "*Public-interest entities which are parent undertakings of a large group exceeding on its balance sheet dates, on a consolidated basis, the criterion of the average number of 500 employees during the financial year*" (art. 29a). See *Christo Gortsos*, "The Taxonomy Regulation: more important than just as an element of the Capital Markets Union", in: *Danny Bush/Guido Ferrarini/Senaina Grünewald* (ed.), *Sustainable Finance in Europe*, 2021, pp. 27-28, available at *https://ssrn.com/abstract=3750039* (last accessed on October 25, 2022).

[23] And therefore they must reach two of the following thresholds: (*a*) a balance sheet total of 20 million euros, (*b*) a net turnover of 40 million euros, (*c*) an average number of employees during the financial year of 250.

[24] See *Fortunato* (fn. 19), 421.

[25] See *Bruno* (fn. 12), 1000.

[26] See in particular *Fortunato* (fn. 19), 422 et seqq.; see also *Bruno* (fn. 12), 984 et seqq.; *David Monciardini/John Dumay/Lucia Biondi*, "Integrated Reporting and EU Law. Competing, Converging or Complementary Regulatory Frameworks?", University of Oslo Faculty of Law, Legal Studies Research, Paper Series N. 2017-23, 10.

[27] See Article 2(16).

the Global Reporting Initiative's Standard [28] and from the European Commission Guidelines on Non-financial Reporting [29]. Specifically, it refers to a "double materiality", *i.e.*: (*i*) an inside-out perspective that indicates how much the sustainability activities influence the value of the undertaking; (*ii*) an outside-in perspective that indicates the impact of the social activity on the environment and on the stakeholders [30]. The Directive 2014/95/EU left a margin of discretion and flexibility to the undertakings because there were no common standards about reporting methodologies, therefore making it impossible, or extremely difficult, to compare the declarations of different undertakings [31].

The new European provision puts an end to diverging standards in reporting methodologies. The Annex I of the Commission Delegated Regulation (EU) 2021/2178, in application of the Taxonomy Regulation, indeed, specifies the content of KPIs (Key Performance Indicators) that the non-financial undertakings have to disclose. This reduces the discretion of the various undertakings and, at the same time, increases the degree of comparability of the various non-financial statements. In particular, the non-financial undertakings have to specify a set of information related to the Taxonomy Regulation, such as: (*i*) the nature of their economic activities as specified in the Taxonomy Regulation; (*ii*) an explanation of how they assessed conformance to the criteria provided in Article 3 of Taxonomy Regulation and in the delegated acts. And Article 3 of the Taxonomy Regulation is a pivotal point in standardisation because it establishes *when an economic activity can be considered environmentally sustainable*.

---

[28] The full document is available at *www.globalreporting.org*.

[29] See *European Commission*, "Communication from the Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information", 4 et seqq.

[30] See *Carol A. Adams/Abdullah Alhamood/Xinwu He/Jie Tian/Le Wang/Yi Wang*, "The double-materiality concept. Application and issue", available at *https://www.globalreporting.org/media/jrbntbyv/griwhitepaper-publications.pdf* (last accessed on October 25, 2022); *Elena Bellisario*, "Rischi di sostenibilità e obblighi di disclosure: il d.lgs. n. 254/16 di attuazione della dir. 2014/95/UE", Le Nuove Leggi Civili Commentate 2017, 30. The perspective of "Double materiality" is well described in point 1.2.1 of the Commission Staff Working Document Impact Assessment Annex to the document Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) 537/2014, as regards the Communication on the sustainability of enterprises, available at *https://eur-lex.europa.eu/* (last accessed on October 25, 2022).

[31] See recital 9 of Directive 2014/95/EU. It was possible, though, to rely on national, international or Union standards, such as the Eco-Management and Audit Scheme (EMAS), the Global Compact, the Guiding Principles on Business and Human Rights or other recognised international standards.

3. *The new Corporate Sustainability Reporting (CSR)*

On April 21 2021, the European Commission approved a proposal for a directive to amend the Non-financial Declaration Directive (NFDR) introducing the Corporate Sustainability Reporting (CSR). If the legislative process is completed, the nature of the non-financial statement will change in a more cost-effective way for the undertakings that have to publish it and, at the same time, with better quality and more comparable information[32]. One of the main reasons that led the European Commission to propose a directive amending the NFRD is that information currently published by companies is not enough for the various stakeholders[33].

Another step towards greater comparability of non-financial statements within the European Union has been the establishment of a uniform and unalterable place of publication. Directive 2014/95/EU, in fact, stipulated that the non-financial statement should be included in the management report[34], but left the possibility for Member States to publish it in a separate report[35]. And so did the Italian legislation with the introduction of art. 5, paragraph 1, lett. b) of d.lgs. 254/2016. In fact, in 2021, in Italy only 42 companies published the non-financial statement in the management report, while another 168 companies used a separate report[36]. The Taxonomy Regulation itself does not change the legal discipline[37]. The different locations did not affect the potential responsibility of the directors for a false or inaccurate statement[38], but nevertheless resulted in a greater difficulty of comparison for investors and stakeholders. The European Commission's proposal for a directive, on the other hand, suggests that the non-financial statement (*rectius*: Corporate Sustainability Reporting) should be included in the management report, eliminating the possibility of publishing a separate report[39].

---

[32] See *Briguglio* (fn. 1), 202 et seqq.

[33] See "Questions and Answers: Corporate Sustainability Reporting Directive proposal", available at *https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_1806* (last accessed on October 25, 2022), where the issue is clearly set out: important information for stakeholders is often omitted and there is a difficulty in comparing the various reports.

[34] See recital 6 of Directive 2014/95/EU and Article 19a(1), of Directive 2013/34/EU.

[35] See Article 19a(4), of Directive 2013/34/EU.

[36] See the published list of Consob available at *https://www.consob.it/web/area-pubblica/soggetti-che-hanno-pubblicato-la-dnf* (last accessed on October 25, 2022).

[37] See Article 8(3).

[38] See *Bruno* (fn. 12), 1002.

[39] See "Assonime feedback on the European Commission Proposal for a Directive on

In addition, the proposal for a directive provides for the extension of the non-financial disclosure requirement to all large companies and to all listed companies, including also the small and medium-sized enterprises listed on EU regulated markets and excluding only the listed micro-companies [40].

Another important novelty in the the proposal for a directive is the introduction of the obligation to assurance information on sustainability. At first it would be introduced the obligation of a *limited assurance* that, at a later time, could become a *reasonable assurance* [41]. In particular, the statutory auditor must provide a (limited) certification of the non-financial statement with regard to various elements, such as the conformity of the information and compliance with the provisions of art. 8 of the Taxonomy Regulation. The certification aims to increase the "credibility" of the declarations, so that they can be considered more reliable by the stakeholders [42].

Corporate Sustainability Reporting" (fn. 1), p. 6-7, which criticises the mandatory inclusion of the Sustainability Reporting inside the Management Report.

[40] See "Proposal for a Directive Of The European Parliament And Of The Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014", p. 12: "To help ensure investor protection, *all companies listed* (except listed micro-companies) on regulated markets should in principle be subject to the same disclosure rules. SMEs listed on EU regulated markets would therefore have to fulfil the proposed new sustainability reporting requirements" (emphasis added). See *Briguglio* (fn. 1), 203.

[41] The difference between limited and reasonable assurance can be found in the lesser or greater degree of detail and in the complexity of the procedure. See *Bruno* (fn. 12), 1007, nt. 87. The European Commission considers it preferable to proceed gradually, starting from a limited assurance and then moving to a reasonable assurance over time. Reasonable assurance would initially be too expensive for companies, given the absence of sustainability assurance standards. In this connection, the Commission proposed entrusting itself with the possibility of adopting these standards: see "Questions and Answers: Corporate Sustainability Reporting Directive proposal" (fn. 33). It should also be borne in mind that positive assurance can (positively) influence banks' credit application decisions. As well as banks will be more likely to advise their customers to purchase the shares of companies with positive assurance: see *Reiner Quick/Petra Inwinkl*, "Assurance on CSR reports: impact on the credibility perceptions of non-financial information by bank directors", Meditari Accountancy Research 2020, V. 28 No. 5, 833 et seqq. On the same topic and on the importance of the assurance, particularly when it is provided by an accountancy firm, see *Kristy Hodge/Nava Subramaniam/Jenny Stewart*, "Assurance of Sustainability Reports: Impact on Report Users' Confidence and Perceptions of Information Credibility", Australian Accounting Review 2009, 19, 178 et seqq. With reference to the Spanish legal system see *Carmelo Reverte*, "Do investors value the voluntary assurance of sustainability information? Evidence from the Spanish stock market", Sustainable Development 2021, 29, 793 et seqq. Lasty, see *Warren Maroun*, "Corporate governance and the use of external assurance for integrated reports", Corporate Governance: an international review 2022, 1 et seqq.

[42] See par. 53 of the proposal for a directive of the European parliament and of the council.

Finally, according to the proposal for a directive, non-financial information is required to be more detailed. It also provides for new obligations concerning the strategy, the role of the board of directors, intangible assets, etc., in addition to the obligations already provided for by art. 19a and 29a of Directive 2013/34/EU[43].

In conclusion, we can see that the main interest of the European Union is the extension of both the subjective and the objective scopes of the sustainability statement, so that the information is more comparable. In particular, the exchange of information, according to the EU commission, is not working adequately: the enterprises must supply determined information (in matter of sustainability) to stakeholders; but, at the same time, they must obtain certain information from suppliers, customers and investee companies in order to draw up the statement. Greater clarity and greater accuracy of the information that must be made can certainly be useful both to reduce costs and to facilitate and standardize the procedures for drafting the sustainability information reporting.

4. *Directors' Liability and Corporate Social Responsibility*

The Directive 2014/95/EU introducing art. 19a (par. 5) required Member States to provide for a system of controls to verify the correct *publication* of the non-financial statement. This verification must be carried out by the statutory audit or audit firm. This is the only control that the directive imposes on Member States. Paragraph 6 of art. 19a, indeed, stated that Member States may – on an optional basis – provide for verification of the *assurance* of the declaration. The European Union, therefore, imposes only a formal control (the publication of the non-financial statement) and not a substantial one. However, Italy has introduced both formal and substantive control rules.

Primarily, the d.lgs. n. 254/2016 states that directors are responsible for the publication of the non-financial statement and the compliance with the d.lgs. itself. The supervisory body must supervise the task of the directors and report to the shareholders' meeting in the annual report[44].

Secondly, art. 3, paragraph 10 states that the statutory auditor (*i*) must verify that the directors have filed the non-financial statement (formal control) and, in addition, (*ii*) must issue a statement of assurance of the non-financial statement (substantive control).

[43] See par. 26 of the proposal for a directive of the European parliament and of the council.

[44] See art. 3, par.7.

The Italian legal system, therefore, by providing for the obligation for the statutory auditor to issue a statement of assurance (limited or reasonable)[45] has gone beyond the provisions of art. 19a of Directive 2014/95/EU, aligning, in advance, with the new proposal for Corporate Sustainability Reporting (CSR).

Control over compliance with this procedure is entrusted to Consob, which may impose pecuniary administrative sanctions on directors, the supervisory body and the statutory auditor[46]. Clearly, it is a responsibility of the company's directors, of the supervisory body and of the statutory audit and not of the company itself.

This means that an obligation (that of non-financial reporting) is imposed on the company without any *direct* sanctions against the company[47]. It would appear, *prima facie*, that the company does not have any disadvantages in the event that the non-financial reporting is not published (or if it has been published but does not comply with the sustainability criteria).

In fact, on closer inspection, the "price" that a company must pay if it does not comply with the rules on sustainability and reporting is much higher than what the directors, the supervisory body and the statutory auditor must support. As mentioned above, the sustainability obligations imposed on companies are of two types: (*i*) those deriving from the Corporate Governance Codes that require companies to follow sustainable objectives; (*ii*) those deriving from European directives, and finally by the Taxonomy Regulation, which require the publication of information on sustainable activities.

In particular, Corporate Governance Codes increasingly require companies to pursue sustainability objectives. Often, even part of the directors' remuneration is linked to the achievement of these objectives[48]. The European directives and regulations, however, as we have seen, require disclosing these activities to the market and stakeholders.

In the case of Corporate Governance Codes – it should be stressed – it is *soft law*: the principles and recommendations of the Corporate Governance Codes must be applied unless the company explains why it does not intend to do so (comply or explain principle)[49]. Instead, the rules on

---

[45] See *supra* nt. 41.

[46] See Art. 8.

[47] See *Fortunato* (fn. 19), 427.

[48] See Article 5, Recommendation n. 25 of the Italian Corporate Governance 2020. Many companies have also set up a Sustainability Committee.

[49] See *Giorgio Marasà*, "Imprese sociali, altri enti del terzo settore, società benefit", 2019, p. 69 et seqq., who stresses the voluntary nature of CSR. Similarly, *Antonio Cetra/Paolo Cuomo*, ""Responsabilità sociale" e gestione dell'impresa azionaria nel nuovo codice

reporting are mandatory (*hard law*) but are linked to the rules – those of sustainability provided for in the Corporate Governance Codes – which are not strictly mandatory (*soft law*); and in fact, art. 19a, par. 1 states that, if a company does not apply some sustainability policies, it must explain the reasons why inside the non-financial reporting.

In both cases, although there are no pecuniary administrative sanctions for the company in case of violation of the rules on corporate governance[50] or non-financial reporting, the company has *reputational damage*. This is exactly what has happened recently in the Spanish legal system that has involved a major multinational company active in consultancy services in many sectors. In particular, this company dismissed its independent directors in violation of the rules of the Code of Corporate Governance. Recommendation No. 21 of the 2020 *Código de buen gobierno de las sociedades cotizadas*[51] states that independent directors may only be dismissed

---

di Corporate Governance", in: Concetto Costa/Aurelio Mirone/Roberto Pennisi/Pierpaolo M. Sanfilippo/Ruggero Vigo (ed.), Studi di diritto commerciale per Vincenzo Di Cataldo, 2021, v. 2, t. 1, p. 165 et seqq.; *Angelici* (fn. 18)., 3 et seqq., in particular p. 7-8 and 17-19; *Umberto Tombari*, ""Potere" e "interessi" nella grande impresa azionaria", 2019, p. 78-79; *Stella Richter Jr.* (fn. 14), p. 956-957. *Contra Papi* (fn. 14), 147 et seqq., who says that there is a real legal obligation to implement ESG policies: "*il testo normativo, obbligando gli enti di interesse pubblico alla divulgazione delle informazioni di carattere non finanziario, prescrive implicitamente (e neanche tanto) la doverosa adozione di politiche CSR*" (p. 151, emphasis added).

In general, on the theme of soft law see *Strampelli* (fn. 14)., 2021, 1100 et seqq.; *Massimo Lembo*, "Gli strumenti di soft law tra l'ordinamento europeo e quello italiano", Diritto del Commercio Internazionale: pratica internazionale e diritto interno 2021, 1049-1051; *Fiammetta Borgia*, "La soft law come strumento di regolamentazione delle attività delle imprese multinazionali", Diritto del Commercio Internazionale: pratica internazionale e diritto interno 2010, 309 et seqq.; *Christian Voegtlin/Andreas G. Schererl*, "Responsible Innovation and the Innovation of Responsibility: Governing Sustainable Development in a Globalized World", Journal of Business Ethics 2017, 227-243, available at *https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2716152* (last accessed on October 25, 2022); *Gregory C. Shaffer/Mark A. Pollack*, "Hard vs. Soft Law: Alternatives, Complements and Antagonists in International Governance", Minnesota Law Review 2010, 706-799, available at *https://minnesotalawreview.org/* (last accessed on October 25, 2022). With reference to the British legal system see *Georgina Tsagas*, "Section 172 of the Companies Act 2006: Desperate Times Call for Soft Law Measures", in: Nina Boerger and Charlotte Villiers (ed.), Shaping the Corporate Landscape, Towards Corporate Reform and Enterprise Diversity, 2018, p 131-150, available at *https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2996090* (last accessed on October 25, 2022).

[50] But see *Elena Bellisario*, "La responsabilità sociale delle imprese fra autonomia e autorità privata", 2012, p. 164 et seqq. The A. considers that the violation of Corporate Governance Codes is a cause of the company's contractual liability towards the stakeholders who are the recipients of these rules. Similarly see *Papi* (fn. 14), 150.

[51] Available at *https://www.cnmv.es/portal/Publicaciones/CodigosGovCorp.aspx*. In

from their office if there is a *just cause*, which in this case did not exist. Despite the fact that the company violated a soft law rule provided for by the Corporate Governance Code – without, therefore, immediate and direct sanctions – the economic damage that the company itself has suffered has been enormous. The company, as a result of the operation, has recorded a decrease of 15% of the value of the shares on the stock exchange, reaching up to a dismissal of 20% [52]. As a result of the violation of a soft law rule (without this being justified), the market has "sanctioned" the company with an economic and reputational penalty [53].

This would not be dissimilar to a breach of the non-financial reporting obligation. In fact, if a listed company follows the principles and recommendations of the Corporate Governance Code on sustainability and "sustainable success" (using the terminology of the Italian Code), it will be in its interest to make these activities known in the communications to be made to the market and in the non-financial statement: a virtuous behaviour brings economic and reputational advantages in the short and long-term. On the contrary, if a listed company that should pursue sustainable goals does not publish the non-financial statement it means that – probably – it

---

particular, the recommendation states "*que el consejo de administración no proponga la separación de ningún consejero independiente antes del cumplimiento del periodo estatutario para el que hubiera sido nombrado, salvo cuando concurra justa causa, apreciada por el consejo de administración previo informe de la comisión de nombramientos*".

[52] For an in-depth analysis of the case see *José Miguel Embid Irujo*, "¿Consejeros independientes? No, gracias", 26.06.2022, available at *https://www.commenda.es/rincon-de-commenda/consejeros-independientes-no-gracias/* (last accessed on October 25, 2022), which underlines the strength and importance of soft law regulation.

[53] In this sense, therefore, the corporate social responsibility is closely linked to the financial results of the company. See *Lenzi* (fn. 19), 245. It should be noted, however, that there is not unanimity on this issue: not all authors believe that corporate social responsibility necessarily follows financial damage. On this theme see among others *Qian Wang/Junsheng Dou/Shenghua Jia*, "A Meta-Analytic Review of Corporate Social Responsibility and Corporate Financial Performance: The Moderating Effect of Contextual Factors", Business & Society 2015, 39 et seqq.; *Paul C. Godfrey/ Craig B. Merrill/Jared M. Hansen*, "The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis", Strategic Management Journal 2009, 425-445; *Alan Muller/Roman Kräussl*, "Doing good deeds in times of need: A strategic perspective on corporate disaster donations", Strategic Management Journal 2011, 911-929; *Jordi Surroca/Josep A. Tribó/Sandra Waddock*, "Corporate Responsibility and Financial Performance: The Role of intangible resources", Strategic Management Journal 2010, 463 et seqq. See also *Angelici* (fn. 18), p. 11, which emphasizes how reputational benefits can sometimes lead to conflicts between shareholders. And similarly, *Amir Barnea/Amir Rubin*, "Corporate Social Responsibility as a Conflict between Shareholders", Journal of Business Ethics 2006, available at *https://papers.ssrn.com/sol3/papers.cfm?abstract_id=686606* (last accessed on October 25, 2022).

has not achieved those goals. The reputational and economic disadvantage of not having published the mandatory non-financial statement will be the same as that of having followed the recommendations of the Corporate Governance Code [54].

5. *Conclusions*

The issue of environmental sustainability and, in general, the issue of corporate social responsibility, is becoming increasingly important in the future. The Corporate Governance Codes refer to the sustainability objectives and the "sustainable success" of companies, entrusting the pursuit to the directors. The Taxonomy Regulation, in this sense, has the merit of establishing uniform criteria in order to determine when an activity can be defined as sustainable. This will make it easier for investors and, in general, stakeholders to compare the non-financial statements of the various European companies [55]. The proposed Corporate Sustainability Reporting Directive moves in the same direction, seeking to increase the degree of comparability of declarations and introducing an assurance requirement. The pursuit or failure to pursue sustainability objectives – and their publication in non-financial reporting – entails both short and long-term economic and reputational advantages (and disadvantages). Where the benefits outweigh the costs, therefore, it will be preferable for a company to implement ESG policies – with related reporting – even if it is not obliged to do so.

---

[54] See *Vincenzo Calandra Buonaura*, "Responsabilità sociale dell'impresa e doveri degli amministratori", in: *Vincenzo Di Cataldo/Pierpaolo M. Sanfilippo* (ed.), "La responsabilità sociale dell'impresa. In ricordo di Giuseppe Auletta", 2013, p. 91 et seqq., which highlights the negative effects on reputation in the event of unreasonable explations for ignoring certain interests.

[55] This also entails both (*i*) a reduction in agency costs in the relationship between institutional investors and their beneficiaries and (*ii*) a reduction in greenwashing phenomena: *Pacces* (fn. 21), 8 et seqq.

Gabriella Iermano

SUITABLE BUSINESS LEGAL STRUCTURES FOR SUSTAINABLE TRANSPORT. THE BENEFIT CORPORATION

Table of contents: 1. Making the transport sector sustainable: an ambitious, but necessary goal. – 2. Attracting private capital for the sustainable transport (r)evolution. – 3. Innovative legal business models for sustainable transport enterprises: Social enterprise and benefit corporation. – 4. Benefit corporations and sustainable transport: the perfect match? – 5. Critical issues: legal uncertainty, lack of homogeneity and risk of greenwashing. – 6. Conclusions.

1. *Making the transport sector sustainable: an ambitious, but necessary goal*

The transport sector is crucial in today's economy and society and has a big impact in particular on employment and growth, making "a decisive contribution to social and territorial cohesion, industrialization and economic development" [1].

At the same time, however, it is also the largest contributor of greenhouse-gas emissions at global level (28% of total emissions in the EU) [2]. For accelerating the transition process toward a sustainable economy [3] a

---

[1] «With transport contributing around 5% to EU GDP and employing more than 10 million people in Europe, the transport system is critical to European businesses and global supply chains. At the same time, transport is not without costs to our society: greenhouse gas and pollutant emissions, noise, road crashes and congestion» (European Green Deal, available at *https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/transport-and-green-deal_en).*

[2] *Luca Milani/Detlev Mohr/Nicola Sandri*, "Built to last: Making sustainability a priority in transport infrastructure", October 2021, available at *https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/built-to-last-making-sustainability-a-priority-in-transport-infrastructure.*

[3] *Paul Adrianus van Baal, Matthias Finger*, "The converging Energy-Mobility System needs an integrated Approach for the Sustainability Transition", Network Industries Quarterly, 2020, Vol. 22, issue 2, 3 et seq.

worldwide approach to transport decarbonization is therefore needed [4].

Policy makers and institutions at global level are indeed expressing growing concerns about the need for a substantial intervention in this field and are proposing several legislative measures to buffer especially the climate emergency.

The European Union is aiming to make Europe the first climate neutral continent by 2050 and, with the *European Green Deal* [5] and the *Fit for 55% Package* presented in July 2021 [6], has already adopted several initiatives [7], with the purpose, on the one hand, to impose the reduction of CO_2 emissions in road [8],

---

[4] This is even more true after the Covid-19 crisis, which has indeed affected transport and connectivity by severely limiting them, but at the same time has raised the attention on the opportunities for a radical rethinking of the transport system: «While the Covid-19 crisis has profound implications for the global economy and transport network, it has also resulted in a high degree of creativity in responding to the crisis, as manifested through changes in business models across the industry, altered habits of transport users, as well as the more concerted effort by private companies to share data so as to help shape evidence-based government policies and decisions in response to the pandemic. Building upon this momentum can help to pave the way towards a more sustainable, integrated and reliable mobility system, while contributing to the Commission's decarbonisation and digitalisation agendas» (*Teodora Serafimova*, "Covid-19: An Opportunity to redesign Mobility towards greater Sustainability and Resilience?", Network Industries Quarterly, 2020, vol. 22, No. 2, 21).

[5] See the *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions* (*European Green Deal*), available at *https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0006.02/DOC_1&format=PDF*.

[6] The *Fit for 55 Package* is a set of proposals aiming at revising and updating EU legislation and at putting in place new initiatives to ensure that EU policies are in line with the climate goals agreed by the Council and the European Parliament". Its name refers to the EU's target of reducing net greenhouse gas emissions by at least 55% by 2030. The measures proposed aim at bringing EU legislation in line with the 2030 goal and at providing a coherent and balanced framework for reaching the EU's climate objectives, which: «ensures a just and socially fair transition; maintains and strengthens innovation and competitiveness of EU industry while ensuring a level playing field vis-à-vis third country economic operators; underpins the EU's position as leading the way in the global fight against climate change» (*https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/*).

[7] The strategic long-term vision for a prosperous, modern, competitive and climate neutral economy has been described by the European Commission in its *Communication* of 28 November 2018 "*A Clean Planet for All*" (*https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0773&from=EN*).

[8] See Directive (EU) 2022/362, amending Directives 1999/62/EC, 1999/37/EC and (EU) 2019/520, as regards the charging of vehicles for the use of certain infrastructures, also known as the *Eurovignette Directive*. It provides the legal framework for charging heavy goods vehicles (HGVs) for the use of certain roads, sets the minimum levels of vehicle taxes for HGVs and specifies the modalities of infrastructure charging, including the variation of charges according to the environmental performance of vehicles.

air[9] and sea[10] transport, and, on the other hand, to encourage forms of mobility considered more eco-friendly, such as railways[11].

But the focus on the problem is high worldwide.

Recently (on August 16, 2022) the *Inflation Reduction Act* has been issued in the US, which is considered the largest piece of United States federal legislation ever to address climate change. Aim of the bill is to curb inflation by reducing the deficit, lower prescription drug prices and invest into domestic energy production while promoting clean energy. To this end, it plans to invest $391 billion in provisions relating (not only to energy security, but also) to climate change[12].

Furthermore, the very recent Report intitled "*Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions*" released on 8 November 2022 at *COP27* by the *United Nations' Expert Working Group*[13] highlights the extremely critical situation and makes very clear that measures have to be urgently taken at different level and in different directions, stressing in particular the role played not only by governments – that have of course "to take the lead in reducing emissions" – but also by "non-state actors", whose actions are critical in achieving global net zero[14].

---

[9] The package of proposals presented by the European Commission on 14 July 2022 includes also a draft regulation to ensure a level playing field for sustainable air transport, also known as the *ReFuelEU Aviation initiative*, which «proposes obligations on fuel suppliers to distribute sustainable aviation fuels (SAF), with an increasing share of SAF (including synthetic aviation fuels, commonly known as e-fuels) over time, in order to increase the uptake of SAF by airlines and thereby reduce emissions from aviation» (*https://www.europarl.europa.eu/thinktank/it/document/EPRS_BRI(2022)698900*).

[10] About the maritime transport, in the *Fit for 55 Package* is included the Proposal for a Regulation of the European Parliament and of the Council on the use of renewable and low-carbon fuels in maritime transport amending Directive 2009/16/EC, aimed at increasing the demand of renewable and low-carbon fuels (RLF) in the maritime transport sector.

[11] According to the European Union, rail is, in fact, by far the greenest mode of mass transportation (it accounts for less than 0.5% of transport-related greenhouse gas emissions). The *Fit for 55 Package* foresees a set of measures aimed at incentivizing this form of clean mobility.

[12] The bill also provides funds toward the decarbonization of the economy in other areas, providing various tax credits and grants and loans toward decarbonizing the industrial and transportation sectors.

[13] *United Nations' High Level Expert Group on the net zero emissions commitments of non-State entities*, "Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions", 2022 available at *https://www.un.org/sites/un2.un.org/files/high-level_expert_group_n7b.pdf*.

[14] See *Giuseppina Capaldo*, "Linee evolutive in tema di soggetti per una società sostenibile", Persona e mercato, 2020, 335 et seq.

2. *Attracting private capital for the sustainable transport (r)evolution*

The transformation towards sustainable transport calls for an integrated approach. Not only technical innovation and increased digitization (the "indispensable engine" of the transformation of the transport system, in order to make it more efficient, safe, reliable and comfortable[15]) are needed; but also the creation of a favorable legal framework for sustainable transport enterprises.

The enormous amount of financial resources required for the achievement of a sustainable transport system[16] makes it essential, indeed, to engage the private sector, that will play a crucial role «to fill the infrastructure investment gap, particularly given current strains on public finances».

As acknowledged by the European Commission in the European Green Deal, reaching the sustainability objectives (also) in the transport sector means, in fact, to encourage "efforts to direct private capital towards interventions in favor of the climate and the environment".

Furthermore, the relevance of the non-state sector was stressed in the already mentioned UN-Report presented at COP27, that recognizes the crucial role played in achieving this goal not only by multinational enterprises, but also by smaller non-state actors. In fact, to be able to "peak global emissions in just three years, by 2025, and cut emissions in half in less than eight years, by 2030 […] money needs to move from funding fossil fuel infrastructure and instead be invested at scale in clean energy. The decisions made by governments and nonstate actors today, tomorrow, and each and every day after will determine whether we meet this goal, and whether we meet it in a way that enhances equity, justice, empowers women, and respects Indigenous rights»[17].

It is thus necessary to develop a regulatory framework that will make green and sustainable transport enterprises more attractive to investors, recognizable and trustworthy in their commitment towards more sustainable business practices.

This should also encompass, on the one side, innovation in the financial

---

[15] To this end, the revision of the *EU Directive 2010/40 /EU* on intelligent transport systems is planned: systems that integrate telecommunications, electronics and information technologies with transport engineering in order to plan, design, make operational, maintain and manage the transport systems (Whereas n. 4 of the *Directive*).

[16] «By 2050, global investment needs for land transport infrastructure will reach USD 3 trillion per year on average» (*OECD*, "Mobilising private investment in sustainable transport structure", available at *https://www.oecd.org/env/cc/financing-transport-brochure.pdf*).

[17] *UN High Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities*, "Integrity Matters", *supra* note 13, 7.

sector [18], especially through the development of new instruments specifically aimed at developing sustainable projects in the transport field, and, on the other side, creation of new legal structures that integrate financial returns and positive social and environmental impact [19].

One possible way for sustainable enterprise to channel private investments towards projects implying a virtuous change in the transport sector, is the issuance of green bonds [20] by private (financial or non-financial) companies, whose proceeds are dedicated to the implementation of eco-sustainable projects. Characterized by a very rapid development, these private capital raising tools are, indeed, described by the European legislator as "one of the main instruments for financing investments related to low-carbon technologies, energy and resource efficiency, as well as transport infrastructures".

Another possible way to finance sustainable entrepreneurial activities in the transport sector il also to invest in stocks issued by green and sustainable transport companies and in funds that hold their stocks [21]. The green stock market has indeed rapidly grown in the recent years, due also to the investors' sensitivity for environmental, social and governance issues related

---

[18] See *Giovanni Strampelli*, "Gli investitori istituzionali salveranno il mondo? Note a margine dell'ultima lettera annuale di *Blackrock*", in Rivista delle società, 2021, 54 et seqq.

[19] Mobilizing private capital financing requires in particular the development of effective tools for private sector engagement, considered that debt and equity are the most common investment instruments that can «seek or facilitate private sector investments in adaptation projects». See *Climate Action Network Europe (CAN)*, "Climate change adaptation and the role of private sector. Creating effective tools for private sector engagement", April 2013, 10, available at *https://climatenetwork.org/*.

[20] Green, blue, sustainable, climate aligned bonds are all forms of bonds characterized by the allocation of the capital raised to eco-sustainable project. See *Monica Cossu*, "Delle scelte di investimento dei Post-Millennials, e del difficile rapporto tra analfabetismo finanziario e finanza sostenibile", Rivista delle società, 2021, 1253 et seq.; *Gabriella Iermano*, "I *green bond* tra incertezze definitorie e nuove prospettive *de iure condendo* alla luce della recente proposta di Regolamento europeo", in *Maria Cristina Quirici* (ed), "La finanza sostenibile nella politica economica dell'Unione Europea: i *green bond*", Giappichelli, 2022, 112.

With specific reference to green bonds associated with sustainable transport projects, see in this volum *Maria Cristina Quirici*, "Green bond as instrument of impact investing for financing sustainable transports"; *Arunma Oteh/Nancy Vandycke/Mafalda Duarte*, "Transition towards sustainability mobility – Where is the financing?, 26 April 2021, available at *https://blogs.worldbank.org/transport/transition-towards-sustainable-mobility-where-financing*.

[21] In the US market «California's move to phase out new gasoline cars by 2035 and the Inflation Reduction Act's support for renewable energy seems to be creating new momentum for environmental investing». This is, for instance, the case of the stocks issued by one of the leading electric vehicle maker globally, which promises less emissions in the auto sector (*Matt Whittaker*, "9 Best Green Stocks and EFTs to Buy", in US News, August 31, 2022, available at *https://money.usnews.com/investing/stock-market-news/slideshows/best-green-stocks-to-buy?slide=2*).

to their investments and, in some cases, to the incentives given by recent legislative acts, which may help buy green stocks and funds [22].

The development of the market of sustainable debt or equity instruments issued by private companies exposes, however, a major question: are their issuers trustworthy enough in their commitment towards sustainability? Or is there a possible conflict between the institutional goals of private companies, which are (mainly) by legal definition profit-oriented business legal structures, and the sustainability goals?

Pursuing sustainability and implementing higher environmental, social and governance standards usually requires big investments for the company and leads to higher costs, thus to lower profits: are managers entitled to take sustainable decisions that can lead to reduce the company's financial result for the company? Can the company legally commit to pursue the common good (like the reduction of CO_2 emissions)? Or, considered that the managers must achieve the company's interest, do they have to pursue exclusively or at least as a priority the shareholders' interest to maximizing their shares' value [23]?

In other words, is there a conflict between corporate law and sustainability? Is a change in corporate law to achieve the targets of a sustainable transport necessary, or at least helpful?

3. *Innovative legal business models for sustainable transport enterprises: social enterprise and benefit corporation*

The interplay between corporate law and sustainability is certainly a more general issue, which does not specifically concern the transport field but refers to all the business sectors and involves critical questions and reflection, such as the company's purpose and interest and, correlatively, the directors' powers and duties [24].

---

[22] Indeed, «investment barriers [...] often limit private investment in sustainable transport infrastructure projects, due to the relatively less attractive risk-return profile of such projects compared to fossil fuelbased alternatives», and «governments have a key role to play in influencing private sector investment, by improving the enabling conditions for investment in sustainable transport infrastructure and delivering investment grade policies» (*Géraldine Ang/Virginie Marchal*, "Mobilising Private Investment in Sustainable Transport. The case of land-based passanger transport infrastructure, OECD Environment Working Papers, No. 56, 2013, OECD Publishing, available at *http://doi.org/10.1787/5k46hjm8jpmv-en*.

[23] See, inter alia, *Marco Cian*, "Dottrina sociale della Chiesa, sviluppo e finanza sostenibili: contributi recenti", Rivista delle società, 2021, 54 et seq.

[24] See *Holger Fleischer*, "Klimaschutz im Gesellschafts-, Bilanz- und Kapitalmarktrecht", Der Betrieb, 2022, 37 et seq.

On a global level the most widespread business model in the private business sector (also for transport enterprises) is the (public or private) limited liability company, which is the subject nowadays of profound rethinking, prone to accusation of being excessively profit-oriented and of leaving no room for balancing with environmental and social issues[25].

The process of reviewing the cornerstones of corporate law has led worldwide to responses of a different nature, which range from intensifying legislative corrective measures aimed at mitigating the profit aim to leave room for external interests (such as socio-environmental protection), to the creation of new legal business models and/or forms of companies.

An emblematic expression of the first approach is the rewording of the very notion of company in the French civil code, modified by the so called *Loi PACTE*, contained in art. 1833, according to which «*Toute société doit avoir un objet licite et être constituée dans l'intérêt commun des associés. La société est gérée dans son intérêt social et en prenant en considération les enjeux sociaux et environnementaux de son activité*»[26]. In comparison with the company's definition given, for example, in the art. 2247 of the Italian civil code, the innovative scope of the law clearly emerges, tempering the profit aim with the need to take into account all the «*enjeux sociaux et environmentaux de son activité*», whereas the Italian legislation (as well as the previous French law) still defines companies and partnerships as generally and exclusively aimed at the distribution of profits among the shareholders, without any reference to further, external interests, such as environmental protection.

About the second approach, instead, in various legislative systems new forms of enterprises and in particular of companies have been introduced,

---

[25] *William H. Clark Jr./ Elizyabeth K. Babson,* "How Benefit Corporations Are Redefining the Purpose of Business Corporations", in William Mitchell Law Review, 2012, vol. 38, Issue 2, 817 et seq.

[26] The wording of the rules recalls § 172 of the UK Companies Act 2006 ("Duty to promote the success of the company"), according to which: (1) A director of a company must act in the way he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole, and in doing so have regard (amongst other matters) to: (a) the likely consequences of any decision in the long term; (b) the interests of the company's employees; (c) the need to foster the company's business relationships with suppliers, customers and others; (d) the impact of the company's operations on the community and the environment; (e) the desirability of the company maintaining a reputation for high standards of business conduct, and (f) the need to act fairly as between members of the company.

The article is in line with section Section 166 Indian Companies Act 2013, according to which: «A director of a company shall act in good faith in order to promote the objects of the company for the benefit of its members as a whole, and in the best interests of the company, its employees, the shareholders, the community and for the protection of environment».

characterized by an institutional compression of the profit aim and the (voluntary) compliance with higher socio-environmental responsibility standards.

In this regard, the two entrepreneurial forms that best express this trend are, on the one hand, the social enterprises and, on the other hand, the benefit corporations [27].

Although coming from a different starting point [28], social enterprises and benefit corporations can be seen in fact as the two sides of the same coin; the two extremes of the same phenomenon of modification of the company's purpose; the *trait d'union* between two areas traditionally considered as antithetic: that of entrepreneurial organizations with altruistic purposes, the former, and that of (for-profit) companies, the latter.

In fact, as result of the reforms that have been taken place in the last years [29,] social enterprises – while still keeping their altruistic purpose – can in some legislative system, like the Italian one, adopt the form of share companies [30] and make profits. These cannot, however, be distributed to the shareholders [31] (or only to a limited degree) [32].

Benefit corporations, on the other hand, can qualify as the corporate

[27] For a comparative approach, see *Giovanni Castellani/Dario De Rossi/Lorenzo Magrassi/Andrea Rampa*, "Le società benefit (Parte II). In *requiem* alle imprese sociali", Fondazione Nazionale dei Commercialisti, 31 July 2016.

[28] See *Andrea Zoppini*, "Un raffronto tra società benefit ed enti non profit: implicazioni sistematiche e profili critici", Orizzonti del diritto commerciale, 2017, 1 et seq.

[29] See, in Italy, the D.Lgs. 2 July 2017, No. 112. On the relationship between benefit corporation and social enterprise, with reference to the Italian legislative framework, see *Paolo Guida*, "La «società benefit» quale nuovo modello societario", in Rivista del Notariato, 2018, 501 et seq.

[30] According to the Italian legislation on social enterprises, as well as to the proposal on European Statute for social and solidarity based enterprises (see European Parliament's recent resolution of 5 July 2018 – Recommendations to the Commission on a Statute for social and solidarity-based enterprises, available at *https://www.europarl.europa.eu/doceo/document/TA-8-2018-0317_EN.html*) can take a variety of legal forms and status, such as associations, foundations, cooperatives and even share companies.

[31] «Social enterprises include organisations that totally prohibit the distribution of profits and organisations such as co-operatives, which may distribute their profit only to a limited degree» and they «therefore avoid profit maximising behaviour, as they involve a limited distribution of profit» (*OECD*, "The social enterprise sector: a conceptual framework", *https://www.oecd.org/cfe/leed/37753595.pdf*). Because of the profit-distribution constraint, they often struggle to acquire external funding.

[32] Social enterprises are present, with different characteristics, in various legal systems. As previously mentioned (*supra*, note 30), a unitary statute at European level has been recently proposed by the Statute for social and solidarity-based enterprises (draft 2018).

model closest to that of non-profit organizations[33]. In fact, they are institutionally oriented to the balance between the classic profit purpose and the pursuit of an external interest, in addition to the statutory commitment of compliance with the ESG standards.

In both cases, the combination between profit-aim and altruistic purpose (with different intensity, of course) makes these new organizational forms of business particularly functional to the pursuit of sustainable growth objectives.

4. *Benefit corporations and sustainable transport: the perfect match?*

Focusing the attention, in this study, in particular on the benefit corporation's model, this seems, thus, at a first glance, to be the perfect match between shareholders' interest and stakeholders' governance[34], representing a new form of enterprise that bridges the for-profit and the not-for-profit model.

---

[33] Literature on the Italian *società benefit* is becoming the more and more copious. See among others: *Alessandra Daccò*, "La società Benefit tra interesse dei soci e interesse dei terzi: il ruolo degli amministratori e i profili di responsabilità in Italia e negli Stati Uniti", Banca borsa titoli di credito, 2021, 40 et seq.; *Michele Squeglia*, "Le società benefit e il *welfare* aziendale. Verso una nuova dimensione della responsabilità sociale delle imprese", Diritto delle relazioni industriali, 2020, 61 et seq.; *Daniela Caterino*, "Denominazione e *labeling* della società benefit, tra marketing "reputazionale" e alterazione delle dinamiche concorrenziali", Giurisprudenza commerciale, 2020, 787 et seq.; *Stefano Prataviera*, "Società benefit e responsabilità degli amministratori", Rivista delle società., 2018, 919 et seq.; *Paolo Guida*, "La «Società benefit» quale nuovo modello societario", Rivista del notariato, 2018, 501 et seq.; *Carlo Angelici*, "Società Benefit", in De Donno/Ventura (ed.), Dalla *benefit corporation* alla società benefit, Bari, 2018, 19 et seq.; *Serenella Rossi*, "L'impegno multistakeholder della società benefit", Orizzonti del diritto commerciale, 2017, 1 et seq.; *Marco Palmieri*, "L'interesse sociale: dallo shareholder value alle società benefit", Banca Impresa Società, 2017, 201 et seq.; *Giorgio Marasà*, "Scopo di lucro e scopo di beneficio comune nelle società benefit", Orizzonti del diritto commerciale, 2017, 1 et seq.; *Mario Stella Richter Jr.*, "Società benefit e società non benefit", Orizzonti del diritto commerciale, 2017, 1 et seq.; *Silvia Corso*, "Le società benefit nell'ordinamento italiano: una nuova "qualifica" tra *profit* e *non-profit*", Nuove leggi civili commentate, 2016, 995 et seq.; *Alberto Lupoi*, "L'attività delle "società benefit" (l. 28 dicembre 2015, n. 208)", in Rivista del Notariato, 2016, 816 et seq.

[34] *William H. Clark/Larry Vranka*, "The Need and Rationale for the Benefit Corporation: Why It Is the Legal Form that Best Addresses the Needs of Social Entrepreneurs, Investors, and, Ultimately, the Public", 2013, available at *http://benefitcorp.net/storage/documents/Benecit_Corporation_White_Paper_1_18_2013.pdf*; *Mara Del Baldo*, "Acting as a benefit corporation and a B Corp to responsibly pursue private and public benefits. The case of Paradisi Srl (Italy)", in International Journal of Corporate Responsibility, 2019, vol. 4.

The intention of this survey is, therefore, to verify whether the benefit corporation's legal structure [35] can offer the transport sector a good alternative legal tool for achieving the sustainability targets [36], highlighting possible critical aspects, which may compromise its real effectiveness in the perspective of the ecological transition [37].

Introduced for the first time in 2010 in Maryland and rapidly spread subsequently in the majority of the other US legislations, the benefit corporation is experiencing a (moderate) success also outside the US, both in Europe and in other continents. Nonetheless, it remains a model still extraneous to most national legislations, inside and outside the European context. In particular, the model has been foreseen in Italy (the first European country), Canada [38], Colombia [39], British Columbia [40], Ecuador [41], Peru [42]; Argentina [43], Rwanda [44],

---

[35] The study will refer mainly on the Italian legislation on the *"Società benefit"* (law No. 208 issued on 28 December 2015).

[36] About the interplay between social enterprises and development of a a sustainable transport sector, see in this *Volume Giulia Boletto*, "Suitable legal structures for sustainable transport. The social enterprise", 115.

[37] *Michael B. Dorff/James Hicks/Steven Davidoff Solomon*, "The Future or Fancy? An Empirical Study of Public Benefit Corporations", Harvard Business Law Review, 2021, 113.

[38] *Carol Liao*, "A critical Canadian perspective on the benefit corporation", Seattle University Law Review, 2017, 683.

[39] See the Colombian *Ley 1901 del 18 de junio de 2018*, that has introduced the *Sociedades Comerciales de Beneficio e Interés Colectivo (BIC)*. On the spread of this company's form in Colombia, see *INCP*, "*SuperSociedades: Ya hay 19 empresas BIC en Colombia*", available at *https://incp.org.co/supersociedades-ya-19-empresas-bic-colombia/*.

[40] See the B.C. Business Corporations Act in force since 20 June 2020, introducing the Benefit company.

[41] *Ley de Emprendimiento e Innovación,* passed on 7 January 2020, introducing the *Sociedades BIC (Beneficio e Interés Colectivo)* in Ecuador.

[42] On the Peruvian *Ley de la Sociedad de beneficio e interés colectivo (Sociedad BIC*) No 31072 passed on November 2020, see Edgar Romario Aranibar Ramos/Fabiola Choque Zambrano/Antony Jonny Patiño Huayhua, "Las sociedades de beneficio e interés colectivo en el Perú: un análisis de legislación comparada en Iberoamérica y Norteamérica", Illustro. Revista de investigation en ciencas económicas, contables y empresariales, 2021, vol. 12, 120 et seqq.

[43] See the Argentinian *Empresas de beneficio e interés colectivo (BIC)*, introduced on 31 May 2022 by the Law No. 303 and defined as "*aquellas sociedades mercantiles que tienen como principal objetivo la generación de un impacto positivo en la sociedad y en el ambiente mientras derivan sus ingresos de actividades comerciales*". First information is available at *https://www.fundacionmicrofinanzasbbva.org/revistaprogreso/empresas-de-beneficio-e-interes-colectivo/.*

[44] See the Rwandan Company law of 2021, which established a Community Benefit Company (CBC). Under the Company Law, the CBC is described "as that company with primary social objectives whose surpluses are re-invested, for that purpose, in the busi-

(and maybe in France[45], where there is not, however, an *ad hoc* legislation). In many other countries the debate on a possible introduction in the legal system is open[46], while in others fully formalized bills are already pending. However, even within the United States, the contents of the concerned legislations are not always homogeneous, but there are substantially two reference models: the PBCL (Public Benefit Corporation Law, adopted in the state of Maryland) and the Model Legislation (adopted in particular in Delaware and California)[47]. The benefit corporations are, thus, regulated on a national basis and this has as a consequence a considerable lack of homogeneity at international level in the law applicable and also in the main characteristics of the model.

In any case, despite the existence of differences at the definitional, regulatory and nomenclature levels, among the various forms of benefit companies regulated worldwide, some elements common to all them (a sort of lowest common denominator) are however identifiable. These can be seen, in particular, in the presence – alongside the profit (or mutualistic, but in any case egoistic) purpose, typical of the corporate form adopted – of "one or more aims of common benefit"[48], and the commitment to "operate in a responsible, sustainable and transparent manner vis-à-vis individuals, communities, territories and the environment, cultural and social heritage, entities and associations as well as other stakeholders"[49]. These aims are indicated in the corporation's statute and are pursued through a management system aimed at balancing the interests of the shareholders with the interests of those on whom the activity may have an impact. The company

---

ness or in the community rather than being driven by the need to maximize profit for its shareholders or owners".

[45] The new art. 1835 c.c. of the French Civil Code, modified by the *Loi Pacte*, foresees the "*sociétés à mission*". These companies should specify in the statute their *raison d'être* (Art. 1835 c.c. «*Les statuts peuvent préciser la raison d'être dont la société entend se doter dans la réalisation de son activité»). See Céline Tridon,* "Entreprises à mission: vers une moralisation de l'économie", 2018, available at *https://www.decision-achats.fr/Thematique/fournisseurs-1235/Breves/Entreprises-mission-vers-moralisation-economie-332491.htm*.

[46] See the Brasilian Decreto n° 9.244, 19 December 2017 on the introduction of the "negócios de impacto", withdrawn by the Decreto nº 9.977, de 2019. About the state of the debate in Portugal, see the accurate survey of *Carlos Olivera*, "The Delaware Public Benefit Corporation Model – Analysis and Comparison", Portuguese Law Review, 2020, 1 et seqq.

[47] On the differences among the US benefit corporations' legislations, see *J. Haskell Murray*, "Social Enterprise Innovation: Delaware's Public Benefit Corporation Law", in Harvard Business Law Review, 2014, 345 et seq. (expecially 371).

[48] The spefic public benefit purpose is mandatory according to the Italian legislation and the PBC, but on the contrary is optional in the MBCL system.

[49] Art. 1, *al.* 376, Law 28 December 2015, No. 208, on the Italian "*società benefit*".

also has specific reporting obligations of a non-financial nature relating to the socio-environmental impact of its activities, which – with reference to Italian legislation [50] – is held annually, as well as the obligation to adapt to external reference standards (third-party standard) [51]. On the other hand, not always a certification by an external body is required [52].

For the sake of clarity, it has to be specified that the benefit corporation qualification differs from the BCorp certification, that, on the contrary, has homogeneous characteristics worldwide. The BCorp certification is granted by a private no-profit organization (BLab) [53] based in Pennsylvania, which has offices all over the world and can be considered the forerunner of the introduction of the legislation on benefit corporations, not only for historical reasons (the BLab lobby has exerted pressure to obtain the approval of the legislation on the benefit corporation), but also for substantial reasons [54].

BCorp's requirements for the certification, in fact, follow the pattern of the benefit corporations' standards (compliance with sustainability standards; pursuit of a benefit purpose alongside the purely profit one; reporting obligation of a non-financial nature).

---

[50] According to art. 1, *al.* 382, Law 28 December 2015, No. 208 on the Italian "*società benefit*", «the benefit corporation shall produce an annual report concerning the pursuing of common benefit; such report shall be attached to the annual financial statements and shall include:

a) the description of the specific objectives, modalities and actions implemented by the directors in order to pursue the aims of common benefit and the possible mitigating circumstances which have prevented, or slowed up, the achievement of the above aims;

b) the evaluation of the generated impact, using a third party evaluation having the requirements listed under Annex A and which includes the evaluation areas identified under Annex B;

c) a specific section containing the description of the new objectives which the benefit corporation intends to pursue in the following fiscal year».

The annual report shall be published on the benefit corporation's website, if existing.

[51] The compliance to third party standard is, instead, optional according to the PBCL.

[52] This certification is not foreseen in the Italian legislation on the "*società benefit*", but is foreseen (on a voluntary basis) in the US PBCL and MBCL legislations.

[53] BLab is a nonprofit networking "transforming the global economy to benefit all people, communities at the planet" (See *Alberto Lupoi*, "L'attività", *supra* note 27, 816 et seq.).

[54] There are several examples worldwide of Certified BCorps active in the transport sector, especially having their seat in countries where the legal form of the benefit corporation is not foreseen. One of them is, Baobab Express SA, with seat in Parakou, Benin, that, according to its website, aims at having a special focus on isolated and unserved communities and at providing «safe and reliable transportation services in an ecosystem where mobility is a matter of luck», showing in this way «that there is another way to do business, by being inclusive and sustainable in everything they do» *(www. baobabexpress.org)*.

There remains, however, a substantial difference between BCorp certified companies and benefit corporations: while for the former, in fact, the voluntary submission to the additional obligations does not affect the legal structure of the company, on the contrary the benefit corporations incorporate in their articles of association the obligation to pursue the chosen benefit purpose, as well as (not the mere maximization of shareholders' profit, but) the balance between the traditional for-profit purpose and a benefit aim, thus making the clause enforceable *erga omnes*.

Without going further into the differences with the BCorps, nor focusing on the peculiarities of the single national legislations on benefit corporations, it is, however, clear that this new legal form, strengthening its commitment to the adoption of sustainability standards; pursuing (often) a beneficial purpose (which in most cases coincides with the fight against climate change and the reduction of pollution thresholds); including in the company's interest, alongside that of the shareholders, the further interests of external stakeholders, appears – on paper – the most adequate entrepreneurial form for ensuring the pursuit of sustainable growth objectives also in the transport sector and, therefore, to convey private capital towards forms of sustainable investment [55].

In fact, even if these targets are in principle not precluded to other (non-benefit) companies, alongside the obligation to respect the ESG factors, in the benefit corporations they become part of the company's by-laws [56]. They modify the extension of powers and duties of directors; legitimize a compression of the shareholders' remuneration, in the name of the pursuit of the general interest adopted; also impose to future shareholders to maintain the altruistic purpose, regardless of the personal inclina-

---

[55] Economic studies are starting to confirm the correlation between corporate social responsibility and financial performance. *Matteo Ferioli/Patrizia Gazzola/Daniele Grechi/Elena-MădălinaVătămănescu*, "Sustainable behaviour of B Corps fashion companies during Covid-19: A quantitative economic analysis", Journal of Cleaner Production, 10 November 2022, 134010 highlight «the positive relationship between sustainability certification and higher financial performance», observing that «the most sustainable companies» analyzed in their paper «were also the most profitable»; *Teodora Serafimova*, Covid-19: An Opportunity to redesign Mobility towards greater Sustainability and Resilience?, Network Industries Quarterly, 2020, vol. 22, 2020, 17 et seqq.

[56] On the role the benefit corporation could play within the corporate law system, see *Alberto Gallarati*, "Incentivi e controllo del mercato nella società benefit. Un'analisi economica e comparata", Contratto e impresa, 2018, 806 et seq.; *Aldo Frignagni/Paolo Virano*, "Le società benefit davvero cambieranno l'economia?", Contratto e impresa, 2017, 503 et seq.; *Giovanni Castellani/Dario De Rossi/Andrea Rampa*, "Le società benefit. La nuova prospettiva di una *Corporate Social Responsability* con *Commitment*", 2016, available at *https://www.fondazionenazionalecommercialisti.it/filemanager/active/01030/2016_05_15_Documento_Benefit_Corporation_Castellani_De_Rossi_Rampa.pdf?fid=1030.*

tions of managers or majority shareholders, at least until the benefit clause is removed from the statute[57].

To better understand this point, it is necessary to focus attention on the legal reasons that led to the introduction of the benefit company model in the US, that was explained by its supporters with the need to offer certain legal basis to overcome the shareholder primacy. In the wake of the emblematic – and dating back – jurisprudential case that had seen the American Supreme Court condemn the majority shareholder Ford to pay damages to the minority shareholders Dodge brothers[58] for having allocated part of the company's assets to activities not functional to maximizing the shareholders' profits, but to external interests (of the workers, in this case), the supporters of the American legislation on the benefit corporation stressed the need to expand the range of action of the directors of profit-oriented companies in such a way as to include in the benefit corporations' interest also the pursuit of purposes not related to the remuneration of the shareholders' capital, but of external origin and of an altruistic nature (such as socio-environmental sustainability and governance objectives).

If the legislative change was necessary or if, instead, the business judgment rule already made it possible to consider the directors stakeholders interests in their decision-making, while interpreting the company's best interest, is still a debated issue[59]. And this in the United States[60], in Cana-

---

[57] *William H. Clark Jr./ Elizabeth K. Babson*, "How Benefit Corporations Are Redefining the Purpose of Business Corporations", in William Mitchell Law Review, 2012, vol. 38, Issue 2, 817 et seq.

[58] «A business corporation is organized and carried on primarily for the profit of the stockholders. The powers of the directors are to be employed for that end. The discretion of directors is to be exercised in the choice of means to attain that end, and does not extend to a change in the end itself, to the reduction of profits, or to the nondistribution of profits among stockholders in order to devote them to other purposes» (Michigan Supreme Court, *Dodge v. Ford Motor Co.*, 170 N.W. 668, 684 –1919, available at *http://www.law.illinois.edu/aviram/Dodge.pdf*; *Jonathan Macey*, "A close read of an excellent commentary on Dodge v. Ford", 2008, Faculty Scholarship Series. Paper 1384, Yale Law School).

[59] For an extremely critical approach, see *Amy Klemm Verbos/Stephanie L.Black,* "Benefit Corporation as a Distraction: An Overview and Critique", Business & Professional Ethics Journal, 2017, 229 et seqq., according to whom benefit corporations «(1) are unnecessary under the law; (2) benefit corporation legislation does not enhance corporate law; (3) benefit corporation laws create unnecessary new legal risks for both traditional and benefit corporations, and their respective directors; and (4) third party certification in entity formation law is inappropriate»..

[60] See the interesting position of *Lynn A. Stout*, "Why should we stop teaching *Dodge v. Ford*", UCLA School of Law Law & Econ Research Paper Series, Research Paper No. 07-11, 2007 (revised 2008): «*Dodge v. Ford* is indeed bad law, at least when cited for the proposition that the corporate purpose is, or should be, maximizing shareholder wealth.

da[61] and above all in European countries, where the definition of the notion of social interest hardly coincides exclusively with that of the interest in maximization of shareholders' profit.

What is certain, however, is that in the benefit corporation, the inclusion of the benefit aim in the statute and the adoption of the specific commitment to comply with higher sustainability standards allow to affirm that the directors can legitimately go "a little further" in the compression of shareholders' profits, compared to what they can do in "traditional" companies in the name of respect for the environment or other altruistic purposes[62]. And this also when the managers' behavior does not strictly serve to strengthening the company's position in the market, even only in the long run.

It becomes thus interesting to investigate whether the benefit corporation really is the ideal corporate model for the pursuit of the described objectives of ecological transition and implementation of a sustainable transport system, or whether this conclusion collides with practical obstacles of a different nature, which lead to limit its effectivness and to compress its potential. The relevance of the question is not only theoretical, considered that, on a practical level, some transport enterprises worldwide have already adopted this legal form (or at least have received the BCorp certification)[63] .

Dodge v. Ford is a mistake, a judicial "sport," a doctrinal oddity largely irrelevant to corporate law and corporate practice. What's more, courts and legislatures alike treat it as irrelevant. In the past 30 years the Delaware courts have cited Dodge v. Ford as authority in only one unpublished case - and then not on the subject of corporate purpose, but on another legal question entirely».

[61] This possibility was considered, for instance, already available according to the Canadian law, «specifically under the requirement that directors manage the corporation in the "best interest if the corporation» (*Carol Liao*, "A critical Canadian Perspective", *supra* note 35).

[62] See *Carlo Angelici*, "Società benefit", in Orizzonti del diritto commerciale, 2017, 4 et seq.; *Francesco Denozza/Alessandra Stabilini*, "La società benefit nell'era dell'*investor capitalism*", in Orizzonti del diritto commerciale, 2017, 1 et seq.

[63] As practical examples of benefit corporations active in the transport sector, see the Italian *MUV Società Benefit*, that aims to «turn sustainable urban mobility into a global movement and to strive towards ever more ambitious challenges» (*https://www.muvgame.com*); *Maganetti Spedizioni S.p.A.* (*http://www.maganetti.com/*); *Outset S.r.l.* (*https://outset.it/it/*).

Abroad, see *Metropolian Transportation Authority*, a public benefit corporation incorporated in the NY (*https://new.mta.info/document/50971*); *Mobility 4 all*, Minnesota Public Benefit corporation.

5. *Critical issues: legal uncertainty, lack of homogeneity and risk of greenwashing*

At a closer observation, some critical issues that could hinder the potential of the benefit corporation legal structure to this extent can be indeed identified.

They mainly concern the legal uncertainty, the lack of homogeneity at a transnational level and, last but not least, the risk of greenwashing.

Under the first aspect, a relevant obstacle capable of slowing the spread of the benefit corporation worldwide and, therefore, its application also in the transport sector, derives from the uncertain legislative solutions applicable to some relevant issues.

In particular, combining a "beneficial" purpose with the profit aim does not create particular problems from a theoretical point of view, but on a practical level it makes necessary to concretely establish terms and methods of this balance, especially when the two interests in question lead to opposite managerial decisions. As the legislations on benefit corporations don't specify which interest should prevail between the profit maximization and the benefit aim (protection of the environment, etc.) [64], the choice between them is left to the directors, who are consequently liable for damages caused by their decisions [65].

In the same way, other questions of not negligible practical importance remain without clear legislative response. One of these is, for example, with reference to the Italian legislation, the controversial right of withdrawal for the dissenting shareholders from the resolution amending the articles of association with which the company adopts the form of benefit corporation [66]. This should not pose particular problems if the future benefit corporation has the legal form of a partnerships (in this case, in fact, according to the general rules the resolution requires the unanimous consent of the members, ex article 2258 of the Italian civil code). On the contrary, if it is incorporated in a (public or private)

---

[64] It is, indeed, "difficult to address questions such as what weight the directors should assign to shareholder and non-shareholder interests, and what standards a court should use in reviewing directors' decisions to consider (or not to consider) non-shareholder interests" (referring, however, to the US constituency statutes). *William H. Clark Jr./ Elizabeth K. Babson*, "How Benefit Corporations", *supra* note 21, 831.

[65] On the managers' liability in case of negligent pursuit of the benefic aim, see, referred to the Italian "Società benefit", *Diletta Lenzi*, "Le società benefit", Giurisprudenza commerciale, 2019, I, 894 et seq.

[66] See, among others, *Domenico Siclari*, "Trasformazione" in società benefit e diritto di recesso", *Rivista trimestrale di diritto dell'economia*, 2019, 80 et seqq.

limited liability company it is less easy to identify the applicable rule [67].

A further obstacle to the effectiveness of benefit corporations comes from the lack of a homogeneous regulatory framework at transnational level. The existence of this corporate model only in some legal systems and, in any case, the lack of homogeneity among the single national legislations issued in the different countries severely limits its use in companies operating on international markets.

But undoubtedly the greatest impediment to the functionality of benefit corporations is represented by the risk of greenwashing [68]: i.e., the risk of a socio-environmental commitment that is simply a facade, serving as a mere marketing function but not corresponding to any real action [69]. To this regard, the existing national legislations clearly show the difficulty of national legislators to provide adequate tools for identifying, preventing and sanctioning greenwashing phenomena. If the traditional private law remedies (damage compensation) show their inadequacy (e.g. about the difficult identification of the subjects entitled to take action, on the one hand, and about proof and quantification of pecuniary damages, on the other hand), sanctions of a different nature are rarely envisaged. The same sanction foreseen by the Italian law [70] – based on the application of the

---

[67] In fact, art. 2437, paragraph 1., of the Italian Civil Code, referred to the S.p.A., recognizes the right of withdrawal in case of "change in the clause of the company's object, when it allows for a significant change in the company". Referring to the s.r.l., instead, art. 2473 of the Italian Civil Code provides for it in the event of a "change in the company's object purpose". Now, strictly speaking, becoming a benefit corporation for sure is not a transformation in another company's type, but does not affect the object (activity) of the company either. It rather affects the ways the company runs its activity or, more correctly, its purpose. There is no doubt, on the other hand, that the transition from a purely profit-oriented (traditional) company to a benefit corporation involves a change in the risk exposition of the shareholders and this could justify the right of withdrawal. See *Silvia Corso*, "Le società benefit", *supra* note 27, 995 et seq.

[68] Greenwashing is one of the biggest issues of the the *UN-High Level Group of Experts on the Net Zero Emissions Commitments of Non-State Entities*, "*Integrity Matters*", *supra* note 11.

In the vaste literature published worldwide on the topic see, one for all, *Frances Bowen/J. Alberto Aragon-Correa*, "Greenwashing in Corporate Environmentalism Research and Practice: The Importance of What We Say and Do", Sage Journal, 2014,

[69] To avoid greenwashing, disclosure plays a significant role: «To prevent dishonest climate accounting and other actions designed to circumvent the need for deep decarbonization […] nonstate actors must report publicly on their progress with verified information that can be compared with peers» (*United Nations' HighLevel Expert Group on the Net Zero Emissions Commitments of Non-State Entities*, "*Integrity Matters*", *supra* note 11, 7).

[70] The Italian "società benefit" that does not pursue the aims of common benefit, according to the law, «is subject to the provisions of Italian Legislative Decree 2 August 2007, No. 145, regarding misleading advertising and the provisions of the Italian Legislative

anti-trust legislation – is difficult to apply in practice and, in fact, there have been no applications so far.

Moreover, some doubts about the capacity of the benefit corporation's form to really impact on the social and environmental sustainability, also in the transport sector, could arise from the current legal structure's transformation of one of the first US benefit corporations, Patagonia, Inc.[71]. This company, while maintaining the legal form of benefit corporation, recently announced a radical change within its corporate structure[72], summarized by its CEO, Yvon Chouinard, as "going purpose instead of going public"[73]. To this end, it has established that the action carried out by the

---

Decree, 6 September 2005, No. 206 (the Italian Consumer Code)» (art. 1, *al.* 384, of the Law No. 208/2015).

Furthermore, the breach of the obligations [*to pursue also aims of common benefit*] may be deemed as a breach of the duties imposed by the applicable laws and the by-laws upon the directors of the company». In this case, «the relevant provisions of the Civil Code regarding directors' liability shall apply» (art. 1, *al.* 381, of the Law No. 208/2015).

[71] On the history of this company and its commitment to a sustainable growth, see *Mary-Clare Bosco*, "From Yosemite to a Global Market: How Patagonia, Inc. has Created an Environmentally Sustainable and Socially Equitable Model of Supply-Chain Management" , 2017, Pomona Senior Theses. 178, available at *http://scholarship.claremont.edu/pomona_theses/178*; *J. Haskell Murray*, "Defending Patagonia: Mergers and Acquisitions with Benefit Corporations", Hastings Business Journal, 2013, vol. 9, 485 et seqq.

[72] Patagonia's adoption of the new corporate structure is generating a lot of attention in the economic press (see e.g. *Matthew Erskine*, "How will the Patagonia perpetual purpose trust terms be enforced?, Forbes, 5 October 2022, available at *https://www.forbes.com/sites/matthewerskine/2022/10/05/how-will-the-patagonia-perpetual-purpose-trust-terms-be-enforced/?sh=22ceae4a2508*), not only in the US (see *Ruth Fend*, "Patagonia ist jetzt Pionier einer neuen Form des Kapitalismus", Zeitonline, 23 September 2022, available at *https://www.zeit.de/green/2022-09/patagonia-verantwortungseigentum-kapitalismus-armin-steuernagel#:~:text=Patagonia%20und%20Verantwortungseigentum%20%22Patagonia%20ist,Modell%20erkl%C3%A4rt%2C%20wie%20es%20geht*). And some critics: see *David Weitzner*, "Patagonia's grand gesture sends the wrong message about ethical capitalism", The Conversation, 11 October 2022, available at *https://theconversation.com/patagonias-grand-gesture-sends-the-wrong-message-about-ethical-capitalism-191660*.

[73] Taking the company public and then prioritizing environmental protection and worker well-being was excluded by the founder of the company due to his mistrust in the stock market, because *"Once you're public, you've lost control over the company, and you have to maximize profits for the shareholder, and then you become one of these irresponsible companies"* (Yvon Chouinard, quoted from *David Gelles*, "Billionaire No More: Patagonia Founder Gives Away the Company", New York Times, 14 September 2022, available at *https://www.nytimes.com/2022/09/14/climate/patagonia-climate-philanthropy-chouinard.html*). See also *Francesco Denozza*, "Lo scopo della società: dall'organizzazione al mercato", Orizzonti del diritto commerciale, 2019, 621; *Carlo Angelici*, "Potere" e "Interessi" nella grande impresa azionaria: a proposito di un recente libro di Umberto Tombari", Rivista delle società, 2020, 4 et seqq.

company in order to preserve the environment was not decisive in solving the climate problem which, due to its urgency and dimension, requires an even more massive commitment. Consequently, it has sought a solution that would allow them to strengthen their commitment even more: solution that was concretely and briefly described by its founder and CEO as being "in business to save the planet" (purpose no longer achievable " simply "by donating 1% of sales each year for environmental protection purposes)[74]. Not considering a valid legislative option available, he decided therefore to proceed autonomously ("to tell the truth, there was no valid option. So we created ours"), donating 2% of the company's shares (equal to 100% of the shares with voting rights) to a trust specifically created for the purpose of "safeguarding and protecting the values of the company" and making sure that the profits are actually used for the environmental cause. 98% of the non-voting shares (common shares), on the other hand, was donated to a no-profit association, also specifically created. The final result of this operation was that the company will therefore distribute the profits not reinvested in it to the two new shareholders, who will use them, however, to protect the environment[75].

From a formal point of view the company is still formally profit-oriented and has the form of benefit corporation. But from a substantial perspective the shareholders' profit aim is lost, being the whole dividends assigned to a no-profit legal structure. The overall plan implemented places in the end the new business structure created outside the profit-oriented entities: at least as long as the ownership of the shares remains with the association.

The case of this company (whose details have been only partially disclosed) does not in itself testify to the failure of the benefit corporation's model, nor its inadequacy, in absolute terms, as mission-driven legal form, but shows rather a dissatisfaction of its founders about the fulfillment of the

[74] See *Andrew Perez/Andy Kroll/Justin Elliott*, "Barre Seid's «Attack Philanthropy»", 6 September 2022, available at *https://www.levernews.com/barre-seids-attack-philanthropy/*; *Giulia Sciola*, "Il nostro unico azionista ora è il Pianeta. Patagonia passa a un fondo e a una no-profit", 15 settembre 2022, available at *https://www.pambianconews.com/2022/09/15/il-nostro-unico-azionista-ora-e-il-pianeta-patagonia-passa-a-un-fondo-e-a-una-no-profit-353809/*; *Kenneth P. Vogel – Shane Goldmacher*, "An Unusual $ 1.6 Billion Donation Bolsters Conservatives", New York Times, 22 August 2022, available at *https://www.nytimes.com/2022/08/22/us/politics/republican-dark-money.html*.

[75] The structural change aims at preserving the company's independence and ensuring that all the profits (ca. 200 million per year) will be destinated to fighting climate change (*David Gelles,* "Billionaire no more"*, supra* note 59)*,* so that to «give away the maximum amount of money to people who are actively working on saving this planet» (quoting the founder and CEO of Patagonia, Y. Chouinard, in a recent interview).

objective – considered absolutely priority – of the ecological transition[76].

The critical approach implicitly taken by the founders of the company, after having strongly advocated the creation of business corporation model, however, necessarily imposes a reflection on the effective functionality of this business structure as a legal tool for accelerating the progression towards a sustainable economy.

On the other hand, it leads to the question whether, in a regulatory context in which it seems that compliance with higher sustainability standards, non-financial reporting obligations and corporate sustainability due diligence duties are increasingly extended to all the companies, benefit corporations still keep their *raison d'être* (quoting art. 1835 of the French civil code). In a *de iure condendo* perspective, this could be probably kept by legally attributing, in the balance between shareholders' interest and benefit aim, more weight to the latter.

6. *Conclusions*

In conclusion, it seems correct to say that the implementation of the objectives of ecological transition and the realization of a sustainable transport system require adequate business legal forms. The company's structure – traditionally considered as based on the shareholders' primacy – does not seem to be able for itself to give adequate space for compliance with sustainability principles and ESG factors. It is in fact questionable if the directors have the power to adopt entrepreneurial choices in line with the objectives of socio-environmental protection if these are potentially detrimental to the shareholders's interest.

To deal with this legal difficulty, the introduction of benefit corporations in some legal systems seems to offer the possibility of overcoming these regulatory obstacles, introducing a new form of company that is profit-driven, and therefore competitive, but at the same time strongly committed to pursuit more general interests, as well as compliance with socio-environmental and sustainability standards. And in the transport sector, some transport enterprises worldwide have indeed become benefit corporations.

However, if on a theoretical level the benefit corporation's model seems

---

[76] Showing to believe in the effectivness of the new legal structure, in fact, the founder of Patagonia stated some years ago that "benefit corporation legislation creates the legal framework to enable mission-driven companies like Patagonia to stay mission-driven through succession, capital raises, and even changes in ownership" (quoted from *J. Haskell Murray*, "Defending Patagonia", *supra* note 58).

to be the one that better than the others allows to implement the sustainability standards and, therefore, to henance the transport ecological transition, on the other hand various obstacles limit their effectiveness.

Legislative lacks, which increase legal uncertainty; absence of the benefit corporation's form in most legal systems outside the United States, which makes it not easily recognizable in the international context; disuniformity in the legal standards, requirements and definitions adopted in the different national legislations on benefit corporations issued worldwide; inadequate legal tools against greenwashing, make, in fact, the model of the benefit corporation, as currently conceived, not very functional to its success and not very suitable to cope with the global dimension of the markets.

It would be different if, at least at the European level, the benefit corporation model were foreseen in all member states. An intervention of the European legislator aimed at setting commun legal standards for the benefit corporation within Europe or even the introduction of a European benefit corporation, following the examples of the European Economic Interest Grouping (EEIG), the European Company (Societas Europaea) and the European Cooperative Society (Societas Cooperativa Europeaea) [77] would undoubtedly help overcoming some of the obstacles mentioned above, making it is easier for benefit corporations to access international markets.

Nonetheless, the European legislator doesn't show a big interest in taking legislative measures in this direction. The path it is taking, on the contrary, leads to the progressive extension to all the companies (for now, the larger) [78] to mandatory corporate sustainability duties [79].

Furthermore, also at national level – even in the countries with a strong sensitivity to both corporate law innovation and sustainable development,

[77] On the three forms of supranational business organizations (EEIG; SE; SCE), in the framework of a critical approach to a theory of supranational companies in Europe, see *Holger Fleischer*, "Supranationale Gesellschaftsformen in der Europäischen Union", Die Zeitschrift für das gesamte Handelsrecht und Wirtschaftsrecht (ZHR), 2010, 385 et seq.

[78] See in this *Volume Luca Della Tommasina,* "Sustainability-related disclosures in financial services and dialogue policies in listed companies", 130 et seqq.

[79] See, in particular, the recently issued *Corporate Sustainability Reporting Directive* (EU) 2022/2464 of 14 December 2022 and adopted by the European Commission on 23 February 2022 (on which, in this *Volume*, *Daniele Buoncristiani*, "The EU Taxonomy Regulation and the Corporate Sustainability Reporting Directive", 87 seqq.; *Federica Agostini/Michele Corgatelli*, "Article 25 of the Proposal for a Directive on Corporate Sustainability Due Diligence: Enlightened Shareholder Value or Pluralist Approach?", European Company Law Journal, 2022, 92 et seqq.).

The proposal was anticipated at national level from the German *Lieferkettensorgfaltspflichtengesetz*, that was issued on 11 June 2021 and will enter into force from 1 January 2023 (to this regard, see *Holger Fleischer*, "Grundstrukturen der lieferkettenrechtlichen Sorgfaltspflichten", Corporate Compliance Zeitschrift, 2022, 205 et seq.).

like Germany [80] – the debate on the introduction of the benefit corporation's form in the internal legal systems is in Europe not silent, but quite moderate.

The explanation of this lack of interest is probably linked to a bigger issue that benefit corporations raise: does it make sense to maintain its voluntary character? Or the urgency of the transformation of the global economy – including in the transport sector – in a more sustainable direction requires extending its "virtuous" characteristics (or some of them) to all the companies, in a mandatory way [81]? Is the voluntary character of commitment towards the pursuit of sustainability goals [82] enough? Or, in a global regulatory context characterizeb by a deep rethinking of the company's purpose (the more and more comprehensive of shareholders' and stakeholders' interest), can the benefit corporations keep its identity only as particularly virtuous niche phenomenon, in which – in the balance between profit and benefit aim – the latter should (at least from a *de iure condendo* perspective) be heavier than the former?

[80] See *Holger Fleischer*, "Benefit Corporations zwischen Gewinn- und Gemeinwohlorientierung: Eine rechtsvergleichende Skizze", Festschrift für Ulrich Seibert zum 65. Geburtstag, Otto Schmidt, Köln, 219 et seq.; *id./Yannick Chatard*, "Gesetzliche Zertifizierung nachhaltiger Unternehmen. Die französische «société à mission» als Vorbild für Deutschland?, Neue Zeitschrift für Gesellschaftsrecht, 2021, 1525 et seq.

[81] See *Klaus Hopt*, "Director's Duties and Shareholders' Rights in the European Union: Mandatory and/or Default Rules?", Rivista delle società, 2016. 13 et seqq.; *id/Rudiger Veil*, "Gli *stakeholders* nel diritto azionario tedesco: il concetto e l'applicazione. Spunti comparatistici di diritto europeo e statunitense", Rivista delle società, 2020, 921 et seqq.

[82] This reflection seems to be in line with the position expressed by the *UN-High Level Group of Experts on the Net Zero Emissions Commitments of Non-State Entities*, "*Integrity Matters*", *supra* note 11: «To effectively tackle greenwashing and ensure a level playing field, nonstate actors need to move from voluntary initiatives to regulated requirements for net zero. Verification and enforcement in the voluntary space is challenging».

Giulia Boletto

SUITABLE BUSINESS LEGAL STRUCTURES FOR SUSTAINABLE TRANSPORT. THE SOCIAL ENTERPRISE

Table of contents: 1. Premise: the social enterprise as a subject of the Social and Solidarity Economy (SSE). – 2. The social enterprise: characteristics of the business legal structure and its recognition in the italian legal system. – 3. The social enterprise and sustainable transport. – 3.1. The need for specific tax treatment for social enterprises. – 4. The italian experience.

1. *Premise: the social enterprise as a subject of the social and solidarity economy (SSE)*

The Social Enterprise is a business model that must be placed in a context different from the traditional market. It is in fact a subject that belongs to the so-called Social and Solidarity Economy (SSE).

For some time now, since the 1970s to be precise, there has been talk of an alternative model of economic growth to the traditional one: the Social and Solidarity Economy (SSE).

Starting in those years, people began to create economic activities based on solidarity and, more generally, on responding to human needs in the awareness that the development model based on the extraction and overconsumption of natural resources was no longer 'sustainable': if the goal is to save the future of our civilisation, infinite growth in a finite world is not possible[1].

Most of SSE-related activities were therefore a consequence of people's preference for economic activities based on cooperation and solidarity rather than competition.

[1] See the Club of Rome Report published in 1972, "The Limits to Growth". Cf. also *Yvon Poirier/Françoise Wautiez/Béatrice Alain*, "Legislation and Public Policies in support of Social Solidarity Economy (SSE). First steps and elements of a practical guide", Impresa Sociale, no. 1, 2022; *www.rivistaimpresasociale.it.*

The implementation of a development model different from neo-liberalism in various parts of the world has led to the growth of a sense of belonging to a movement that initially called itself Solidarity Economy (as it was called at the first world meeting held in Lima in July 1997) to evolve into Social and Solidarity Economy in the early 21st century.

The SSE has shown itself to be resistant and resilient to global crises (including that of 2008) and this has laid the groundwork for its recognition on a large scale by organisations such as UN agencies: the conference on the Social Economy organised by the UN Research Institute for Social Development in 2013 laid the foundation for establishing the UN Inter-Agency Task Force on Social and Solidarity Economy in September 2013.

In addition to showing remarkable resilience to economic and financial crises, the sector shows potential in terms of social and technological innovation, creation of rights-based, inclusive, local, sustainable jobs that promote economic growth and environmental protection [2].

Over the past two decades, the EU has recognised the importance of SSE as an alternative model of economic development to the liberal-capitalist one [3], and promoted many initiatives aimed at the development, the launch as well as the macroeconomic and legal acknowledgement of social economy as an integral part of the European social market [4].

The most important of such initiatives are listed below:

(2009) The European Parliament adopts an important resolution to promote the social economy as a necessary strategy to compensate for the distortions of the capitalist development model.

[2] As is demonstrated by the position paper released by the *UN Inter-Agency Task Force on Social and Solidarity Economy*, SSE is at the core of going ahead with at least 65 or the 169 targets underpinning the SDGs.

[3] According to a 2017 *CIRIEC* study, “Recent Evolutions of the Social Economy in the European Union”, SSE organisations have, since the last quarter of the 20th century, contributed to sustained and sustainable economic growth also to the benefit of employment, effectively addressed several yet unsolved social problems and contributed to reducing levels of inequality. This study shows that in Europe alone, the social economy has more than 2.8 million entities and enterprises employing over 13.6 million workers, equivalent to 6.3 per cent of the working-age population in EU countries.

[4] In recent years, several Member States, including Spain, Portugal, and France, have introduced special regulations and laws to give legal recognition to the social economy. In particular, French law no. 856 of 31 July 2014 on the social and solidarity economy represents the most structured legislative intervention within the process aimed at combining, for socially useful purposes, the economic and social dimensions of a new way of doing business, which qualifies, precisely, the so-called social economy actors. Cf. *Valentina Maria Marcelli*, “La legge francese sull’economia sociale”, in: *Antonio Fici* (ed.), “Diritto dell’Economia sociale”, 2016, p. 205 et seqq.

(2011) The Social Business Initiative is launched with the aim of creating a favourable climate for social enterprises as key players in social economy and innovation. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions[5].

(2018) The European Parliament adopts a resolution with recommendations to the Commission on a Statute for social and solidarity-based enterprises – 2016/2237(INL).

(2021) The European Pillar of Social Rights Action Plan is launched to build an ever-stronger social Europe.

(Dec 2021) European Commission, Social Economy Action Plan.

(Jul 2022) The European Parliament adopts the resolution of 6 July 2022 on the EU Action Plan for the Social Economy – 2021/2179(INI)

Despite numerous legislative proposals and initiatives, there is no UE legal framework for the SSE.

Nowadays countries such as France, Spain, Portugal, Greece etc. have adopted national legislation on the SSE in order to make it easier to think about public support policies for this sector.

Although there is not yet a shared definition of social economy, what emerges is that in the SSE people organise and develop economic activities to create jobs for themselves and, at the same time, to meet a social need.

The SSE represents a different way of organising the economic activity in that its main objective is not profit but a social, altruistic, environmental goal. Typical SSE-related operations are not-for-profit enterprises, for which the absence of profit should not be confused with the obligation to manage the enterprise in an uneconomic way but should be understood as the allocation of the operating surplus or profit for the purpose of social utility.

The SSE is an excellent example of an 'economy that works for people' as it incorporates the objectives of social solidarity and sustainability; it complements the traditional economic system, and its characteristics are well suited to the model of sustainable development and ecological transition.

The SSE has been studied for years by economists, sociologists, and jurists[6].

---

[5] As a follow-up to the SBI, the European Commission funded a study to map social enterprises and their ecosystems in Europe (and beyond, in a total of 35 countries). The first study was published between 2014 and 2015. A first update of this study was conducted between 2018 and 2020.

[6] Among the many studies available, cf. *RIPESS*, "Global vision of the solidarity-based

Some consider the social economy to be the third side of capitalism, in addition to the public and private sectors.

Advocates of the SSE are pushing for the social economy to be granted the same legitimacy as the other two sectors, public and private, with a corresponding level of support in terms of resources and public policies.

Others, who have a more radical perspective on this scheme, believe that the social economy is an initial phase of a fundamental transformation of the economic system.

The important thing to be said and remembered is that economic activities in the social economy are based on solidarity and respond to human needs, since the goal of social utility comes first.

The SSE should not be confused with the traditional market economy whose logic is based on exchange for profit; the SSE works according to a cooperative logic, which operates when a group of people who freely share a need or an objective choose how to organise themselves to meet this need, deciding directly how to address it, in the way that suits them best, and how to share responsibilities, costs and benefits among the participants.

It should be made clear that the various forms of responsible business, such as Benefit Corporations, are not part of the SSE (as is specified in the 2021 Action Plan), but, to all intents and purposes, are subjects of the traditional market economy[7].

SSE subjects are private entities, independent of public authorities, characterized by: common principles and shared operational and organisational traits, such as the priority of people as well as of social and environmental goals over profit; reinvestment of most profits/surpluses in the sustainability of the subjects and in the general interest of providing goods and services to their members or to society as a whole; democratic or participatory governance.

It is precisely the distinctive combination of entrepreneurship, social responsibility, organisational efficiency, and ethical dimension that makes SSE subjects particularly suitable for a 'sustainable' development model and ecological transition.

Taking the European context as a reference scenario and following the approach adopted by the European Commission in its 2021 Action Plan, the organisations with SSE characteristics are as follows:

Cooperatives

Mutual aid organisations

---

social economy: convergences and differences in concepts, definitions and reference systems", February 2015, at *www.socioecoorg.it*.

[7] As regards the legal structure of benefit companies, I refer to the article by *Gabriella Iermano*, published in this volume.

Associations
Foundations
Social enterprises
Among them, the most innovative organisational form with respect to the legal traditions of various countries is the social enterprise[8].

2. *The social enterprise: characteristics of the business legal structure and its recognition in the italian legal system*

In the Social Business Initiative launched in 2011, the European Commission formulated a definition of social enterprise based on the recognition of three key dimensions:

1) An entrepreneurial dimension: Stable and continuous production of socially useful goods and services. Revenues are mainly generated both from the direct sale of goods and services to private or associated users and from public procurement.
2) A social dimension: The aim pursued is explicitly social. The products supplied and the activities carried out have a social/general interest connotation. The priority of the social aim must be clearly established in the social enterprises' articles of partnership.
3) Inclusive governance: All stakeholders are involved, whatever the legal form of the enterprise. The profit distribution constraint ensures that the social aim of the enterprise is safeguarded. The governance and organisational structure of social enterprises must ensure that the interests of all stakeholders are duly represented in the decision-making process.

Italy was among the first countries in Europe to legally recognize this business legal structure.

The social enterprise was introduced into the Italian legal system by Legislative Decree no. 155/2006.

The social enterprise is not a new or different type of enterprise (such as an agricultural or a commercial enterprise) but a 'status' that can be assumed by various types of entities, corporate or otherwise.

This status can be acquired by all organisations pursuing socially useful purposes while conducting a business activity, including commercial companies, as long as they respect the three characteristics of social economy

[8] On this point, cf. *Joël Monnet*, "L'ouverture du secteur de l'économie sociale et solidaire aux sociétés commerciales", Droit des sociétés, no. 11, 2014, étude 22. Cf. *Carlo Borzaga*'s definition of social enterprise at *www.irisnetwork.it.*

subjects (entrepreneurial dimension, social dimension and inclusive governance).

The introduction of the social enterprise was also important on the systematic level, in the sense that the compatibility between the non-profit purpose and the business activity has become a systemic principle and brought with it the so-called *neutrality of organisational forms with respect to the purpose*. Prior to the entry into force of this decree, which, therefore, made the use of corporate forms possible in the non-profit sector, the pursuit of non-profit purposes was generally only possible with the legal forms of the association, the foundation, or the social cooperative (for the use of the corporate form, a legislative provision derogating Article 2247 of the Civil Code was required).

Despite their importance from a social point of view (they produce socially useful goods and services), no tax breaks were provided for these organisations in 2006. For this reason, few organisations opted for this status.

In Italy, the social enterprise is now part of the so-called Third Sector (after the Third Sector reform which took place between 2016 and 2017, as we will see below).

In particular, Legislative Decree 112/2017 identifies the specific characteristics of this status.

The social enterprise carries out an entrepreneurial activity in the general interest and the revenue from this type of activity must exceed 70 per cent of the total.

Activities of general interest are listed by the legislator and include entrepreneurial activities (whatever they may be) that employ at least 30 per cent of highly disadvantaged or disabled workers.

The social enterprise can also finance itself by carrying out other activities (other than those of general interest), as long as the related revenues do not exceed 30 per cent of the total.

Incorporated social enterprises can distribute dividends to their shareholders up to a limit of 50 per cent of the profits. This provision favours the access of venture capital to the social enterprise (but it should be remembered that, unlike Benefit Corporations, the only purpose of the social enterprise remains that of social utility).

Multi-stakeholder governance, i.e. the involvement of users and workers in the management of the organisation, allows, on the other hand, to avoid opportunistic behaviour, guaranteeing the pursuit of general interest goals[9].

---

[9] On this point, cf. *Carlo Borzaga*, “Opportunità e limiti della riforma del Terzo settore”, in: *Antonio Fici* (ed.), “La riforma del terzo settore e dell’impresa sociale. Una introduzione”, 2018, 57 et seqq.

3. *The Social enterprise and sustainable transport*

Social enterprises (and, more generally, social economy entities) have flourished in the fields of social, health, welfare, cultural, sporting and recreational services mainly to make up for the lack of supply of such services by the state [10]. Today, European institutions (also) place these subjects among the main actors of ecological transition [11], acknowledging their potential in the pursuit of the more general objective of achieving a more sustainable, equitable and inclusive growth model (see the 2021 Action Plan).

As far as sustainable transport is concerned, the SSE has been providing innovative green solutions for decades, including clean and shared mobility services [12].

3.1. *The need for specific tax treatment for social enterprises*

The December 2021 Action Plan aims to create favourable conditions for the development of the social economy and emphasises the importance of specific and consistent taxation, noting that few states have yet developed a taxation framework in accordance with the specific features of this sector.

The tax treatment of SSE entities in the EU is left to the exclusive jurisdiction of the national states, but the European institutions committed to also provide framework legislation in this area in the future [13].

---

[10] For data on Italy, cf. *Carlo Borzaga/Manlio Calzaroni/Eddi Fontanari/Massimo Lori*, "L'economia sociale in Italia: dimensioni ed evoluzione", Impresa Sociale, no. 2, 2022; *www.rivistaimpresasociale.it*.

[11] See *Anna Athanasopoulou/Patrick Klein*, "Social Economy in Europe", Impresa Sociale, no. 1, 2022; *www.rivistaimpresasociale.it.*

[12] With regard to Italy, see, for example, Cramars, a social enterprise committed to sustainable mobility; *www.coopcramars.it.*

[13] In its Resolution of 6 July 2022, the European Parliament "strongly welcomes the proposal for a Council recommendation on social economy framework conditions to be approved in 2023; stresses that the recommendation should provide a common Union-level definition of the social economy based on its main principles and features as presented in the SEAP and that both the recommendation and definition need to take into account the diversity of social economy entities in Member States; highlights that the recommendation must have the primary objective of strengthening the legal and policy frameworks for the social economy, especially in Member States where the social economy ecosystem is less developed; believes that the recommendation should clearly highlight the support instruments made available by the EU and provide guidance on specific policies, such as suitable legal frameworks for different kinds of social economy entities, public procurement, State aid, employment, social and health policies, taxation,

In its 2018 Resolution (with recommendations to the Commission concerning a statute for social enterprises), the European Parliament emphasised that such enterprises deserve different tax treatment from conventional companies for two reasons:

- The positive impact of social enterprises on the community.
- Their limited ability to raise funds and make profits compared to traditional commercial enterprises.

In this latter regard, it should be considered that access to financial resources is as crucial for social enterprises as it is for all other enterprises.

The specific nature of social enterprises makes it difficult for them to rely on traditional funding channels, as they can guarantee low or no return on investment. Moreover, due to the specific nature of the goods and services provided, social enterprises often sell their services to public clients or target users who are not required or are not able to pay.

Unlike conventional enterprises, social enterprises can rely on private resources (human resources, such as volunteers, or financial resources, such as donations).

It is therefore clear that social enterprises are not comparable with profit-making enterprises and that they deserve a different tax treatment. This would 'compensate', on the one hand, for the numerous organisational and functional constraints they must undergo to qualify as social enterprises and, on the other hand, for the positive benefit that these enterprises produce for the community in terms of reducing public expenditure.

Italy is the first country to have introduced special taxation arrangements relating to the income generated by social enterprises [14], and it did so as part of a reform concerning more specifically the 'Enti del Terzo Settore' (ETS, third-sector entities). The aim of this reform, which saw the light between 2016 and 2017 [15], was to differentiate third-sector entities from the broader set of non-profit entities, and to determine, in a logic of certainty and guarantee, the indispensable requirements that entities must meet in order to be granted and retain the ETS status.

ETSs are private not-for-profit entities that deal with the general interest in a logic of horizontal subsidiarity (Article 118, Italian Constitution, last

---

education, skills and training and the importance of linking ongoing transitions with the social economy agenda".

[14] On this point, allow me to refer, also for further bibliographical references, to *Giulia Boletto*, "Le imprese del Terzo settore nel sistema di imposizione dei redditi: tra sussidiarietà e concorrenza", 2020, 181 et seqq.

[15] In implementation of delegated law no. 106/2016, the reform decree on the social enterprise (Legislative Decree no. 112 of 3 July 2017) and the decree on Third Sector Code (Legislative Decree no. 117 of 3 July) were issued.

paragraph), which therefore deserve preferential (*favor*) legislation [16]. The legislator has introduced an *ad hoc* tax treatment for business-oriented ETSs, i.e. SSE organisations engaged in the provision of general-interest services.

The ETS tax regime is not yet fully in force, as some of its rules are subject to approval by the European Commission (such approval has not yet been requested): the European Commission will be called upon to assess whether these rules constitute State Aid, which is prohibited under Article 107 TFEU [17].

Although several years have passed since the Reform came into force, uncertainty still lingers at the European level regarding the positions and roles of SSE entities in the market. This fact has so far discouraged Italian institutions from applying for authorisation.

The fact remains that the Italian case is the first example of *ad hoc* tax legislation for social enterprise and the hope is that it will become a model for other countries to accelerate the (necessary) path to uniform tax regulation of SSE organisations at the European level.

3.2. *The italian experience*

The Third Sector law reform (2016-2017) has accurately defined the subjective perimeter of the sector: ETSs expressly include a first group of typical entities – Voluntary Organisations, associations for social advancement, philanthropic entities, social enterprises, associative networks, mutual aid organisations – alongside atypical entities, whose common denominator is that they are private entities (not corporations); they pursue 'non-profit civic, solidarity and socially useful purposes'; they carry out activities in the general interest 'through voluntary or gratuitous forms of action or mutuality or the production and exchange of goods and services'; and they are registered in the RUNTS (National Single Register of the Third Sector). In addition to the formal prerequisite of registration in the RUNTS, an essential requirement to determine whether a subject can be included in

[16] Article 118 of the Italian Constitution, last paragraph, reads, "The State, regions, metropolitan cities, provinces and municipalities shall promote the autonomous initiatives of citizens, both as individuals and as members of associations, relating to activities of general interest, on the basis of the principle of subsidiarity".

[17] The rules whose effectiveness is subject to the approval of the European Commission also condition the effectiveness of those of a structural nature that are linked to them (i.e. Article 79, which defines the criteria for establishing the non-commercial nature of the entities involved; Articles 84 and 85 relating, respectively, to ODVs and APSs; Article 87 on the accounting obligations of non-commercial third-sector entities; and Article 89 on regulatory coordination).

or should be excluded from the Third Sector is the activity it carries out (which must be of general interest) [18] and its social purpose [19]; on the other hand, the legal form taken by the entities is now less important, as are the ways in which the activity is managed, which, in fact, are placed on the same level, as the article specifies 'through voluntary or gratuitous forms of action or mutuality or the production and exchange of goods and services'.

Within the subjective perimeter of the Third Sector, a distinction is therefore made between entities that (basically) offer services (Voluntary Organisations, APSs, philanthropic entities), and SSE-related entities that carry out their general-interest activities through market mechanisms (such as social enterprises and commercial ETSs), but always in pursuit of public purposes.

Third-sector entities must fulfil these essential requirements and operate within organisational and functional constraints, as well as comply with transparency obligations and a series of controls [20].

Constraints, charges, and controls are elements that can distinguish what lies inside from what lies outside the boundaries of the Third Sector.

---

[18] Activities in the general interest listed by the legislator include interventions and services aimed at safeguarding and improving the condition of the environment and the prudent and rational use of natural resources.

[19] The delimitation of Third Sector subjects results in a series of essential constraints imposed by the legislator. These entities are required to:

- serve a non-profit making purpose (Article 8 CTS and Article 3 Legislative Decree 112/2017) expressed through the requirement of earmarking the organisation's assets to carry out the activity envisaged in the statutes, accompanied by the prohibition of distributing profits, even indirectly, to persons who are members of corporate bodies in various capacities;

- pursue civic, solidaristic and socially useful purposes (Articles. 4(1), 5(1) and 21(1), CTS; Article 1(1), Legislative Decree 112/2017);

- carry out activities of general interest (expressly listed in Article 5 CTS, and Article 2 Legislative Decree 112/2017).

[20] In addition to general obligations concerning all ETSs, there are also specific ones relating to certain types of Third Sector entities, i.e. for ODVs (Articles 32-34), for APSs (Articles 35-36), for philanthropic organisations (Articles 37-39), and for association networks (Article 41). On the other hand, social enterprises are required to envisage appropriate forms of involvement of workers and users, as well as of other stakeholders directly connected to their activities (Article 11, Legislative Decree no. 112/2017). The introduction of such strict parameters evidently implies the legislator's desire to create a close correlation between them and the special promotional treatment awarded to these entities on a constitutional basis (Art. 118, Italian Constitution, last paragraph). For a more in-depth investigation and other bibliographical references, allow me to mention *Giulia Boletto*, "Riflessioni intorno al trattamento tributario di enti che agiscono per l'interesse generale (entro e oltre il c.d. Terzo settore)", Giurisprudenza delle Imposte, no. 4, 2021, open access.

The combination of these elements represents the *proprium* of the new subjective definition and ensures that the related entities are alien to the logic of the market and the utilitarian purposes that characterise it (Constitutional Court no. 131/2020). The Constitutional Court (ruling no. 131/2020) has clarified that, within the scope of the Third Sector, the actions of private individuals for purposes of general interest embody the principle of social solidarity (Article 2 of the Italian Constitution), i.e. the founding principle of the Republic.

One of the most innovative aspects of the reform is the fact that SSE-related private entities are within the scope of the Third Sector [21].

Indeed, it is envisaged that ETSs that do not qualify as *social enterprises* pursuant to Legislative Decree 112/2017 may carry out entrepreneurial activities in the general interest, on an exclusive or predominant basis, producing an operating profit or surplus, on condition that they do not distribute it or use it for purposes other than institutional ones, as generally provided for by Articles 8 and 9 of the Third Sector Code (CTS).

Enterprises that meet all the requirements to qualify as ETSs will be able to enjoy a 'preferential' tax regime (if the European Commission does not object!) as opposed to profit-making companies.

With a view to balancing public support for ETSs and fair competition, Italy has provided for a structured and diversified preferential regime (*favor*) based on the different requirements that the reform legislator has envisaged for the different types of Third Sector enterprises (social enterprises or ETSs carrying out entrepreneurial activities in the general interest on a primary or secondary basis) in order to guarantee that they take no part in the 'traditional' market.

The general logic seems to be that of compensation (which the European Parliament seemed to suggest in its above-mentioned 2018 Resolution, and which also appears to emerge from Constitutional Court ruling no. 72/2022): the fact that stricter *constraints*, *charges and controls* are introduced adds certainty to the fact that the entity is on the market only and exclusively for general interest purposes and not for selfish ends. Therefore, a preferential tax regime is more justified and appropriate.

As far as the social enterprise is concerned, we have seen that it is a typical Third Sector entity regulated by Legislative Decree 112/2017.

Social enterprises are exempted from taxation of the profits that they reinvest in their main general interest activity.

The provision to lift the tax on the profits of social enterprises (Article

[21] For a more in-depth investigation of the entrepreneurial evolution in the third sector, let me refer again to *Giulia Boletto*, "Le imprese del terzo settore nel sistema di imposizione dei redditi: tra sussidiarietà orizzontale e concorrenza", 2020.

18 Legislative Decree 112/2017) appears to be closely linked to and justified by the specific organisational structure envisaged for them and peculiar to the social economy (including the so-called multi-stakeholder governance and the statutory constraints envisaged for such entities), i.e. by elements that, according to scholars of the subject (jurists, economists and sociologists), appear suitable to ensure that the entity is able, on the one hand, to achieve the best quality and efficiency of the service, and, on the other hand, to 'safeguard' the actual pursuit of general interest purposes. On closer inspection, this is an organisational model outlining a form of private enterprise that appears different from other profit-making companies, and capable of embodying the constitutional principle of horizontal subsidiarity, understood in the sense that, in the production of goods and services, the public power does not need to do what the private sector can do better.

In these terms, i.e. given that the social enterprise and other private forms of enterprise are not comparable, it is hoped that the tax concession will not be selective and that the preferential scheme will not infringe Article 107 TFEU.

4. *Sustainable transport through social enterprises: what is the tax advantage?*

In conclusion, it seems interesting to compare the tax advantages associated with a Benefit Corporation with those of the social enterprise

Benefit Corporations are characterized by the fact that they combine a profit-making purpose with a purpose of social utility. As well as all other forms of Responsible business, they belong to the traditional market economy.

From a tax point of view (especially as far as income tax is concerned) Benefit Corporations in Italy do not enjoy tax advantages even if they pursue a social interest (such as sustainability).

Why is that so?

It is because our tax system is based on the general principle according to which all the wealth produced is taxed, regardless of its purpose: it does not matter whether it is in the general interest or for personal enrichment.

In the framework of the SSE, private entities operate on a non-profit basis and, where they operate for the general interest of the community, according to the Italian Constitutional Court, they have distinctive characteristics that are capable of embodying the principle of social solidarity (Article 2 Italian Constitution).

Therefore, these entities cannot be considered as *enterprises* in the same

way as other economic operators solely and exclusively because of objective parameters (such as their commercial or non-commercial nature), but it seems reasonable, appropriate, and necessary to consider the different destination of the wealth they produce [22].

Therefore, one cannot but agree to a tax policy aimed at providing for a qualitative discrimination of income earmarked for the common good, emphasising the fact that such income makes an 'indirect' contribution to public spending, since, by financing general interest activities for socially useful purposes, it enables the reduction of public spending.

However, in order to also protect competition, this discrimination is graded according to the greater or lesser guarantee that these entities actually operate as economic actors in the general interest [23].

This tax system therefore recognises the positive utility produced by social enterprises (in terms of reducing public spending), and thus a different form of contribution to public spending [24].

---

[22] Two important rulings of the Italian Constitutional Court (nos. 131/2020 and 72/2022) emphasised the peculiar nature of Third Sector entities in general, stating that, due to their specific features, the entities that fall within the Third Sector belong to the so-called solidarity market in which the contribution to public spending takes place indirectly (i.e. by producing goods and services of general interest for socially useful purposes), and not through the payment of taxes.

[23] In this regard, it is emphasised that the European Parliament, in its Resolution of 6 July 2022 on the EU action plan for the social economy (2021/2179(INI)) urges national, regional and local authorities to make better use of the potential of the existing rules in relation to specific provisions for services of general economic interest (SGEI) to access public financial support under the EU State Aid Regulation, including by making full use of the possibility, where appropriate, of recognising social economy actors that carry out an economic activity as SGEI.

[24] The Italian doctrine (*Alessandro Giovannini*, "Quale capacità contributiva?", Dir. e prat. Trib., 2020, 826 et seqq.) highlights that nowadays it is necessary to understand the notion of contributory capacity in terms that should be as flexible as possible, so as to adapt it to the current economic situation. Taxation must be linked to the positive or negative utility that each subject produces, which stems from a private fact that produces external consequences and is thus passed on to the community in terms of public costs or benefits. In practice, it is the *sharing of social responsibility* that becomes economically assessable for tax purposes.

Luca Della Tommasina

SUSTAINABILITY-RELATED DISCLOSURES IN FINANCIAL SERVICES AND DIALOGUE POLICIES IN LISTED COMPANIES

Table of Contents: 1. The dialogues between institutional investors and board of directors in listed companies: introductory remarks. – 2. Sustainability-related disclosures in financial services: periodic information of the market and pre-contractual information of the client. – 3. Active and passive information by financial market participants: preliminary findings. – 4. The client's interest in up-to-date (non-financial) information: premise. – 5. The client's interest in up-to-date (non-financial) information: the "publicly available information". – 6. ESG-dialogues with institutional investors: background and problems. – 7. ESG-dialogues with institutional investors: the participation of ESG-friendly directors. – 8. ESG-dialogues with institutional investors and organizational arrangements: quarterly reports to the supervisory board and periodic meetings about sustainability goals. – 9. ESG-dialogues, closed-door meetings and equal treatment of shareholders. – 10. ESG-dialogues with institutional investors and business judgment rule. – 11. ESG-dialogues with institutional investors between the Article 120(4-*bis*) *t.u.f.* and takeovers.

1. *The dialogues between institutional investors and board of directors in listed companies: introductory remark*

The dialogues between the board of directors and institutional investors or asset managers are still far from taking on a well-defined physiognomy in Italian listed companies [1].

[1] Even in Germany this is a debate that is still going on, so that it has been defined by German literature an "Entwicklungsthema": *Hans-Christoph Hirt/Klaus J. Hopt/Daniela Mattheus*, "Dialog zwischen dem Aufsichtsrat und Investoren", Aktiengesellschaft 2016, 725. See also *Klaus J. Hopt/Patrick C. Leyens*, "Der Deutsche Corporate Governance Kodex 2020 – Grundsatz- und Praxisprobleme –", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2019, 929, 951, 992 et seq.; *Katja Langenbucher*, 50 Jahre Aktiengesetz – Aktienrecht und Kapitalmarktrecht, in: Holger Fleischer/Jens Koch/Bruno Kropff/Marcus Lutter (ed.), 50 Jahre Aktiengesetz, ZGR-Sonderheft 19, 2016, 273, 288. About the

Setting aside the reasons for mistrust that exist from the standpoint of institutional investors (related to the risk that their activism is mistakenly perceived as an alliance with the board and, indirectly, with the controlling shareholder [2]), the real resistance factor to permanent dialogues with the blockholders comes from the side of directors, especially in the light of liabilities arising from the well-known market abuse regulation [3]. In this perspective it is easy to understand the doubts raised with regard to the so-called *two-way engagement*, which implies an active involvement of the board of directors [4], but also the mistrust towards meetings that cut off

---

risks of interference in the business strategy and in the monitoring role of the supervisory board, see *Holger Fleischer/Christian Strothotte*, "Ein Stewardship Code für institutionelle Investoren: Wohlverhaltensregeln und Offenlegung der Abstimmungspolitik als Vorbild für Deutschland und Europa?", Aktiengesellschaft 2011, 221, 227; *Holger Fleischer*, "Zukunftsfragen der Corporate Governance in Deutschland und Europa: Aufsichtsräte, institutionelle Investoren, Proxy Advisors und Whistleblowers", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2011, 155, 166; *Patrick Hell*, "Institutionelle Investoren, Stewardship und ESG", Neue Zeitschrift für Gesellschaftsrecht 2019, 338, 342. See also, into Italian literature, *Umberto Tombari*, Le nuove prospettive dell'"informazione societaria": il dialogo tra organo amministrativo e soci al di fuori del contesto assembleare, in: Umberto Tombari (ed.), Informazione societaria e *corporate governance* nella società quotata, 2018, p. 1, 4 et seq.; *Chiara Mosca*, "Comunicazione selettiva dagli amministratori agli azionisti e presidi a tutela del mercato", Rivista delle società 2018, 29, 47-66; *Giovanni Strampelli*, "*Engagement* degli investitori istituzionali e colloqui riservati con gli emittenti", Banca borsa titoli di credito 2018, I, 393, 411 et seqq.; *Andrea Bartalena*, "Opa per *delisting* e *insider trading*: brevi riflessioni sull'*insider* di se stesso", Banca borsa titoli di credito 2018, II, 698, 708.

[2] Which, because of the fluid boundaries of the notion of "acting in concert" provided for by the Italian takeover regulation, may be dangerous upon the occurrence of circumstances requiring the controlling shareholder to make a takeover bid: *Uwe H. Schneider*, "Abgestimmtes Verhalten durch institutionelle Anleger: Gute Corporate Governance oder rechtspolitische Herausforderung?", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2012, 518, 530 et seq.; *Giuseppe Guizzi*, Gli investitori istituzionali tra esigenze di coordinamento e problema del concerto, in: Marco Maugeri (ed.), Governo delle società quotate e attivismo degli investitori istituzionali, 2015, p. 109, 114; *Matteo Gargantini*, Coordinamento (extra-)assembleare dei soci e azione di concerto nella s.p.a. quotata, in: Mario Campobasso/Vincenzo Cariello/Vincenzo Di Cataldo/Fabrizio Guerrera/Antonella Sciarrone Alibrandi (ed.), Società, banche e crisi d'impresa. Liber amicorum Pietro Abbadessa, 2014, III, p. 2097, 2135 et seqq.

[3] *Simone Alvaro/Marco Maugeri/Giovanni Strampelli*, Investitori istituzionali, governo societario e codici di *stewardship*. Problemi e prospettive, 2019, p. 48 et seq.; *Klaus J. Hopt*, "The Dialogue between the Chairman of the Board and Investors: The Practice in the UK, the Netherlands and Germany and the Future of the German Corporate Governance Code Under the New Chairman", ECGI - Working Paper No. 365/2017, available at *ssrn*, pp. 7 et seqq. of the manuscript.

[4] About the alternative between the one-way and the two-way modality of the meetings with institutional investors see *Giovanni Strampelli*, Il ruolo dell'organo di controllo nei dialoghi extra-assembleari tra gli emittenti quotati ed i loro soci, in: Concetto Costa/Aure-

part of the shareholder base. It is no surprise that the new Italian Corporate Governance Code (hereinafter referred to as "CGC") requires listed companies to adopt policies for the management of dialogues "*with the general public of shareholders*" rather than specific blockholders: this may be enough to give an idea of the suspicion that surrounds working hypotheses based on selective communications [5].

An interesting input to deepen the problem and to imagine governance solutions that allow a stable interaction of the directors with part of shareholders comes today from the European legal framework about sustainability-related disclosures in the financial services sector [6], launched in 2019 (and effective from March 2021) with the aim of enhancing disclosure to final investors on the integration of sustainability risks, on the consideration of adverse effects on sustainability, on sustainable investment objectives and on the promotion of environmental or social characteristics. In particular, in the Regulation (EU) 2019/2088, commonly known as *Sustainable Finance Disclosure Regulation* or "SFDR", a specific role has been assigned to such a disclosure in the decision-making and consulting processes that are in charge, respectively, to intermediaries providing portfolio management services and investment advisors, also called – for these purposes – *financial market participants* and *financial advisers* [7].

---

lio Mirone/Roberto Pennisi/Pierpaolo M. Sanfilippo/Ruggero Vigo (ed.), Studi di diritto commerciale per Vincenzo Di Cataldo, Impresa, Società, Crisi d'impresa, 2.II, 2021, p. 939, 948; *Marco Maugeri*, "Sostenibilità ed *Engagement* degli azionisti istituzionali", Rivista delle società 2021, 1350, 1364; *Assogestioni*, Consiglio Nazionale dell'Economia e del Lavoro. Commissione Politiche economiche. Audizione, 5 May 2021, 6.

[5] See Recommendation No. 3 of the Italian CGC, which establishes that, upon proposal of the chairman in agreement with the chief executive officer, the board of directors adopts – and describes in the corporate governance report – a policy for managing dialogue with the generality of shareholders. In doing so, the board shall take into account the engagement policies adopted by institutional investors and asset managers.

[6] The so-called Taxonomy Regulation [(EU) 2020/852] shall be taken into account too. See *Danny Busch*, Sustainability Disclosure in the EU Financial Sector, in: Danny Busch/ Guido Ferrarini/Seraina Grünewald (ed.), Sustainable Finance in Europe. Corporate Governance, Financial Stability and Financial Markets, 2021, p. 397, 399; *Alessio M. Pacces*, "Will the EU Taxonomy Regulation Foster a Sustainable Corporate Governance?", ECGI – Law Working Paper No. 611/2021, available at *ssrn*, pp. 9 et seqq. of the manuscript.

[7] In this context, the use of the word "short-termism" (or of its opposite, "long-termism") will be avoided. This word is in itself polysemous and in some ways dangerous, that is, source of misunderstandings: *Mario Stella Richter* jr, *Long-Termism*, in: Concetto Costa/Aurelio Mirone/Roberto Pennisi/Pierpaolo M. Sanfilippo/Ruggero Vigo (ed.), Studi di diritto commerciale per Vincenzo Di Cataldo, Impresa, Società, Crisi d'impresa, 2.II, 2021, p. 901, 919 et seqq., 927 et seq., 935 et seq.; *Mark J. Roe/Roy Shapira*, "The Power of the Narrative in Corporate Lawmaking", ECGI - Working Paper No. 554/2020, available at *ssrn*, pp. 11 et seqq. of the manuscript. It is not like the word "sustainability" hides less

As will be seen in what follows, the SFDR opens up new perspectives for research about the relationship between institutional investors and board of directors. Unless it can be demonstrated that the ordinary reporting activities of directors of listed companies fully address the information needs of *financial market participants* and *financial advisers*, it does not seem pointless – in order to give them all the necessary elements for the fulfilment of new transparency duties – to envisage interaction tools with institutional investors and asset managers.

2. *Sustainability-related disclosures in financial services: periodic information of the market and pre-contractual information of the client*

The SFDR articulates the new disclosure duties on two levels:

a) a first set of information establishes a relationship between the intermediary and any current or potential client, without distinction;

b) the second core of information concerns the relationship between the intermediary and the individual client.

In particular, financial market participants and financial advisers who consider principal adverse impacts of investment decisions on sustainability factors must draw up and publish a statement on due diligence policies with respect to those impacts, taking due account of their size, the nature and scale of their activities and the types of financial products they make available [8].

---

pitfalls [*Marco Ventoruzzo*, "Il nuovo Codice di Corporate Governance 2020: le principali novità", Le società 2020, 439, 441; *Nicoletta Ciocca*, Sostenibilità dell'attività di impresa e doveri degli amministratori, in: Fabiola Massa (ed.), Sostenibilità. Profili giuridici, economici e manageriali delle PMI italiane, 2019, p. 77, 79 et seq.], but this is the expression used by SFRD and therefore it is the one that will be used below, if only to minimise the scope for further legal ambiguity in connection with the so-called CSR-Law [see again *Mario Stella Richter* jr (in this footnote), 932]. It is understood that, if a trait-d'union was to be established between sustainability and long-termism, short-termism would be in this context the one of "corporate decisions that damage the economy via environmental degradation (which boosts profits today but degrades the economy tomorrow), an unwillingness to protect corporate customers, employees, and other stakeholders, and an unwillingness to act in a public-spirited way": that is, the so-called "Type B" short-termism [*Mark J. Roe*, "Stock-market short-termism's impact", University Pennsylvania Law Review 2018, 71, 81].

[8] Such a statement shall include information about their policies on the identification and prioritisation of principal adverse sustainability impacts and indicators, a description of the principal adverse sustainability impacts and of any actions in relation thereto taken or,

The sustainability due diligence policy is not intended for a specific recipient: it is part of periodic information which addresses the market as a whole, thus overlapping with the many reports already in existence, since the *individual non-financial statement* provided by *d.lgs.* 254/2016, that is the equivalent for the Italian "*dichiarazione individuale di carattere non finanziario*". Also known as "DNF", this non-financial statement highlights the impact of the company on some focus areas, all relevant for the purposes of the ESG-engagement [9], like the environment or the public health, and the actions taken to ensure gender equality and human rights or to fight against discrimination and corruption [10].

A similar overlap takes place with respect to the engagement policy required by the Directive (EU) 2017/828 (so-called *Shareholders Rights II Directive*: below, for brevity, "SHRII") [11]. This results from the Article

---

where relevant, planned, a brief summary of engagement policies and a reference to their adherence to responsible business conduct codes and internationally recognised standards for due diligence and reporting: Article 4(2) SFDR. See *Danny Busch* (fn. 6), p. 410.

[9] See *Carlo Angelici*, "Divagazioni sulla "responsabilità sociale" d'impresa", Rivista delle società 2018, 3, 14 et seq.; *Francesco Denozza/Alessandra Stabilini*, Informazione non finanziaria e stakeholder *empowerment*, in: Piergaetano Marchetti/Federico Ghezzi/ Roberto Sacchi (ed.), Il caleidoscopio dell'informazione nel diritto societario e dei mercati. In ricordo di Guido Rossi, 2020, p. 225, 228 et seq.; *Marco Maugeri*, "Informazione non finanziaria e interesse sociale", Rivista delle società 2019, 992, 1012 et seqq.; *Sabino Fortunato*, "L'informazione non-finanziaria nell'impresa socialmente responsabile", Giurisprudenza commerciale 2019, I, 415, 420 et seqq. The connection between DNF and the policy provided for by Article 3 SFDR becomes clear considering the definition of sustainable investment which is carried by Article 2(17) SFDR. The corresponding figure is divided into three subtypes: *a)* an investment in an economic activity that contributes to an environmental objective, as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy; *b)* an investment in an economic activity that contributes to a social objective, in particular an investment that contributes to tackling inequality or that fosters social cohesion, social integration and labour relations; *c)* an investment in human capital or economically or socially disadvantaged communities, provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices, in particular with respect to sound management structures, employee relations, remuneration of staff and tax compliance. See *Danny Busch* (fn. 6), p. 406 et seq.

[10] Moreover, DNF explains how the materiality principle has been applied, also in light of the Guidelines on non-financial reporting (methodology for reporting non-financial information) by EU Commission (2017/C 215/01): see *Giovanni Strampelli*, L'informazione di e per il bilancio (relazioni) e la revisione contabile, in: Mario Cera/Gaetano Presti (ed.), Il Testo Unico Finanziario, II, 2020, p. 1608, 1639 et seq.

[11] Indeed, the drafting of a strategy does not occur upon a request by their respective clients or investors, but today shall form the subject of a general planning (see *Chiara Presciani*, La trasparenza degli azionisti istituzionali di società quotate, 2020, pp. 12 et

4(2c) SFDR, whereby it is provided that sustainability policy shall include "brief summaries of engagement policies in accordance with Article 3*g* of Directive 2007/36/EC, where applicable" [12].

Reporting about remuneration policies should also be taken into account: financial market participants and financial advisers shall give information on how those policies are consistent with the integration of sustainability risks (Article 5 SFDR). This is of particular importance in the light of the constraints which have been introduced in Italian corporate law: according to the Article 84-*quater* of the so-called "*Regolamento Emittenti*" (below, for brevity, "*Reg. Issuers*"), adopted by Consob – that is the Italian supervisory Authority on markets of financial instruments – with the Resolution No. 11971 of 14 May 1999 and recently amended, listed companies have to regulate variable compensation in accordance with "financial and non-financial performance targets", based – "where appropriate" – upon the standards relating to the corporate social responsibility [13].

---

seqq.; *Enrico Ginevra/Chiara Presciani*, "Sovereign Wealth Fund Transparency and the European Rules on Institutional Investors Disclosure", Giurisprudenza commerciale 2019, I, 995, 1006), even just in view of a non-compliance choice [*Antonio Roncero Sánchez*, La implicación de los inversores institucionales y de los gestores de activos en las sociedades cotizadas como opción de política jurídica, in: Francisco José León Sanz/Sonia Rodríguez Sánchez (ed.), Cuestiones actuales de Derecho mercantil. La reforma europea del Derecho de sociedades y del Derecho concursal, 2018, p. 19, 39; about the *Stewardship-Gedanke*, see also *Tobias Tröger*, "Die Regelungen zu institutionellen Investoren, Vermögensverwaltern und Stimmrechtsberatern im Referentenentwurf eines Gesetzes zur Umsetzung der zweiten Aktionärsrechterichtlinie (ARUG II)", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2019, 126, 136, who highlights that institutional investors' activism is now regarded «nicht mehr als eigennützige, freiwillige Initiative, sondern als unterschiedslos für alle geltende, heteronome Belastung»].

[12] That is the above mentioned Directive (EU) 2017/828, amending the Directive 2007/36/EC (also known as *Shreholders Rights Directive*), which led to the introduction of the engagement policies now provided for by Article 124-*quinquies t.u.f.* See, among others, *Claudia Tedeschi*, "La direttiva *shareholder rights II* e il nuovo ruolo degli investitori istituzionali nelle società quotate: dall'attivismo all'engagement nella prospettiva di efficienza e di continuità dell'impresa", Rivista del diritto commerciale e del diritto generale delle obbligazioni 2020, II, 557, 575 et seqq.

[13] About the link between the variable part of managers' remuneration and sustainable success objectives see *Lucia Calvosa*, "Tutela degli *stakeholders*, sostenibilità e nuova governance in Eni", being published into the volume containing the proceedings of the Conference entitled "La nuova società quotata. Tutela degli *stakeholders*, sostenibilità e nuova *governance*", 9 April 2021, § 5.G, pp. 15 et seq. of the manuscript; *Giuseppe Benedetto Portale*, Un nuovo capitolo del governo societario tedesco: l'adeguatezza del compenso dei *Vorstandsmitglieder*, in: Amministrazione e controllo nel diritto delle società. *Liber amicorum* Antonio Piras, 2010, p. 91, 94 et seq.; *Ilaria Capelli*, Le remunerazioni, in: Mario Cera/Gaetano Presti (ed.), Il Testo Unico Finanziario, II, 2020, p. 1886, 1897; in German literature, *Holger Fleischer*, Corporate Social Responsibility: Vermessung eines

In this regard, it can be said that in 2019 European law has improved a regulation model about reporting activities that aims to stimulate competition: any potential investor must be provided with harmonised reading keys, which simplify the comparison between financial intermediaries [14].

Such an aim is not contradicted by the fact that financial market participants – unless they have more than five hundred employees – and financial advisers may choose not to consider the adverse impacts of investment decisions on sustainability factors. Indeed, in this case, they shall publish "clear reasons for why they do not do so, including, where relevant, information as to whether and when they intend to consider such adverse impacts" [15]. The *comply or explain rule* safeguards the underlying objective [16]: the very fact of revealing its disinterest in non-financial variables helps to provide a certain image of the intermediary in the eyes of the public [17].

Forschungsfeldes aus rechtlicher Sicht, in: Holger Fleischer/Susanne Kalss/Hans-Ueli Vogt (ed.), Corporate Social Responsibility. Achtes deutsch-österreichisch-schweizerisches Symposium, Hamburg 1.-2. Juni 2017, 2018, p. 1, 33; *Gunnar Friede/Timo Busch/Alexander Bassen*, "ESG and financial performance: aggregated evidence from more than 2000 empirical studies", Journal of Sustainable Finance and Investment 2015, 210, 222 et seq.; *Frauke Schmidt*, Die Ausstrahlung aufsichtsrechtlicher Corporate Governance auf das Aktienrecht. Überlagerung in der Bankaktiengesellschaft, Entstehungsgeschichte und Perspektiven für die börsennotierte Aktiengesellschaft, 2017, pp. 259 et seq., especially 267 et seq.; *Heribert M. Anzinger*, "Vorstands- und Aufsichtsratsvergütung: Kompetenzverteilung und Offenlegung nach der zweiten Aktionärsrechterichtlinie", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2019, 39, 68 et seq.

[14] See *Anna Scotti*, I codici di condotta tra mercato, impresa e contratto, 2019, pp. 203-209; *Antonio Blandini*, "La società quotata", Rivista di diritto dell'impresa 2010, 13, 29; *Pierpaolo Sanfilippo*, "I codici di autodisciplina societaria: nuovi profili di *enforcement*", Rivista del diritto commerciale e del diritto generale delle obbligazioni 2008, I, 929, 966 et seq.; *Mario Stella Richter jr*, "*Corporate sustainability Due Diligence*: noterelle semiserie su problemi serissimi", Rivista delle società 2022, 714, 719.

The need to develop common patterns is well known to the above mentioned Taxonomy Regulation, which not coincidentally establishes the Platform on Sustainable Finance in order to create a classification system of the business activities and consequently protect private investors from greenwashing, with the help of the best expertise on sustainability, also with a non-academic background. Climate change mitigation and adaptation, the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, protection and restoration of biodiversity and ecosystems, are the six environmental objectives of the Regulation.

[15] Article 4(1b) SFDR. See *Danny Busch* (fn. 6), p. 409 et seq.

[16] In general, *Holger Fleischer*, "Corporate Purpose: A Management Concept and its Implications for Company Law", European Company and Financial Law Review 2021, 161, 185. The same applies to Italian DNF: the company may decide not to conduct ESG-oriented policies, but in this case it must clearly state the reasons of such a choice for each of the relevant areas.

[17] It has been observed that the comply or explain rule generates some sort of factual

However, new transparency obligations about sustainability strategies do not end with the disclosure of a corporate policy to the benefit of an anonymous crowd of actual and potential investors.

On the other hand – and this is perhaps the most innovative part of the SFDR – specific disclosure duties have been introduced in the pre-contractual phase of the relationship with the individual client. In particular, pre-contractual disclosures of financial market participants (or financial advisers) shall describe the manner in which sustainability risks are integrated into their investment decisions (or into their investment or insurance advice) and the results of the assessment of the likely impacts of sustainability risks on the returns of the financial products they make available (or they give advice on). A detailed description is then required for each of the financial products offered (or recommended) to clients: the description shall include "a clear and reasoned explanation of whether, and, if so, how a financial product considers principal adverse impacts on sustainability factors"; it shall also include information on assessment methods adopted by the company to determine whether non-financial performance targets have been met. More specifically: *i)* for any *financial products that promote environmental or social characteristics*, information on how ESG-goals are met; *ii)* information about the index, if designated as a reference benchmark; *iii)* where a financial product has sustainable investment as its objective but no reference benchmarks are designated, an explanation on how that objective is to be attained [18].

---

obligation. Or, if it is not so in the immediate future, it will be in the medium-long term, once the target of the many recent reforms about sustainable success of companies – that is, the sensitization of the market and of the investor towards ESG-issues and factors, therefore the increasing of competition between companies based on impact assessments of their business activities – will be achieved. See *Vincenzo Calandra Buonaura*, Responsabilità sociale dell'impresa e doveri degli amministratori, in: Studi in ricordo di Pier Giusto Jaeger, 2011, p. 257, 279; *Diego Corapi*, "*Corporate governance*", Rivista del diritto commerciale e del diritto generale delle obbligazioni 2019, I, 545, 554; *Marco Maugeri* (fn. 9), 1029; *Sabino Fortunato* (fn. 9), 417; *Iris Barsan*, "Corporate accountability: non-financial disclosure and liability – A French perspective", European Company and Financial Law Review 2017, 399, 418; recently also *Marco Maugeri* (fn. 4), 1360; in German literature, among others, *Conrad Ruppel*, "ARUG II: Aktienrechtliche Trasparenzpflichten für kollektive Vermögensverwalter im Lichte des Investmentrechts", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2022, 219, 242 et seq.

[18] More specifically, SFDR highlights that "sustainable products with various degrees of ambition have been developed to date" (Recital No. 21) and so distinguishes financial products with environmental or social characteristics and financial products which have as an objective a positive impact on the environment and society. The first ones are regulated in Article 8 SFDR, whereby information on environmental or social characteristics and the relative index [so *(a)* information on how those characteristics are met, and *(b)* information on whether and how the index, if designated as a reference benchmark, is consistent with

3. *Active and passive information by financial market participants: preliminary findings*

In this context it is necessary to verify whether financial market participants have the possibility to obtain *passively* – that is without the need to address specific requests to the board – sufficient information on sustainability strategies performed by the investee companies.

In this respect, the most significant information is taken from DNF or, in the near future, from the management report itself, as the recent Directive (EU) 2022/2464 on corporate sustainability reporting includes in the latter any "information necessary to understand the undertaking's impacts on sustainability matters, and information necessary to understand how sustainability matters affect the undertaking's development, performance and position" (Article 1, amending Article 19a of the Directive 2013/34/EU).

Sustainability statements are not isolated.

Useful information may be obtained from the report provided for by Article 123-*ter* of the legislative decree n. 58/1998 (also known as "*testo unico dell'intermediazione finanziaria*" or, for brevity, "*t.u.f.*"), which explains

---

those characteristics] shall be included in pre-contractual information "provided that the companies in which the investments are made follow good governance practices". The same requirement is not provided for "where a financial product has sustainable investment as its objective and an index has been designated as a reference benchmark". In this case, which is regulated by Article 9, the information to be disclosed pursuant to Article 6(1) and (3) shall be accompanied by the following: *i)* information on how the designated index is aligned with that objective; *ii)* an explanation as to why and how the designated index aligned with that objective differs from a broad market index; *iii)* where no index has been designated, an explanation on how that objectives are to be attained. See *Danny Busch* (fn. 6), p. 416 et seqq.

In 2020 the Taxonomy Regulation has been joined to this already complex legal framework. It has implanted further information requirements on the two disclosure channels (pre-contractual disclosures and periodic reports) already provided for by SFDR. Particularly: *i)* where a financial product invests in an economic activity that contributes to an environmental objective, the distributor has to disclose information on environmental objectives to which the investment underlying the financial product contributes, and a description of how and to what extent the investments underlying the financial product are in economic activities that qualify as environmentally sustainable (Article 5 of Taxonomy Regulation); *ii)* where a financial product is not subject to Article 8(1) or to Article 9(1), (2) or (3) of Regulation (EU) 2019/2088, the information to be disclosed shall be accompanied by the following statement: "The investments underlying this financial product do not take into account the EU criteria for environmentally sustainable economic activities" (Article 7 of Taxonomy Regulation). See, among others, *Christos V. Gortsos*, The Taxonomy Regulation: More Important Than Just as an Element of the Capital Markets Union, in: Danny Busch/Guido Ferrarini/Seraina Grünewald (ed.), Sustainable Finance in Europe. Corporate Governance, Financial Stability and Financial Markets, 2021, p. 351, 362 et seq., 369 et seqq.

how remuneration policy contributes to "the company strategy, the pursuit of long-term interests and the sustainability of the company" (paragraph 3-*bis*) [19]. Furthermore, there is no shortage of details in the *report on corporate governance and ownership structure* (Article 123-*bis t.u.f.*), especially concerning diversity policies and the board's internal organisation, including the establishment of sustainability committees and any other governance tools aimed at performing the objectives laid down in the due diligence policy soon to be introduced [20].

[19] See also the Italian CGC, Recommendation No. 27, according to which performance goals conditioning the variable part of remuneration (but also claw-back or retention clauses) must be consistent with the company's strategic objectives and sustainable success perspectives. Further guarantees – with a view to strengthening sustainability and long-termism instances – are provided for in the same Corporate Governance Code in relation to: *i)* share-based remuneration plans, which must encourage alignment with the interests of shareholders over a long-term horizon (Recommendation No. 28); b) the remuneration of non-executive directors, who must not be "tied, except for a not substantial part, to financial performance objectives" (Recommendation No. 29). It is understood that «mit „nachhaltig" in diesem Sinne sind allerdings nicht die Nachhaltigkeitskriterien im Sinne von CSR gemeint». «Ob das Erreichen ethischer oder ökologischer Zielsetzungen Einfluss auf die Vorstandsvergütung haben soll, bleibt daher weiterhin der Entscheidungsfreiheit des Aufsichtsrats anheim gegeben» [*Gregor Bachmann*, "CSR-bezogene Vorstands- und Aufsichtsratspflichten und ihre Sanktionierung", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2018, 231, 243].

[20] See the recent Draft Directive on Corporate Sustainability Due Diligence, issued by EU Commission on February 23, 2022 [in literature, *Anna Genovese*, I bilanci di sostenibilità dopo la *Non Financial Reporting Directive*: rilevanza e prospettive, in: Concetto Costa/Aurelio Mirone/Roberto Pennisi/Pierpaolo M. Sanfilippo/Ruggero Vigo (ed.), Studi di diritto commerciale per Vincenzo Di Cataldo, Impresa, Società, Crisi d'impresa, 2.I, 2021, p. 375, 386 et seq. and fn. 36; about the enforcement mechanisms, *Luca Enriques*, "The European Parliament Draft Directive on Corporate Due Diligence and Accountability: Stakeholder-Oriented Governance on Steroids", Rivista delle società 2021, 319, 322 et seq.]. The aim of Draft Directive is to strengthen the engagement for sustainability by big corporations, not necessarily listed companies, but more generally: a) any limited liability companies operating in some high impact sectors and having more than two hundred and fifty employees on average and a net worldwide turnover of forty million euros; b) outside these sensitive sectors, any limited liability companies having more than five hundred employees on average and a net worldwide turnover of more than hundred and fifty million euros. The aim is likely to be achieved through the introduction of new duties that overcome the "comply or explain" logic: particularly, the duty to integrate sustainable due diligence into their policies, to identify actual or potential adverse human rights and environmental impacts (and to prevent or mitigate potential and bring to an end or minimise actual ones), to establish and maintain a complaints procedure, to monitor the effectiveness of the policy and the inherent measures, and to publicly communicate on due diligence (Articles 7 and 8 of the draft of directive). The due diligence policy shall contain, among the others, a code of conduct describing rules and principles to be followed by the company's employees and subsidiaries, and the measures taken to extend the application of the code to established business relationships. Finally, the introduction

Such a regulatory framework does not fail to raise problems of coordination with the new obligations resulting from SFDR.

The information set submitted by annual reports allows financial market participants to fulfil only the first core of transparency duties, while it raises doubts as to whether the interlocutor is the client in the pre-contractual phase.

This does not mean that institutional investors do not have tools at all to obtain non-financial information: it is enough to take into account the rules about information prior to the general meeting and the broad shareholders' rights in listed companies, and in particular the right to ask questions on topics on the agenda [21]. Moreover, a general right to ask the board questions on non-financial matters exists during the ordinary annual meeting [22], if only because the management report provided for by Article 2428 of the Italian civil code (below, for brevity, "*c.c.*") can not avoid to provide shareholders of listed companies with information on non-financial profiles [23].

Nevertheless, it would be illusory to think that such prerogatives solve the problem.

The DNF and the management report are undoubtedly crucial: a blind-request would open the way to vague statements and standardized templates; on the contrary, a request for clarification linked to specific textual data allows the institutional investors to nail down the board to not evasive answers [24]. However, it remains a critical point, far from easy

---

of an enforcement system (including administrative sanctions but also specific forms of civil liability for non-compliance) is relevant: Member States shall ensure that companies are liable for damages if they failed to comply with their due diligence obligations and "as a result of this failure an adverse impact that should have been identified, prevented, mitigated, brought to an end or its extent minimised through the appropriate measures laid down in Articles 7 and 8 occurred and led to damage".

[21] Not only during the meeting but even before: see *Paolo Montalenti*, "La Direttiva Azionisti e l'informazione preassembleare", Giurisprudenza commerciale 2011, I, 685, 687-692.

[22] In the further meetings – if further meetings are convened – each request would discount the limit of the necessary relevance to the topics on the agenda: see, especially from the perspective of listed companies, *Giuseppe Guizzi*, Gli azionisti e l'assemblea nelle società quotate tra mito e realtà, in: Niccolò Abriani/José Miguel Embid Irujo (ed.), Los derechos de los accionistas en las sociedades cotizadas. El proceso de adaptación de la Directiva 2007/36/CE, de 11 de julio, sobre el ejercicio de determinados derechos de los accionistas de sociedades cotizadas en España e Italia, 2011, p. 75, 94.

[23] *Paolo Montalenti*, La società per azioni: dallo *shareholder value* al successo sostenibile. Appunti, in: Concetto Costa/Aurelio Mirone/Roberto Pennisi/Pierpaolo M. Sanfilippo/Ruggero Vigo (ed.), Studi di diritto commerciale per Vincenzo Di Cataldo, Impresa, Società, Crisi d'impresa, 2.II, 2021, p. 671, 685.

[24] Moreover, DNF is accompanied by a certification of the statutory auditor that offers the institutional investor reference points of undoubted utility in the formulation

to overcome with the information and contact opportunities offered by the general meeting: the lack of a permanent dialogue with the directors of the investee company may create gaps for the information needs of the institutional investors and consequently of their clients.

An annual update of the reports published by the company may not be consistent with the policy adopted by the institutional investor. Special needs for clarifications, explanations and additions shall be taken into account in the perspective of pre-contractual disclosure. This would require the setting up of a specific context for an exchange of questions and answers between the institutional investors – acting on behalf of their current and potential clients – and the board of directors: waiting for the annual management report could prove to be inadequate in view of the best clients' protection.

All this brings back to the problem of information, of its *completeness* and above all of its *updating*.

If it is demonstrated that the client's interest in receiving up-to-date and complete non-financial information is worthy of legal protection, the requests of blockholders – even just for clarifications and additions about published statements – could lead the investee companies to promote permenent dialogue platforms, so as to follow the information needs manifested by the institutional investors in their engagement and sustainability policies in accordance to SHRII-Directive and SFDR.

4. *The client's interest in up-to-date (non-financial) information: premise*

The so-called *financial market participant* may be observed from a threefold point of view:

a) it is first an investor, a financial market actor which of the investee company knows what is common knowledge, on the basis of the mere reading of periodic reports accessible to all, and these reports have already been outlined in the previous paragraphs;
b) it is a portfolios manager that owes duties of diligence and transparency towards its clients, and at the same time, for the purposes of the so-called product governance regulation, it is a *distributor*, and more specifically an investment firm offering "financial instruments which it

of questions and in the identification of the profiles deserving attention: about this, see, among others, *Giovanni Strampelli* (fn. 10), pp. 1643 et seq.; *Sabino Fortunato* (fn. 9), 425.

does not manufacture" [Article 16(3) Directive 2014/65/EU] [25];

c) it is a blockholder who should play an active role in the investee company [26], and in this perspective shall adopt and publish a policy that illustrates its engagement on relevant matters, including strategy, financial and non-financial performances and risks, social and environmental impact and corporate governance [27].

The client's interest in receiving information comes into play at the second of the three levels just mentioned. In managing portfolios, the intermediary shall run a specific suitability test on the individual client [28]. According to the Directive 2004/39/CE (commonly known as Mifid I), when providing investment advice or portfolio management, it shall obtain the necessary information regarding:

(i) the client's knowledge and experience in the investment field relevant to the specific type of product or service,

(ii) the client's financial situation, especially the ability to withstand losses, and

(iii) the client's investment objectives, so that the intermediary can implement investment strategies "that are suitable for him" [Article 19(4)].

It is clear that *inquiring on the financial product and therefore on the investee company* is an unavoidable step if the intermediary – as indeed suitability rule prescribes – shall verify the consistency of the investment

---

[25] *Dionysia Katelouzou/Konstantinos Sergakis*, "Shareholder Stewardship Enforcement", ECGI - Working Paper No. 514/2020, 2020, available at *ssrn*, pp. 3 et seq. of the manuscript; *Marco Maugeri* (fn. 4), 1355.

[26] Hence the idea that these special shareholders have fiduciary duties as reflections of the interests they are intended to safeguard. See, among others, *Roberta S. Karmel*, "Should a Duty to the Corporation Be Imposed on Institutional Shareholders?", Business Lawyer 2004, 1, 15 et seqq.; *Iman Anabtawi/Lynn Stout*, "Fiduciary Duties for Activist Shareholders", Stanford Law Review 2008, 1255, 1293 et seqq.

[27] And how they conduct dialogues with investee companies, exercise voting rights and other rights attached to shares, cooperate with other shareholders, communicate with relevant stakeholders of the investee companies and manage actual and potential conflicts of interests in relation to their engagement: *Alessandra Daccò*, Il ruolo degli investitori nella *governance* delle società, in: Mario Cera/Gaetano Presti (ed.), Il Testo Unico Finanziario, II, 2020, p. 1782, 1803 et seqq. Already before SHRII-Directive, see, among others, the Dutch experience: *Richard G.J. Nowak*, Corporate Boards in the Netherlands, in: Paul Davies/ Klaus J. Hopt/Richard Nowak/Gerard Van Solinge (ed.), Corporate Boards in Law and Practice. A Comparative Analysis in Europe, 2013, p. 484; in the light of the recent debate on sustainability due diligence, *Vanessa Knapp*, "Sustainable Corporate Governance: A Way Forward?", European Company and Financial Law Review 2021, 218, 237.

[28] *Emanuele Rimini*, Le regole di condotta, in: Mario Cera/Gaetano Presti (ed.), Il Testo Unico Finanziario, I, 2020, p. 416, 443.

with the financial and non-financial objectives of the client[29].

The obligations arising from the recent product governance regulation lead to same result[30]. According to the Article 16(3) Directive 2014/65/EU (commonly known as Mifid II), an investment firm which manufactures financial instruments – that is the equivalent of the *investee company*, for the puroposes of the SFDR and of this manuscript, or rather, of those, among the investee companies, which are also "investment firms" – "shall make available to any distributor all appropriate information on the financial instrument"[31]; the distributor "shall have in place adequate arrangements to obtain the information" on financial instruments, so that it can understand their characteristics and identify their target market (or just actualize it, if already defined by the manufacturer).

Both the suitability test and the distribution strategy are therefore synonymous with a duty of active information. And there can be no reasonable

---

[29] In this regard, ESMA includes the rank of *green* or *ethical investment* among the variables that the manufacturer first and the distributor, then, must take into account in defining the target market and drawing up the distribution strategy. See *Danny Busch/Guido Ferrarini/Arthur van den Hurk*, "The European Commission's Sustainable Finance Action Plan", 2018, available at *ssrn*, p. 8 of the manuscript; *Eckart Bueren*, "*Sustainable Finance*", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2019, 813, 850 et seq., 868, also about Article 8(3)(c)(ii) of Regulation (EU) No. 1286/2014 (the so-called "PRIIPs Regulation"); *Robert Piwowarski*, Anlegerleitbilder und Anlegerschutz der MIFID II. Untersucht anhand der Product Governance und der Anlageberatung, 2020, p. 210; *Veerle Colaert*, Integrating Sustainable Finance into the MiFID II and IDD Investor Protection Frameworks, in: Danny Busch/Guido Ferrarini/Seraina Grünewald (ed.), Sustainable Finance in Europe. Corporate Governance, Financial Stability and Financial Markets, 2021, p. 445, 454 et seq., 462 et seq.; *Maria Elena Salerno*, "L'integrazione dei fattori di sostenibilità nelle regole di comportamento dell'intermediario finanziario: un ritorno al modello di distribuzione *orientato al prodotto*", Diritto della banca e del mercato finanziario 2022, 53, 98 et seqq.

[30] Indeed, according to MIFID II-Directive, a "distributor" – that is a firm offering, recommending or selling an investment product and service to a client, therefore a "financial market participant" in the sense used in SFDR – shall take all reasonable steps to ensure that the level of product information obtained from the manufacturer (here, the investee company) *is of a reliable and adequate standard*, in order to plan a distribution strategy in accordance with the characteristics, objectives and needs of the target market: see ESMA, Guidelines on MIFID II product governance requirements, § 61; see also Article 10(2) SHRII-Directive. Such a duty to obtain information from the investee company occurs even if the manufacturer is not an entity subject to MIFID II; in other words, the distributor shall determine the target market also when the target market is not defined by the manufacturer: see, into Italian financial market law, Article 74(2) of the so-called "Regolamento Intermediari" (Consob - Resolution No. 20307 of 15 February 2018). See also *Filippo Annunziata*, "Il recepimento di MIFID II: uno sguardo di insieme tra continuità e discontinuità", Rivista delle società 2018, 1100, 1120 et seq.

[31] Including the identified target market of the financial instrument.

doubt that such an information needs to be updated.

In this regard, the SFRD does not help to solve the problem where it states that information shall be disclosed "*in accordance with Article 24(4) of Directive 2014/65/EU*" [Article 6(3) SFDR], namely "on a regular basis, at least annually, during the lifespan of the investment".

Such a standard essentially concerns costs and charges of products or services, and therefore *financial* performances, and it is no coincidence that the same Article 24 provides the possibility of an aggregate representation of distinct elements ("to allow the client to understand the overall cost as well as the cumulative effect on return of the investment", unless the client requests otherwise, thereby opting for an itemised breakdown of the costs of each financial product): a similar representation of sustainability risks is unworkable[32]. Not only: the duty to *inform the client on a regular basis, at least annually, during the lifespan of the investment*, implies that the investment has already been concluded and the suitability test has already been carried out. It is clear that the rule is designed to manage the *post-contractual information about costs and charges*, especially with respect to cases of downgrading of financial products' rating.

At most, it may mean that annual frequency – in updating the elements to be provided to the client – is some sort of *Mindestnorm* also for *non-financial* information and also in view of *pre-contractual* disclosures[33].

In this way, Article 24: a) *in the post-trade phase*, could mean the duty of monitoring *at least once a year* the evolution of returns, financial costs and risks as well as the results of non-financial performances in order to report to the client, it being understood that it is up to the intermediary

---

[32] Indeed, what an investment firm can do is to explain to the client the extent to which the investee companies pursue sustainability objectives and at most to formulate synthesis assessment. This is different from the aggregate representation of risks, which does not seem to be possible also because of the lack of a single reading key for the ESG-performances. Besides, the issue of stakeholder delineation «is a thorny one. Different stakeholders will have different, often conflicting interests, so whom to consult and how much weight to give their input» depends on the policy of the individual company: *Mark J. Roe/Holger Spamann/Jesse M. Fried/Charles C.Y. Wang*, "The Sustainable Corporate Governance Initiative in Europe", Yale Journal on Regulation Bulletin 2021, 133, 151.

[33] It is in this sense that Recital No. 21 SFDR should also be understood, particularly the part that provides, as regards disclosure obligations for financial market participants (about the alignment of the relevant indexes with the environmental or social characteristics of the financial products they make available), that "those disclosures by means of periodic reports should be carried out annually". Which means: if those disclosures are included into periodic reports of the financial market participants, their lifecycle shall not exceed the year. See *Rüdiger Veil/Katrin Deckert /Jörn Axel Kämmerer/Christian Voigt*, Nachhaltige Kapitalanlagen durch Finanzmarktregulierung. Reformkonzepte im deutsch-französischen Rechtsvergleich, 2019, pp. 67 et seqq.

to implement a business policy based on a more frequent update; b) *at the pre-contractual stage*, could mean the duty of acquiring information as up-to-date as possible, in any case not later than the year preceding the conclusion of the contract[34], whereby, however, it is up to the intermediary to put in place a policy that provides for its commitment to acquire from the investee companies updated information on a half-yearly or quarterly basis.

5. *The client's interest in up-to-date (non-financial) information: the "publicly available information"*

Once any misunderstandings arising from the annual update rule have been cleared out of the way:

(i) there is no difficulty in finding a client's interest – a legally protected interest, that is – in non-financial information;

(ii) there is no difficulty in finding a client's interest – a legally protected interest, that is – in the most up-to-date (non-financial) information.

An annual frequency of the update may be inadequate: or in an *objective sense*, due to the occurrence of events that undermine the achievement of specific goals or that, perhaps more rarely, allow an overperformance; or in a *subjective sense*, because the intermediary itself chooses to adopt a policy based on a more frequent monitoring of the sustainability performances of investee companies.

Moreover, there is little point – in order to argue the contrary – in appealing to Article 74(2) *Reg. Intermediaries*, which seems to make unnecessary any active conduct of the "distributor" (here the equivalent of the "financial market participant") towards the investee company when the information – helpful in inquiring on financial products – "is publicly available"[35]; whereby "publicly available" means "clear, reliable and addressed to the market in compliance with regulatory requirements", such as – it expressly says so – information arising from the fulfilment of reporting duties under Directives 2003/71/EC and 2004/109/EC, and therefore the half-yearly report, which

[34] Moreover, «der Rückgriff auf den 'Jahresbericht' als Informationsmedium scheint von den bestehenden gesellschaftsrechtlichen Bestimmungen inspiriert zu sein»: *Rüdiger Veil/Katrin Deckert /Jörn Axel Kämmerer/Christian Voigt* (fn. 33), p. 69.

[35] Where all relevant information is not publicly available, "the reasonable steps should include entering into an agreement with the manufacturer or its agent in order to obtain all relevant information enabling the distributor to carry out its target market assessment": ESMA, Guidelines on MIFID II product governance requirements, § 61. About this, see *Verle Colaert*, "Product Governance: Paternalism Outsourced to Financial Institutions?", 2019, available at *ssrn*, p. 6 of the manuscript.

is still required [Article 5 of the Directive 2004/109/EC, amended by the Directive 2013/50/EU, and Articles 154-*ter*(2) *t.u.f.* and 81 *Reg. Issuers*], and the quarterly reports, no longer provided for as mandatory [Article 3(1a) of the Directive 2004/109/EC, amended by the Directive 2013/50/EU, and Articles 154-*ter t.u.f.* and 82-*ter Reg. Issuers* [36]].

The fact is that the Article 74 *Reg. Intermediaries* has regard only to financial profiles, so much so that ad hoc references to sustainability information have been introduced in the *Reg. Intermediaries* only as a result of a recent resolution by Consob (on July 2022). Above all, the annual or half-yearly update constitutes a minimum standard, and in any case the added value that a dialogue, especially where conducted in a two-way modality, can give to the circulation of non-financial information should not be overlooked.

This is all the more true since the recent Directive (EU) 2022/2464 is going to reorganise the whole sustainability reporting system of listed companies, thus bringing them – even in the absence of specific constraints – to implement joint treatment of financial and non-financial profiles in any periodic statement addressed to the market, both on a mandatory (as for the half-quarterly report) and on a voluntary basis (as for the additional quarterly information).

6. *ESG-dialogues with institutional investors: background and problems*

In summary, if the institutional investor considers sustainability risks to be significant (that is, if it decides to draw up a policy that includes the assessment of sustainability risks and gives it a decisive weight in the selection of investments), it can not limit itself to thoroughly collate the information available on the basis of periodic reports – if published – by the company. Which means that: *i)* if the DNF is not available, the institutional investor has every interest in acquiring information on the sustainability strategies performed by the company (this is the policy published pursuant to Article 3 SFDR which requires the institutional investor to obtain non-fi-

[36] Member States are permitted to require companies to publish additional periodic financial information provided that the contents of the additional report do not lead to an excessive focus on their short-term results and performances (see *Hendrik Brinckmann*, Periodic Disclosure, in: Rüdiger Veil (ed.), European Capital Markets Law[2], 2017, p. 311, 328-332). And the same requirement is provided for by Article Article 154-*ter*(5-*bis.c*) *t.u.f.* in view of the voluntary reintroduction – by the individual company – of quarterly periodic financial reports. This point will be raised again later (see § 8).

nancial information or, failing that, to discard the financial product from the basket which is made available to clients); *ii)* if the company publishes the DNF or statements of similar content, the institutional investor has the duty to request any clarifications and additions it deems necessary or appropriate in order to best protect the client's interest in receiving non-financial information; *iii)* then, the institutional investor has every interest in monitoring the implementation of the non-financial commitments undertaken by the company through the DNF or other targeted reports: an update of the investee company's non-financial profile on an annual basis may not allow for satisfactory protection of clients' information interests [37].

Ultimately, the proper performance of disclosure duties requires active (and not merely passive) information processes. The result is the need to implement forms of engagement that allow the institutional investor to have a direct contact with the board, uncoupled from the annual appointment that hinges on the approval of financial statements [38]. This is in keeping with the mutual integration process regarding financial and non-financial information, along the path of development and harmonization of European CSR reporting systems.

It is in this sense that sustainability-related disclosure raises a problem of corporate governance and is therefore fully part of the debate – currently underway – on how to implement the relationships (and in particular the dialogue) between institutional investors and board of directors in listed companies [39].

---

[37] Moreover, according to the recent Draft Directive about corporate due diligence and corporate accountability, "Member States shall ensure that undertakings carry out in good faith effective, meaningful and informed discussions with relevant stakeholders when establishing and implementing their due diligence strategy". See, about this, *Eddy Wymeersch/Martin Winner/Rolf Skog/Michael Schouten/Markus Roth/Andrés Recalde/Alain Pietrancosta/Adam Opalski/Klaus Hopt/Guido Ferrarini/Susan Emmenegger/Paul Davies* (so-called *European Company Law Experts Group*), "The European Parliament's Draft Directive on Corporate Due Diligence and Corporate Accountability", § 38.

[38] *Francesco Denozza*, Lo scopo della società tra *short-termism* e *stakeholder empowerment*, in: Concetto Costa/Aurelio Mirone/Roberto Pennisi/Pierpaolo M. Sanfilippo/Ruggero Vigo (ed.), Studi di diritto commerciale per Vincenzo Di Cataldo, Impresa, Società, Crisi d'impresa, 2.I, 2021, p. 281, 306, fn. 50. See also *Paolo Cuomo*, "Il consiglio di amministrazione e la gestione dell'impresa nel codice di *corporate governance*", Rivista delle società 2021, 79, 88.

[39] About the effect of internal corporate mechanisms on the quality of CSR reporting, see *Tobias Gerwing/Peter Kajüter/Maximilian Wirth*, "The role of sustainable corporate governance in mandatory sustainability reporting quality", Journal of Business Economics 2022, 517, 549 et seqq.; *Christine Adel/Mostaq M. Hussain/Ehab K.A. Mohamed/Mohamed Basuony*, "Is corporate governance relevant to the quality of corporate social responsibility disclosure in large European companies?", International Journal of Account-

In this regard, it is easy to predict that the attention of operators will be almost entirely focused on three main elements:

a) the directors entitled to intervene: that is, whether all directors should or may participate in the meeting, or whether the participation of the board is necessarily selective, thus excluding directors who are traditionally more sensitive to the need of protection of minority shareholders or to ESG-issues;
b) the modality of the dialogue, if one-way or two-way. The company's practice seems to steer towards flexible solutions, thus avoiding a strict division by subject matter. Not only: it does not rule out the participation of stakeholders other than shareholders. In this regard, in order to decide the modality of the meeting, some dialogue policies launched in 2020 provide that the appointed director "shall make a case-by-case assessment based on the company's best interest", taking into account some further factors, such as past dialogue experiences, actual relevance of the request and its foreseeable usefulness (also in view of long-term value creation), the characteristics of the requesting stakeholders and its conduct during previous interactions with the company[40];
c) the selection of shareholders entitled to participate[41]. It is reasonable to envisage a particularly cautious attitude on the company's side about that. There is a strong risk that closed-door dialogues raise the suspicion of an infringement of market abuse regulation [although – as will

ing and Information Management 2019, 301, 327 et seqq.; *Christine A. Mallin/Giovanna Michelon/Davide Raggi*, "Monitoring Intensity and Stakeholders' Orientation: How Does Governance Affect Social and Environmental Disclosure?", Journal of Business Ethics 2013, 29, 33 et seqq. See also *Alice Klettner/Thomas Clarke/Martijn Boersma*, "The Governance of Corporate Sustainability: Empirical Insights into the Development, Leadership and Implementation of Responsible Business Strategy", Journal of Business Ethics 2014, 145, 149 et seqq.; *Patrick Velte/Martin Stawinoga*, "Do chief sustainability officers and CSR committees influence CSR-related outcomes? A structured literature review based on empirical-quantitative research findings", Journal of Management Control 2020, 333, 373 et seqq.; *Swarnodeep Homroy/Wentao Li/Nassima Selmane*, "Director Expertise and Compliance to Corporate Social Responsibility Regulations", 2021, available at *ssrn*, pp. 20 et seqq. of the manuscript. In this regard, however, the risk of excessively strict application of the standard of good governance should not be overlooked, especially in light of the recent draft directive on corporate due diligence and accountability: see *Marco Ventoruzzo*, "Note minime sulla responsabilità civile nel progetto di direttiva *Due Diligence*", Rivista delle società 2021, 380, 382; *Umberto Tombari*, "La Proposta di Direttiva sulla *Corporate Due Diligence* e sulla *Corporate Accountability*: prove (incerte) di un *capitalismo sostenibile*", Rivista delle società 2021, 375, 378.

[40] See *Policy for managing the dialogue with shareholders and other stakeholders*, Document approved by the Board of Directors of Snam S.p.A. on 29 July 2021, 17.

[41] See above, § 1.

be said below – there is no lack of suitable tools to make the dialogue compliant with constraints laid down in the Article 17 of the Regulation (EU) 596/2014]: it is no coincidence that the Italian CGC itself identifies the interlocutor of the board in "shareholders in general" [42].

The most sensitive issue is probably the first.

In this regard, Assonime – the representative association of the Italian listed companies – has recently expressed a clear preference for the centralisation of powers upon the chairman and the chief executive officer. Indeed, if on the one hand Assonime's *Principles for Listed Companies' Dialogue with Investors* are intended to enhance the role of all directors (establishing the board's responsibility for the drafting of the guidelines about the dialogues and for the monitoring tasks relating to their effectiveness over time), on the other hand they entrust the management of the dialogue "exclusively" to a "Responsible Director" and assign such a role to the chief executive officer and the chairman (in conjunction or in alternative and in any case "consistently with their powers to represent the company and competences on the topic of the dialogue"). This therefore rules out any participation of the lead independent director and generally of non-executive directors. Or rather: it does not allow to adopt a policy that provides for the institutional involvement of such directors during the meetings [43].

7. *ESG-dialogues with institutional investors: the participation of ESG-friendly directors*

The resistance to the involvement of directors other than the chairman and chief executive officers could prove to be groundless if the dialogue should be necessary to check the results of sustainability policies during the year and consequently update the information available for the purposes

[42] See also CONSOB, *Q&A of 18 March 2021 on selective disclosure towards shareholders and the controlling shareholder in particular, as well as on the publication of inside information relating to business plans*: "the law recognises the need to ensure, also from a subjective point of view of corporate governance, the protection of all categories of shareholders, including minority shareholders, through the principle of equal treatment referred to in article 92" *t.u.f.*, and "the express provisions of information flows to individual shareholders are found in our legal system only in the presence of a controlling relationship".

[43] See *Assonime*, Principles for Listed Companies' Dialogue with Investors, *sub* Principle 4, according to which the Responsible Director has the power of involving in the dialogue, when appropriate and allowed by the policy, individual board members, including independent ones and particularly the lead independent director or the chairperson of the relevant committee, having regard to their specific competences entrusted by the board.

of suitability rule and product governance, as well as to obtain not otherwise available information, especially from companies not publishing DNF or any other non-financial reports, or to receive clarifications or additions about them, where published.

Moreover, the Italian CGC, which recommends listed companies to adopt a dialogue policy, adds that, in doing so, the board shall take into account the engagement policies of institutional investors and asset managers[44].

Such a detail must not go unnoticed. On the contrary, it establishes *a close interdependence between the dialogue policy adopted by the companies and the engagement policy implemented by their institutional investors*. At least in companies that adhere to the Italian CGC, the board can not fail to take into account any request by institutional investors to schedule meetings in accordance to their engagement policy. If the institutional investor undertakes to promote regular meetings with the minority director or non-executive and independent directors or the lead independent director himself[45], the board shall take this into account when adopting the dialogue policy[46].

Taking this into account does not mean blindly transposing the instructions provided by the engagement policy; on the contrary, it means going along with them – otherwise justifying any different governance choice[47] – *in so far as they are worthy of protection and proportionate*. Requirements that can hardly be said to be lacking in the hypothesis here considered, at least as long as the request for meetings with special directors:

i) covers ESG issues;
ii) is aimed at the fulfilment of sustainability-related disclosure duties;
iii) leaves open the possibility to support the (independent or) lead inde-

---

[44] See *Piergaetano Marchetti*, "Il nuovo Codice di Autodisciplina delle società quotate", Rivista delle società 2020, 268, 278; out of the Italian legal framework, *Deirdre Ahern*, "Turning Up the Heat? EU Sustainability Goals and the Role of Reporting under the Non-Financial Reporting Directive", European Company and Financial Law Review 2016, 599, 624.

[45] *Giovanni Strampelli* (fn. 1), 427 et seqq. In general, the importance of pro-active directors has been highlighted by *Brenda Hannigan*, The Rise of Stewardship – "Smoke and Mirrors" or Governance Realignment?, in: Helmut Siekmann in Gemeinschaft mit Andreas Cahn/Tim Florstedt/Katja Langenbucher/Julia Redenius-Hövermann/Tobias Tröger/Ulrich Segna (ed.), Festschrift für Theodor Baums zum siebzigsten Geburtstag, 2017, p. 561, 576 et seqq.

[46] The argument could be widened to include the position of the supervisory board: see *Giovanni Strampelli* (fn. 4), 950 et seq.

[47] See *Antonio Cetra/Paolo Cuomo*, "Responsabilità sociale" e gestione dell'impresa azionaria nel nuovo Codice di *Corporate Governance*, in: Concetto Costa/Aurelio Mirone/Roberto Pennisi/Pierpaolo M. Sanfilippo/Ruggero Vigo (ed.), Studi di diritto commerciale per Vincenzo Di Cataldo, Impresa, Società, Crisi d'impresa, 2.I, 2021, p. 165, 183.

pendent director with a so-called "Responsible Director", to be identified – according to Assonime – in the chairman or the chief executive officer(s).

8. *ESG-dialogues with institutional investors and organizational arrangements: quarterly reports to the supervisory board and periodic meetings about sustainability goals*

An efficient governance solution could be borrowed from the model of quarterly financial reports: the company could identify four windows during the year and schedule a meeting with its institutional investors and asset managers at the end of each of them.

A quarterly reporting duty – towards the market – has been initially provided for by the Italian corporate law: then, it has been repealed as a result of the Directive 2013/50/EU. Nevertheless, there is nothing to prevent the company from restoring the system of quarterly financial reports on a voluntary basis: the union of the two forms of reporting (any interim financial reports and the dialogues with institutional investors on sustainability policies) could then make the option for quarterly financial reporting more solid, also in the light of the paragraph 5-*bis*, c), of the Article 154-*ter t.u.f.*, which does not rule out the publication of additional reports provided that in such a way an excessive focus on the company's short-term returns and performance is not being encouraged[48].

Such an organizational choice could be accompanied by the establishment of an ESG-committee with the power to receive requests for clarification or integration about the sustainability policies of the company within a cut-off deadline and with the assistance of the Investor Relations' structure[49]. In any case, beyond the individual governance choices, it remains the

[48] See *Hendrik Brinckmann* (fn. 36), p. 331.

[49] About ESG-committees, see *Guido Ferrarini/Michele Siri/Shanshan Zhu*, "The EU Sustainable Governance Consultation and the Missing Link to Soft Law", 2021, ECGI - Law Working Paper No. 576/202, available at *ssrn*, p. 20 of the manuscript, particularly about the Luxembourgish, the Spanish and the Danish Corporate Governance Codes (who encourage companies to identify and assign specific CSR functions to a pre-existing committee or to an *ad hoc* sustainability committee); *Antonio Cetra/Paolo Cuomo* (fn. 47), 180 et seq.; *FIN-GOV*, Massimo Belcredi/Stefano Bozzi (ed.), Rapporto FIN-GOV sulla *corporate governance* in Italia, 2021, pp. 25-28; *Lucia Calvosa* (fn. 12), p. 10 of the manuscript; *Paolo Cuomo* (fn. 38), 88 et seqq.; *Daniela M. Salvioni/Francesca Gennari*, "Stakeholder Perspective of Corporate Governance and CSR Committees", Symphonya Emerging Issues in Management 2019, 28, 32 et seqq.; *Ignacio Danvila del Valle/Jose Maria Díez Esteban/*

duty of the board to plan proper information flows [50]. This would require the board to adopt an internal regulation based on the following elements:

(i) the ESG-committee could examine the disclosure requests submitted by institutional investors with a preliminary function: a filter function, in order to verify their *materiality*, thus their relevance to the topics of the quarterly meeting [51], and a coordination function with other board structures, committees at first [52];

(ii) this should be followed up with a collective discussion on the requests submitted by institutional investors. It does not mean that internal rules of the board can not assign to the chief executive officer and the chairman a role of proposal as for the disclosure to be given to institutional investors [53]: all that matters is that a moment of information

---

Óscar Lopez-de-Foronda Pérez, "Corporate Social Responsibility and Sustainability Committee Inside the Board", 2013, available at *ssrn*, p. 9 of the manuscript; *Jan Endrikat/Charl de Villiers/Thomas W. Guenther/Edeltraud M. Guenther*, "Board Characteristics and Corporate Social Responsibility: A Meta-Analytic Investigation", 2020, available at ssrn, pp. 11 et seqq. of the manuscript; *Marco Cian*, "Clausole statutarie per la sostenibilità dell'impresa: spazi, limiti e implicazioni", Rivista delle società 2021, 475, 498 et seq.

[50] Which is a corollary of the general duty to plan suitable organizational arrangements. The same set of prerogatives generally provided for by the Articles 2381(3/5) and 2403(1) *c.c.* – and distributed between the chief executive officers, the monitoring board of directors and the supervisory board [*Giorgio Meo*, L'amministrazione delle società quotate, in: Mario Cera/Gaetano Presti (ed.), Il Testo Unico Finanziario, II, 2020, p. 1813, 1861 et seqq.; *Pietro Abbadessa*, Profili topici della nuova disciplina della delega amministrativa, in: Pietro Abbadessa/Giuseppe Benedetto Portale (ed.), Il nuovo diritto delle società. Liber amicorum Gian Franco Campobasso, 2, 2006, p. 491, 493 et seqq.] – is deemed therefore to apply also to this context.

[51] In some policies such a role is performed by the Investor Relations corporate department: *Policy for managing the dialogue with shareholders and other stakeholders*, Document approved by the Board of Directors of Snam S.p.A. on 29 July 2021, 15.

[52] If the request concerns the remuneration policy and the evaluation of non-financial results for attribution to the chief executive officer or managers of the variable compensation, the ESG-Committee shall forward the request to the remuneration committee in order to obtain its assessments. Similar forms of prior coordination between committees operate in the face of requests concerning the appointments (especially in view of the implementation of diversity policies) or the identification of the main corporate risks. See, recently, *Marcello Bianchi/Mateja Milič*, "Le politiche di *engagement* delle società tra teoria e prassi", Rivista delle società 2021, 1324, 1333.

[53] Particularly: *a)* the chief executive officer, for business profiles (like the quality of relationships with business partners, including payment practices); *b)* the chairman for the governance profiles (such as "the role of the undertaking's administrative, management and supervisory bodies, including with regard to sustainability matters, and their composition", "business ethics and corporate culture, including anti-corruption and anti-bribery", "political engagements of the undertaking, including its lobbying activities":

sharing and cross-checking takes place inside the board, *both* in relation to compliance assessments (which cannot but be joint assessments [54], especially in the light of market abuse regulation) *and* because of elementary needs of participation of all the directors in any discussion about issues of strategic relevance [55] (and besides, disclosure of interim non-financial underperformances or overperformances could have a not negligible impact on the investment policies of blockholders);

(iii) with specific regard to the profiles that affect the chief executive officer's competence, it seems appropriate to implement forms of coordination between financial reporting and non-financial reporting. A cut-off term for sending any requests to the ESG-committee could be set so as to allow the board to discuss simultaneously: *a)* the answers to be given to institutional investors and, if provided, the quarterly periodic reports; *b)* in any case, the answers to be given to institutional investors and the half-yearly report;

(iv) the proper functioning of such a reporting system assumes adequate information for all directors before the meeting of the board, hence the need for the chairman to exercise his monitoring and coordination powers [56], but also the opportunity to extend the discussion of the items on the agenda to the key management personnel, when having

---

see Corporate sustainability reporting directive); *c)* a joint competence for mixed profiles or programmatic assessments about social factors (particularly about equal opportunities, working conditions and respect for the human rights, fundamental freedoms, democratic principles and standards).

[54] See *John Armour/Brandon Garrett/Jeffrey Gordon/Geeyoung Min*, "Board Compliance", Minnesota Law Review 2020, 1191, 1212; *Sean J. Griffith*, "Corporate Governance in an Era of Compliance", William & Mary Law Review 2016, 2075, 2108; *Mark Fenwick/Erik P.M. Vermeulen*, "Evaluating the Board of Directors: International Practice", ECGI - Law Working Paper No. 425/2018, available at *ssrn*, p. 23 of the manuscript; *Guido Ferrarini*, Funzione del consiglio di amministrazione, ruolo degli indipendenti e doveri fiduciari, in: Margherita Bianchini/Carmine Di Noia (ed.), I controlli societari. Molte regole, nessun sistema, 2010, p. 51, 55 et seq.; *Niccolò Abriani*, "Il nuovo Codice di *Corporate Governance*", Rivista di diritto societario 2022, 253, 268 et seqq.

[55] See *Assonime*, Gli obblighi di comunicazione delle informazioni non finanziarie - Circolare n. 13, 12 June 2017, p. 39; more generally, see, among others, *Jan Jezak*, "The Board of the Directors as an Active Participant in the Strategic Decision-Making Process: Theory and Practice (Empirical Evidence)", 2010, available at *ssrn*, pp. 3 et seqq. of the manuscript; *Paolo Cuomo* (fn. 38), 83 et seq.; *Lucia Calvosa*, Sui poteri individuali dell'amministratore nel consiglio di amministrazione di società per azioni, in: Amministrazione e controllo nel diritto delle società. Liber amicorum Antonio Piras, 2010, p. 356, 373.

[56] See *Giovanni Strampelli* (fn. 1), 428; in general, *Pierpaolo M. Sanfilippo*, Il presidente del consiglio di amministrazione nelle società per azioni, in: Pietro Abbadessa/Giuseppe Benedetto Portale (ed.), Il nuovo diritto delle società. Liber amicorum Gian Franco Campobasso, 2, 2006, p. 441, 464.

the ability to conduct the relevant activities[57].

The involvement of the supervisory board would also be unavoidable[58]. In this regard, the need to make more efficient use of information flows could suggest the adoption of a policy in which selective dialogues are associated with the quarterly reports to be drawn up and transmitted by the directors to the supervisory board[59].

Actually, it is not impossible to argue that a duty of quarterly reporting on sustainability strategies and goals already falls upon the chief executive officer pursuant to Article 150(1) *t.u.f.*, constituting therefore a mandatory rule for all listed companies: according to the Italian legal framework, subject of the interim reports are not only the most significant transactions or transactions not concluded on an arm's length basis, either because they are influenced by a holding company or because one or more directors have an

---

[57] See *Policy for managing the dialogue with shareholders and other stakeholders*, Document approved by the Board of Directors of Snam S.p.A. on 29 July 2021, 19.

[58] Besides, the board of directors and the supervisory board perform a common function of monitoring the day-by-day management and the adequacy of the organisational arrangements: *Niccolò Abriani*, Il ruolo del collegio sindacale nella governance del nuovo millennio, in: Michele Vietti (ed.), La *governance* nelle società di capitali. A dieci anni dalla riforma, 2013, p. 329, 335, 339 et seqq.; *Id.*, L'organo di controllo (collegio sindacale, consiglio di sorveglianza, comitato per il controllo della gestione), in: Umberto Tombari (ed.), *Corporate governance* e 'sistema dei controlli' nella s.p.a., 2013, p. 95, 110 et seqq. See also *Carlo Angelici*, In tema di rapporti fra "amministrazione" e "controllo", in: Pietro Abbadessa (ed.), Dialogo sul sistema dei controlli nelle società, 2015, p. 145, 154.

This is all the more reason to involve the so-called *consiglio di sorveglianza* in the two-tier board system. In this regard, it is no coincidence that in Germany they discuss the question of eligibility of dialogues between the supervisory board (*Aufsichtsrat*) and institutional investors, or rather the question of the limits to the «externe Kommunikationskompetenz» of the supervisory board («als 'Annexkompetenz' zu seinen Rechten und Pflichten aus § 111 Absatz 1 AktG»): see *Hauke Hein*, Die Stewardship-Verantwortung institutioneller Investoren. Plädoyer für einen aktienrechtkonformen Deutschen Stewardship Kodex, 2018, pp. 252 et seq.; *Laura Greimel*, Kapitalmarktkommunikation des Aufsichtsrats, 2020, pp. 134 et seq.; *Maximilian Zobel*, "Besondere Rechtsprobleme von Gesprächen oder Vereinbarungen des Aufsichtsrats mit Aktionären oder künftigen Investoren", StudZR Wissenschaft Online 1/2018, 204; for some sort of "Rechtsfortbildung extra legem", *Philipp Maximilian Holle*, "Kommunikation des Aufsichtsrats mit Marktteilnehmern Aufsatz", Zeitschrift für Wirtschaftsrecht 2019, 1895, 1897. See also *Omid Ebrahimzadeh*, Der Investorendialog des Aufsichtsrats, 2020, p. 89, who suggests – «zur Begründung der Annexkompetenz» of the supervisory organ – a «Grundsatz der Organadäquanz», that is the principle according to which «Entscheidungen von dem Organ getroffen werden sollten, das dafür seiner Zusammensetzung, Funktion und Verfahrensweise über die besten Voraussetzungen verfügt».

[59] See *Giovanni Strampelli*, "I flussi informativi nelle società quotate: poteri e doveri del collegio sindacale", Rivista di diritto privato 2017, 79, 82 et seq. Moreover, the involvement of the statutory auditor cannot be excluded, at least in companies that publish the DNF and in view of his power to issue certification on the contents of the statement.

interest in them. According to the text of the Article 150(1) *t.u.f.*, the report deals first and generally with *the activity carried out by the company and its subsidiaries*, and this – if only for listed companies who have adopted and published a business strategy that promotes sustainable success – should not give rise to doubts about the need to include sustainability matters in reporting to the supervisory board[60].

In short, periodic meetings with institutional investors could take shape by budding from the reports submitted by the directors – especially chief executive officer – to the supervisory board[61]. The quarterly-based reporting system there provided could become the engine of a virtuous programme that develops along parallel tracks, each of which can strengthen the other: a first track, based on the sharing of sustainability goals and non-financial profiles between chief executive officer, board of directors, top management, supervisory board and statutory auditor (which is a necessary consequence of the duty to set up proper organizational arrangements); a second track, based on the dialogue between the board of directors (or the lead independent director or a specific ESG-committee) and institutional investors.

9. *ESG-dialogues, closed-door meetings and equal treatment of shareholders*

In this context, it could be anything but problematic to justify some sort of selection of those who are entitled to intervene, especially where appropriate measures that inform absent shareholders about the results of the dialogue are adopted by the company.

The break with the model outlined by the Italian CGC *(listed companies are required to adopt policies for the management of dialogue "with the general public of shareholders")* seems therefore to be reasonable and proportionate:

i) reasonable, as it is consistent with the special position of the institutional investor: its duties towards the clients, and particularly the duty to adopt an engagement policy, based on sustainability goals, and to dis-

[60] See Article 150(1) t.u.f.: "Gli amministratori riferiscono tempestivamente, secondo le modalità stabilite dallo statuto e *con periodicità almeno trimestrale*, al collegio sindacale *sull'attività svolta* e sulle operazioni di maggior rilievo economico, finanziario e patrimoniale, effettuate dalla società o dalle società controllate; in particolare, riferiscono sulle operazioni nelle quali essi abbiano un interesse, per conto proprio o di terzi, o che siano influenzate dal soggetto che esercita l'attività di direzione e coordinamento".

[61] A starting point can be found in the dialogue policy adopted by Tod's S.p.A. ("Politica per la gestione del dialogo con gli Azionisti di Tod's"), 13.

close about sustainability assessments, even in the pre-contractual phase, would justify the choice of the company to organize selective dialogues;

ii) proportionate, as the publication of a summary report of the dialogue on the website of the company seems able to avoid any infringement of equal treatment of shareholders.

Not only: it also makes the selective dialogues compliant with the market abuse regulation. In this regard, the attempt to argue that information on sustainability performances falls outside the scope of MAR would raise serious doubts. It is quite clear that MAR has been drawn up from the perspective of financial information, and the problem of how (and whether) to adapt the prohibition of selective disclosure and the corresponding exceptions to the new context of non-financial information is still to be explored. However, while taking full account of the many uncertainties surrounding the problem, it does not seem impossible to state that information about sustainability performances, if not carried by the DNF or similar statements or reports, can be considered as “inside information”, which is likely to have significant effects – if made public – on the prices of their shares [62]. There would be little point in saying that the latter element cannot boast significant empirical evidence [63]: the objection would be without value, if only because of the cultural change in place – perhaps epochal – with regard to business and sustainable success of corporations

[62] Article 7(1) MAR. See *Lucia Calvosa*, “Informazioni privilegiate e Regolamento MAR”, Rivista del diritto commerciale e del diritto generale delle obbligazioni 2019, I, 99, 120 et seq.; specifically about the ESG-information as an *inside information*, *Marco Maugeri* (fn. 4), 1369; *Francesco Denozza*, “La nozione di informazione privilegiata tra *Shareholder Value* e *Socially Responsible Investing*”, Giurisprudenza commerciale 2005, I, 585, 585 et seqq.; *Peter O. Mülbert/Alexander Sajnovits*, “The Inside Information Regime of the MAR and the Rise of the ESG Era”, European Company and Financial Law Review 2021, 256, 276 et seq.

[63] In this connection, see *Hans B. Christensen/Luzi Hail/Christian Leuz*, Mandatory “CSR and Sustainability Reporting: Economic Analysis and Literature Review”, Working Paper No. 26169, August 2019, Revised April 2021, available at *ssrn*, p. 35 et seqq. of the manuscript; *Klaus J. Hopt/Rüdiger Veil*, “Gli *stakeholders* nel diritto azionario tedesco: il concetto e l’applicazione. Spunti comparatistici di diritto europeo e statunitense”, Rivista delle società 2020, 921, 946; about the actual feasibility of a withdraw strategy from non-ESG compliant financial stocks, see the concerns expressed by *Johannes Köndgen*, Sustainable Finance: Wirtschaftsethik – Ökonomik – Regulierung, in: Katharina Boele-Woelki/Florian Faust/Matthias Jacobs/Thilo Kuntz/Anne Röthel/Karsten Thorn/Birgit Weitemeyer (ed.), Festschrift für Karsten Schmidt zum 80. Geburtstag, 2019, 671, 682 et seq. See also *Marlene Plumlee/Darrell Brown/Rachel M. Hayes/R. Scott Marshall*, “Voluntary environmental disclosure quality and firm value: Further evidence”, Journal of Accounting and Public Policy 2015, 336 et seqq.; *Lei Gao/Joseph H. Zhang*, “Firms’ earnings smoothing, corporate social responsibility, and valuation”, Journal of Corporate Finance 2015, 108, 125 et seqq.

in the direction of a (sort of) *stewardship market* [64]. On the other hand, the ability of non-financial information to influence prices can grow based on how much more attention is given by the capital market to sustainability performances (and to increasingly ESG-friendly governance solutions) [65]. But after all, this is the real challenge of the European regulator, as clearly testified by the recent flood of regulatory developments about non-financial statements, but also about remuneration and engagement policies insofar as they relate to sustainable success objectives [66].

Moreover, even if the company decides not to publish some of the contents of the dialogue, and that is the case of a relevant corporate transaction, which the company is planning or negotiating with other companies

---

[64] See *Francesco Denozza*, "Incertezza, azione collettiva, esternalità, problemi distributivi: come si forma lo *short-termism* e come se ne può uscire con l'aiuto degli *stakeholders*", Rivista delle società 2021, 297, 315 and fn. 34. See also, among others, the debate about disclosure of corporate environmental performance (*Simon Döring/Wolfgang Drobetz/ Sadok El Ghoul/Omrane Guedhami/Henning Schröder*, "Foreign Institutional Investors, Legal Origin, and Corporate Greenhouse Gas Emissions Disclosure", 2020, available at *ssrn*, pp. 10 et seqq. of the manuscript), even in light of the potential of artificial intelligence [*Niccolò Abriani/Giulia Schneider*, "Il diritto societario incontra il diritto dell'informazione. *IT*, *Corporate Governance* e *Corporate Social Responsibility*", Rivista delle società 2020, 1326, 1355]. As a matter of fact, there is no shortage of recent studies which show that "the introduction of sustainability labels – such as the Morningstar '5 Globes' Rating and the Low Carbon Designation – significantly affected the inflows into US mutual funds" [*Alessio M. Pacces*, Sustainable Corporate Governance: The Role of the Law, in: Danny Busch/Guido Ferrarini/Seraina Grünewald (ed.), Sustainable Finance in Europe. Corporate Governance, Financial Stability and Financial Markets, 2021, p. 151, 159 et seq. and fn. 35; empirical results in *Andreas G.F. Hoepner/Ioannis Oikonomou/Zacharias Sautner/ Laura T. Starks/Xiao Y. Zhou*, "ESG Shareholder Engagement and Downside Risk", ECGI - Finance Working Paper No. 671/2020, available at *ssrn*, pp. 19 et seqq. of the manuscript; *Samuel M. Hartzmark/Abigail B. Sussman*, "Do Investors Value Sustainability? A Natural Experiment Examining Ranking and Fund Flows", Journal of Finance 2019, 2789, 2830 et seqq.; *Marco Ceccarelli/Stefano Ramelli/Alexander F. Wagner*, "Low-carbon Mutual Funds", ECGI - Finance Working Paper No. 659/2020, available at *ssrn*, pp. 32 et seq. of the manuscript].

[65] «Ainsi, une société dont le comportement est évalué comme étant *CSR compliant* obtiendra un meilleur *rating* et aura, de ce fait, accès à des conditions de financement plus favorables en termes de fonds propres, sachant qu'un cours d'actions plus élevé permet d'émettre du capital à un prix supérieur» [*Xenia Elisa Karametaxas*, L'engagement des investisseurs institutionnels: enjeux et perspectives de la prise de décisions collectives, 2019, p. 207]. See also *Henry Peter/Guillaume Jacquemet*, "Corporate Social Responsibility, Sustainable Development et Corporate Governance: quelles correlations?", Revue suisse de droit des affaires et du marché financier 2015, 170, 187. More recently, *Peter O. Mülbert/ Alexander Sajnovits* (fn. 62), 276 et seq.; *Mario Libertini*, "Sulla proposta di Direttiva UE su "Dovere di diligenza e responsabilità delle imprese"", Rivista delle società 2021, 325, 334.

[66] *Giovanni Strampelli*, "Gli investitori istituzionali salveranno il mondo? Note a margine dell'ultima lettera annuale di BlackRock", Rivista delle società 2020, 51, 59.

and submits to institutional investors with regard to its implications on sustainability strategies, even in this case there does not seem to be any breach of equal treatment rule.

The truth is that not all shareholders are the same [67].

It is the whole of corporate law that ratifies the structural inequality between shareholders even as to their role in view of the most significant resolutions and therefore as to the kind of their involvement in defining the related proposal to be submitted to the general meeting [68]. It is enough to look at the Article 114(1) Directive (EU) 2017/1132, which allows the directors to leave out all the reports prior to the general meeting for a merger by acquisition resolution, provided that the minority shareholders of the company being acquired are entitled to have their shares purchased *by the acquiring company*. Such a purchase obligation implies that the majority shareholder of the acquiring company has been involved prior to the drawing up of the draft terms of merger, if only to ensure that it will vote for the operation, thus *before (and out of) the general meeting* of shareholders [69]. But the same is true for each merger, even beyond the particular case of Article 114(1) Directive (EU) 2017/1132, and also for divisions or capital increases restricting or withdrawing the right of pre-emption, at least because no board would enter into negotiations with third parties without a due diligence about the willingness of strategic shareholders. This seems rather to be a sign of proper performance of directors' duties [70].

In general, equal treatment cannot mean that the company has to give up implementing governance tools that enhance the specificities of single

---

[67] *Hans-Christoph Hirt/Klaus J. Hopt/Daniela Mattheus* (fn. 1), 738; *Giovanni Strampelli* (fn. 1), 413 et seq., with references to the Dutch case law. In the latter perspective see also *Jesper Lau Hansen*, The Role of Shareholders in Public Companies in the Nordic Countries, in: Holger Fleischer/Jesper Lau Hansen/Wolf-Georg Ringe (ed.), German and Nordic Perspectives on Company Law and Capital Markets Law, 2015, pp. 86 et seq.

[68] And not only of specific shareholders, but also of third parties: *Giuseppe Ferri jr*, Modificabilità e modificazioni del progetto di fusione, 1998, pp. 158 et seq.; Tribunale Milano, 31 January 2005, Giurisprudenza italiana 2005, 1865.

[69] *Marco Maugeri*, "Gruppi di società e informazioni privilegiate", Giurisprudenza commerciale 2017, I, 907, 908 et seqq.; *Giovanni Strampelli* (fn. 1), 412 et seqq.; *Sergio Gilotta*, Le società quotate e l'informazione societaria, in: Mario Cera/Gaetano Presti (ed.), Il Testo Unico Finanziario, II, 2020, p. 1468, 1522 et seq.; *Chiara Mosca* (fn. 1), 46, 54et seqq.; *Carmine Di Noia/Matteo Gargantini*, *Corporate governance* e comunicazione di informazioni privilegiate, in: Umberto Tombari (ed.), Informazione societaria e *corporate governance* nella società quotata, 2018, p. 7, 44; *Chiara Picciau*, "Comunicazioni selettive ai soci e informazioni privilegiate nei recenti orientamenti Consob", Rivista delle società 2021, 614, 620 et seqq.

[70] *Luca Della Tommasina*, Informazione preassembleare e tutela dell'investimento, 2018, pp. 27 et seq.

shareholders [71]. This is all the more so if the concerned shareholders are institutional investors and asset managers, who are required to publish an engagement policy, accompanied by a wide range of communications about the way they invest in sustainability goals [72]: they play some sort of «Quasi-Abgabe im öffentlichen Interesse» [73], to the extent that, with their more or less «gentle goad» [74], contribute to ensuring the effectiveness and fairness of the competition between listed companies and their non-financial statements [75]. Fundamental is therefore the verification of the statements

---

[71] See *Pirmin J. Schauer*, Aufsichtsratskommunikation. Ein Beitrag zur Definition der Rolle des Aufsichtsrats und seines Vorsitzenden im Bereich der Investor Relations einer kapitalmarktorientierten Aktiengesellschaft, 2021, pp. 374 et seq.; *Andrea Bartalena* (fn. 1), 708; *Giovanni Strampelli* (fn. 1), 412 et seqq. Recently, *Sergio Gilotta*, Il dialogo selettivo tra la società quotata e i suoi azionisti, 2022, pp. 249 et seqq., 265 et seqq.

[72] *Daniela Weber-Rey/Markus Reps*, "Ankerbeteiligungen: Chancen für die Corporate Governance, Rechtsrahmen und Investorenvereinbarungen: Ein Beitrag zu der rechtspolitischen Debatte um verantwortungsbewusste Aktionäre", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2013, 597, 639 et seq.; *Hauke Hein* (fn. 60), 300 et seqq.; *Pietro Fazzini*, "Doveri fiduciari degli amministratori designati dai fondi attivisti e conflitto di interessi: alcune considerazioni in una prospettiva transatlantica (nota a Court of Chancery of the State of Delaware, *In re PLX Tech. Stockholders Litigation*)", Rivista di diritto societario 2020, 207, 256; *Paul Davies/Klaus J. Hopt/Richard Nowak/Gerard Van Solinge*, Boards in Law and Practice: A Cross-Country Analysis in Europe, in: Paul Davies/Klaus J. Hopt/Richard Nowak/Gerard Van Solinge (ed.), Corporate Boards in Law and Practice. A Comparative Analysis in Europe, 2013, p. 101.

[73] *Tobias Tröger* (fn. 11), 136.

[74] The quoted expression has been employed by *Niccolò Abriani*, "Il «pungolo gentile» dell'assemblea «mite» tra attivismo degli azionisti e nuova governance societaria. Prime riflessioni sull'attuazione in Italia della Direttiva 2007/36", Rivista di diritto dell'impresa 2011, 15, 47 et seq. See, among the others, *Wohlverhaltensregelns des BVI*: «Die Fondsgesellschaft beobachtet die Unternehmensführung der Portfoliounternehmen. Sie legt Grundsätze offen, ob und wie sie im Interesse ihrer Anleger den Dialog mit Portfoliounternehmen führt oder mit anderen Anlegern der Portfoliounternehmen im gesetzlich zulässigen Umfang kooperiert, um eine verantwortungsvolle Führung, einen Werterhalt und eine Wertsteigerung des Portfoliounternehmens zu fördern» (V.8). «Die Fondsgesellschaft informiert die Anleger über getroffene oder zu treffende Maßnahmen zur Berücksichtigung von Kriterien zum verantwortlichen Investieren sowie über etwaige von ihr angewandte Kodizes. Sie informiert die Anleger über ihre Aktivitäten zur Stimmrechtsausübung und gegebenenfalls über Art und Umfang der Dialoge mit Portfoliounternehme» (V.9). In this regard, see also *Wolf-Georg Ringe*, "Stewardship and Shareholder Engagement in Germany", ECGI - Law Working Paper No. 501/2020, available at *ssrn*, pp. 27 et seqq. of the manuscript.

[75] On the other hand, from institutional investors and asset managers «wird erwartet, dass sie ihre Eigentumsrechte aktiv und verantwortungsvoll auf der Grundlage von trasparenten und die Nachhaltigkeit berücksichtigenden Grundsätzen ausüben» (*Klaus J. Hopt/Markus Roth*, Der Aufsichtsrat: Aktienrecht und Corporate Governance. Sonderausgabe aus dem Großkommentar zum Aktiengesetz §§ 95 bis 116 AktG, 2018, p.

published by the companies, so the request for clarifications, explanations, additions[76]: otherwise non-financial statements run the risk of becoming empty moulds[77], scripts filled with rhetoric and available for all the companies belonging to the same sector, with a consequent zeroing of any competition based on sustainability[78].

1808). See also *Xenia Elisa Karametaxas* (fn. 65), p. 21*; Joseph A. McCahery/Zacharias Sautner/Laura T. Starks*, "Behind the scenes: The corporate governance preferences of institutional investors", Journal of Finance 2016, 2905–2932; *Elroy Dimson/Oğuzhan Karakaş/Xi Li*, "Active Ownership", Review of Financial Studies 2015, 3225, 3228 et seqq.; *Peter Iliev/Lukas Roth*, "Directors and Corporate Sustainability", 2021, available at *ssrn*, pp. 2 et seqq. of the manuscript; *Jochen Vetter*, "Geschäftsleiterpflichten zwischen Legalität und Legitimität – Muss sich Ethik lohnen? –", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2018, 338, 362; *Michele Siri/Shanshan Zhu*, Integrating Sustainability in EU Corporate Governance Codes, in: Danny Busch/Guido Ferrarini/Seraina Grünewald (ed.), Sustainable Finance in Europe. Corporate Governance, Financial Stability and Financial Markets, 2021, p. 175, 188; *Vanessa Knapp* (fn. 27), 243; *Chiara Mosca*, "Director-Shareholder Dialogues Behind the Scenes: Searching for a Balance Between Freedom of Expression and Market Fairness", European Company and Financial Law Review 2018, 805, 812; *Giovanni Strampelli*, "*Soft law* e fattori ESG: dai codici di *corporate governance* alle *corporate* e *index guidelines*", Rivista delle società 2021, 1100, 1105; *Piergaetano Marchetti*, "Il bicchiere mezzo pieno", Rivista delle società 2021, 336, 341; *Claudia Tedeschi* (fn. 12), 588 et seq.

[76] Besides, «the integration of CSR in corporate governance codes seems superficial and usually done by using boilerplate language» [*Michele Siri/Shanshan Zhu* (fn. 75), 189]. See also *Holger Fleischer/Christian Strothotte* (fn. 1), 228; more recently, *Joachim Hennrichs*, "Die Grundkonzeption der CSR-Berichterstattung aus ausgewählte Problemfelder", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2018, 206, 228 et seq. It goes without saying that a similar need for cross-checks exists in the comparison between financial market participants, to be regarded for their engagement in the investee companies: see, recently, *Massimiliano Bonacchi/April Klein/Sara Longo/Giovanni Strampelli*, "The Effects of Credible Voluntary Disclosures: Institutional Investor Engagement and Investees' ESG Performances", ECGI - Law Working Paper No. 622/2022, available at *ssrn*, pp. 15 et seq.

[77] See *Serenella Rossi*, Il diritto della *Corporate Social Responsibility*, in: Concetto Costa/Aurelio Mirone/Roberto Pennisi/Pierpaolo M. Sanfilippo/Ruggero Vigo (ed.), Studi di diritto commerciale per Vincenzo Di Cataldo, Impresa, Società, Crisi d'impresa, 2.II, 2021, p. 767, 793.

[78] «*Corporations may talk the talk of sustainability and long-termism, but they are walking a different walk*»: *Mario Stella Richter jr* (fn. 7), 937. So that «l'équilibre du marché se définit comme un équilibre de *pooling* (ou mélangeant), et non pas comme un équilibre séparateur» (that's how the risk of homologising is described by *Sophie Harnay/Tatiana Sachs/Katrin Deckert/Fabienne Llense/Aurélie Ballot-Léna/Armand Hatchuel/Kevin Levillain/Claire Lieury/Gaëtan Marain/Antoine Reberioux et al.*, L'efficacité des codes de gouvernance. Perspectives comparées et pluridisciplinaires, 2017, p. 143).

10. *ESG-dialogues with institutional investors and business judgment rule*

A further point deserves clarification.

While it is true that the recent pre-contractual information duties about sustainability strategies may encourage the interaction between the company's board and its institutional investors or asset managers, it remains, however, that any decision to hold selective meetings with them is a discretionary choice by the directors, without any obligation in this respect being derived from the European legal framework on sustainability-related disclosures in financial services.

This also applies to the directors of listed companies who have undertaken – through any non-financial statement addressed to the market – to assess and monitor the impact of their business on environment, human rights, gender equality, and for these purposes it is irrelevant that such a commitment is voluntary or based on a legal obligation (this is the case of *due diligence policy* announced by the aforementioned Draft Directive). In either event, the commitment does not entail any mandatory governance structures. This last profile is also traceable to the wide range of discretion that belongs to the board of directors[79].

Accepting requests for a two-way dialogue about ESG and sustainability policies and providing progressively more complex and structured tools for periodic interaction with institutional investors and asset managers is a corporate governance practice that may increase the common perception of the company's commitment to a business strategy based on sustainable success goals. Its convenience, however, can only be assessed by the board of directors and at most by the annual general meeting, to the extent that shareholders are informed through the non-financial statement, even included in the management report. This is not a duty of the company to the institutional investor: it is the institutional investor who has a duty to clients

---

[79] Moreover, the idea prevails that even decisions concerning the implementation of organisational arrangements are traceable to the business discretion and – consequently – to the BJR-doctrine: *Lorenzo Benedetti*, "L'applicabilità della *business judgment rule* alle decisioni organizzative degli amministratori", Rivista delle società 2019, 413; *Sabino Fortunato*, "Codice della crisi e codice civile: impresa, assetti organizzativi e responsabilità", Rivista delle società 2019, 952, 985 et seq.; *Mario Stella Richter jr*, "In principio sono sempre le funzioni", Rivista delle società 2019, 20, 30 et seq.; *Giacomo Meruzzi*, L'adeguatezza degli assetti, in: Maurizio Irrera (ed.), Gli assetti e i modelli organizzativi delle società di capitali, 2019, p. 41, 68 et seqq.; *Andrea Bartalena*, "Assetti organizzativi e *business judgment rule*", Società 2020, 1346, 1348 et seqq.; *Vincenzo Di Cataldo/Davide Arcidiacono*, "Decisioni organizzative, dimensioni dell'impresa e *business judgment rule*", Giurisprudenza commerciale 2021, I, 69, 94 et seqq.

(honor the policy published pursuant to Article 3 SFDR and inform the individual client – prior to the conclusion of the investment contract – about the non-financial characteristics of its products or the circumstances that make it impossible to assess sustainability profiles related to the individual product [80]). If the institutional investor does not receive enough information from a company, it may decide to divest and move towards another one which gives more information on sustainability goals: the underlying logic is the same that, according to ESMA, should prompt the distributor to remove a financial product from its basket if the manufacturer does not provide it with adequate product information [81]. As a reflection of this, the behavior of the institutional investor may induce the board of the investee company to review its strategies and organizational arrangements [82].

It is in this perspective that every resolution of the board about sustainability strategies – and consequently about the inherent governance structures, included ESG-committees or two-way dialogues – can and must be assessed [83]: the dialogue between directors and institutional investors is

[80] In general about the relationship between the governance solutions adopted by the company and the investment or divestment decisions of its current or potential shareholders see *Michael Hoffmann-Becking*, "Zehn kritische Thesen zum Deutschen Corporate Governance Kodex", Zeitschrift für Wirtschaftsrecht 2011, 1173, 1174; *Hans Christoph Ihrig/ Jens Wagner*, "Corporate Governance: Kodex-Erklärung und ihre unterjährige Korrektur", Betriebs-Berater 2002, 2509, 2514; *Peter Hommelhof/Martin Schwab*, Regelungsquellen und Regelungsebenen der Corporate Governance: Gesetz, Satzung, Codices, unternehmensinterne Grundsätze, in: Peter Hommelhoff/Klaus J. Hopt/Axel v. Weder (ed.), Handbuch Corporate Governance. Leitung und Überwachung börsennotierter Unternehmen in der Rechts- und Wirtschaftspraxis[2], 2009, p. 71, 80; *Maurizio Irrera*, "L'autovalutazione del consiglio di amministrazione tra *soft law*, prescrizioni regolamentari, aspirazioni e limiti intrinseci", Rivista di diritto societario 2022, 291, 312.

[81] ESMA, Guidelines on MIFID II product governance requirements, § 63: «Where the distributor is not in a position to obtain in any way sufficient information on products manufactured by entities not subject to the MiFID II product governance requirements, the firm would be unable to meet its obligations under MiFID II and, consequently, should refrain from including them in its product assortment».

[82] See *Marco Maugeri* (fn. 4), 1370; *Anat R. Admati/Paul C. Pfleiderer*, "The "Wall Street Walk" and Shareholder Activism: Exit as a Form of Voice", Review of Financial Studies 2009, 2645, 2685; *Alexander Dyck/Karl V. Lins/Lukas Roth/Hannes F. Wagner*, "Do institutional investors drive corporate social responsibility? International evidence", Journal of Financial Economics 2019, 693, 702.

[83] It remains to be verified whether and to what extent the forthcoming (mandatory) due diligence policy – provided for by the above mentioned Draft Directive – will bring about changes to the directors' duties in the management of companies (or in any case in the management of *large companies*: see Article 2 of the Draft Directive). At this stage Italian corporate law doesn't know a duty of care paradigm that falls within the category of stakeholderism (like any forms of mandatory balance or trade-off between the interests

just a tool at the service of a company strategy that creates value for shareholders; a tool that the directors can decide to implement or discard, thus relying on the safe harbour provided by the business judgment rule [84]. With one exception, this is well known: that is the case in which it is the method that is found to be in default [85].

---

of shareholders and the interests of other stakeholders), neither for those listed companies who have adopted and pubblished the DNF and have committed to consider the impact of their business on environment and human rights. In this case, in the words of *Lucian A. Bebchuk/Roberto Tallarita*, "Will Corporations Deliver Value to All Stakeholders?", August 2021, avalilable at *ssrn*, 21 of the manuscript, «the ultimate goal remains shareholder value – just as in the conventional shareholder primacy approach – but some stakeholder interests are highlighted as a means to maximize shareholder value». In general, it seems that the European legal framework «does not explicitly endorse benefitting stakeholders beyond what would be useful for shareholder value maximization» [*Lucian A. Bebchuk/Roberto Tallarita*, "The illusory promise of stakeholder governance", Cornell Law Review 2020, 91, 128]. See also *Mario Libertini*, "Scelte fondamentali di politica legislativa e indicazioni di principio nella riforma del diritto societario del 2003. Appunti per un corso di diritto commerciale", Rivista di diritto societario 2008, 198, 235 et seq.; *Carlo Angelici* (fn. 9), 19; *Giorgio Marasà*, Informazione non finanziaria e gestione socialmente responsabile negli enti del terzo settore, in: Piergaetano Marchetti/Federico Ghezzi/Roberto Sacchi (ed.), Il caleidoscopio dell'informazione nel diritto societario e dei mercati. In ricordo di Guido Rossi, 2020, p. 253, 258; *Marco Maugeri* (fn. 9), 1029 et seq.; *Umberto Tombari*, "Poteri" e "interessi" nella grande impresa azionaria, 2019, p. 78 et seq.; *Id.*, "L'organo amministrativo di S.p.A. tra *interessi dei soci* ed *altri interessi*", Rivista delle società 2018, 20, 28; *Paolo Cuomo* (fn. 38), 93; *Giovanni Strampelli*, "La strategia dell'Unione europea per il capitalismo sostenibile: l'oscillazione del pendolo tra amministratori, soci e *stakeholders*", Rivista delle società 2021, 365, 373; *Renzo Costi*, Banca etica e responsabilità sociale delle banche, in: Studi in ricordo di Pier Giusto Jaeger, 2011, p. 291, 301. Ultimately, this is the model followed – among others – by General Motors' Guidelines, which state that directors "must fulfill their responsibilities consistent with their fiduciary duties to the shareholders", only specifying that "shareholders' long-term interests will be advanced by responsibly addressing the concerns of other stakeholders essential to the Company's success, including customers, employees, dealers, suppliers, government officials and the public at large". «Vor diesem Hintergrund verliert die tiefschürfende Auseinandersetzung über die von der Verwaltung berücksichtigenden Belange – etwa unter dem Stichwort eines „Unternehmensinteresses" oder eines *shareholder vs. stakeholder view* – erheblich an juristischer Bedeutung» [*Andreas Engert*, Private Macht im Gesellschaftsrecht: die Macht der Verwaltung und ihre Kontrolle, in: Florian Möslein (ed.), Private Macht, 2016, p. 381, 419].

[84] See *Piergaetano Marchetti*, "Codici di condotta, *corporate governance* e diritto commerciale", Rivista del diritto commerciale e del diritto generale delle obbligazioni 2019, I, 23, 33. The same goes for the decision not to set up a CSR-committee (or ESG-committee): *Antonio Cetra/Paolo Cuomo* (fn. 20), p. 183. In German literature, see *Simon Patrick Link*, "Shareholder und Investor Activism – Rechtsfragen der aktuellen Praxis", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2021, 904, 915.

[85] Indeed, business judgment rule only insulates a director from liability for decisions made where the director (is not interested in the subject of the business judgment and –

In particular, a problem of «procedural care»[86] *in view of the resolutions about the organizational structure of the company* is intended to arise not only in the relations between the board and the chief executive officer or between the directors and the supervisory board. Shareholders' meeting itself comes into play here as an information and monitoring tool[87]: it should not be forgotten that the DNF and any non-financial information included by the board in the management report, even just to explain a non-compliance choice, are directed to the public *but before that to the general meeting*; in the annual meeting shareholders can assess benefits that the board plans to derive (or has decided not to draw) from environmental and ethical-social policies, to be regarded not only for non-financial performances goals but also for the corporate governance structures adopted (or not adopted) in order to implement, monitor and review the global non-financial strategy[88]. In this sense, business judgment rule applies equally to management choices and to corporate governance choices. In particular:

above all –) is informed with respect to the subject of the business judgment to the extent he reasonably believes to be appropriate under the circumstances: see, among the most recent rulings, *In re: Nine West LBO Securities Litigation*, 12 April 2020, 505 F. Supp. 3d 292 (S.D.N.Y. 2020).

[86] *Marco Ventoruzzo/Pierre-Henri Conac/Gen Goto/Sebastian Mock/Mario Notari/Arad Reisberg*, Comparative Corporate Law, 2015, p. 296.

[87] A «tighter leash» for the board of directors [the image belongs to *Jacob E. Hasler* (fn. 36), 1322] could be created by the articles of association if they provided for a periodic say-on-sustainability in the context of the ordinary annual meeting: see *Holger Fleischer* (fn. 16), 184 et seq.; *Alex Edmans*, Grow the Pie. How Great Companies Deliver Both Purpose and Profit, 2020, p. 206 et seq.; *Giuseppe Benedetto Portale*, "Amministrazione e controllo nel sistema dualistico delle società bancarie", Rivista di diritto civile 2013, 25, 37.

[88] In other words, although there isn't any resolution of the shareholders about DNF – neither a non-binding resolution [according to the model which has been tested in Italy until 2019 for the remuneration policy: see *Marco Maugeri*, Le deliberazioni assembleari «consultive» nella società per azioni, in: Mario Campobasso/Vincenzo Cariello/Vincenzo Di Cataldo/Fabrizio Guerrera/Antonella Sciarrone Alibrandi (ed.), Società, banche e crisi d'impresa. *Liber amicorum* Pietro Abbadessa, I, 2014, p. 819, 824 et seqq.] nor a binding resolution (according to the say-on-pay model expected in Italy from 2019 for the first section of the so-called "Relazione sulla politica di remunerazione e sui compensi corrisposti": Article 123-*ter t.u.f.*) – shareholders, and especially institutional investors and asset managers, have the possibility to assess non-performances goals that have been fixed by the directors (*Ilaria Capelli*, "La sostenibilità ambientale e sociale nelle politiche di remunerazione degli amministratori delle società quotate: la rilevanza degli interessi degli *stakeholder* dopo la SHRD II", Orizzonti del Diritto Commerciale 2020, 553, 580), even just for their utility in view of maximizing shareholder value. See, already before the recent non-financial disclosure legal framework, *Giuseppe Guizzi* (fn. 22), p. 93; see also *Sabrina Bruno*, "Dichiarazione 'non finanziaria' e obblighi degli amministratori", Rivista delle società 2018, 974, 1008 et seq.

i) if specific requests from institutional investors or asset managers for the activation of periodic dialogues have been addressed to the company and have not been accepted by the board of directors, it is necessary to give an account of such a choice in the DNF or in the management report and explain the reasons, so that shareholders can evaluate the overall corporate policy;
ii) similarly, if the company is required to entrust the dialogue to an independent director (or even just to allow him to attend meetings) and the request is denied, the board will have to give an account of it in the DNF or in the management report, so that the general meeting of shareholders – with the contribution of notices and reports of institutional investors and asset managers – can assess the dialogue policy.

11. *ESG-dialogues with institutional investors between the Article 120(4-bis) t.u.f. and takeovers*

Once selective two-way dialogues have been freed from the uncertainties linked to the principle of equal treatment of shareholders and the market abuse regulation, the next step is probably to verify the potential of such dialogues in relation to investors who are not (or rather: are not yet) shareholders of the company. A further possible direction for the development of dialogue policies about ESG and sustainability goals is linked to the recent introduction of specific disclosure obligations for those who buy shares in listed companies beyond certain thresholds of relevance. The reference is to Article 120(4-*bis*) *t.u.f.*: since 2017, who buys shares in listed companies above ten, twenty and twenty-five percent of the capital shall state the objectives he intends to pursue over the next six months, and in particular, where he aims to acquire control or otherwise exercise influence over the management of the company, the strategy he intends to adopt[89].

[89] See *Andrea Tucci*, Gli assetti proprietari delle società quotate, in: Mario Cera/Gaetano Presti (ed.), Il Testo Unico Finanziario, II, 2020, p. 1542, 1558 et seq.; *Daniele Umberto Santosuosso*, "Prima lettura del nuovo comma 4-*bis* dell'art. 120 Tuf (sulla accresciuta trasparenza relativa alle acquisizioni di partecipazioni di società quotate nel contesto europeo e internazionale)", Rivista di diritto societario 2017, 1287, 1289; *Giulio Sandrelli*, "Note sulla disciplina «anti-scorrerie»", Rivista delle società 2018, 186, 188. Moreover, the same applies to the managers of alternative investment funds where the latter acquire control of listed companies: see Articles 46 *t.u.f.* and 28-*terdecies Reg. Issuers*; see also *Marco Cian*, "I FIA: osservazioni e interrogativi dal punto di vista del quadro di mercato e delle imprese finanziate", Banca borsa e titoli di credito 2017, I, 293, 308 et seq. See also *Roberto Sacchi*, Due ipotesi di asimmetria informativa consentita nelle s.p.a. non quotate, in: Piergaetano

Now, in view, above all, of takeover bids which are aimed at achieving control, such a declaration of intent is likely to also concern non-financial goals underlying the business strategy, and this for three reasons: firstly, because they are the same legal provisions, even if they do not make express reference to non-financial profiles, which must be interpreted in the broadest sense, so that that the bidder shall inform in advance what attention will be paid to ESG-factors, especially in the light of the current mutual integration between financial and non-financial reporting; secondly, because it is in the interest of the target company to know the kind of (sustainable) development that the bidder intends to promote, at least with a view to drafting the statement that directors will release to shareholders: a statement that, according to Article 103(3-*bis*) *t.u.f.*, must contain an assessment of the effects that the success of takeover will have on the interests of the company[90] (and it goes without saying, then, that directors' duty to make a forecast about non-financial effects assumes a greater weight so as the reputational rating that market assigns to the target company is higher in terms of corporate social responsibility); thirdly, because it is in the bidder's interest to immediately make the project that he has in mind clear and the role that the various categories of stakeholders assume in it, both to discourage any techniques of defense (or better: to provide directors with a reason less to implement defenses against the takeover[91]) and – above all – to avoid negative repercussions on the shares' listing price[92].

Marchetti/Federico Ghezzi/Roberto Sacchi (ed.), Il caleidoscopio dell'informazione nel diritto societario e dei mercati. In ricordo di Guido Rossi, 2020, p. 47, 58 et seq.

[90] See – already before the Article 103(3-*bis*) t.u.f. – *Duccio Regoli*, Offerte pubbliche di acquisto e comunicato agli azionisti, 1996, p. 61; today, *Paolo Benazzo*, Le OPA volontarie, in: Mario Cera/Gaetano Presti (ed.), Il Testo Unico Finanziario, II, 2020, p. 1345, 1372; with regard to long-termism and sustainability, see *Antonio Cetra/Paolo Cuomo* (fn. 47), p. 174. See also *Martin Winter/Stephan Harbarth*, Corporate Governance und Unternehmensübernahmen: Anforderungen an das Verhalten von Vorstand und Aufsichtsrat des Bieters und der Zielgesellschaf, in: Peter Hommelhoff/Klaus J. Hopt/Axel v. Weder (ed.), Handbuch Corporate Governance. Leitung und Überwachung börsennotierter Unternehmen in der Rechts- und Wirtschaftspraxis[2], 2009, p. 463, 465 et seqq.

[91] See *Moritz Bassler*, Die Bedeutung von institutionellen Anlegern für die interne Corporate Governance ihrer Beteiligungsunternehmen. Inhalt und rechtliche Grenzen des institutionellen Anlegeraktivismus, 2015, p. 230 et seqq.; *Maximilian Zobel*, "Besondere Rechtsprobleme von Gesprächen oder Vereinbarungen des Aufsichtsrats mit Aktionären oder künftigen Investoren", StudZR Wissenschaft Online 1/2018, 204, 225 et seq.; *Jochen Reichert/Nicolas Ott*, Investorenvereinbarung mit der Zielgesellschaft – Möglichkeiten und Grenzen der Einflussnahme auf Gesellschaftsorgane, in: Mathias Habersack/Peter Hommelhoff (ed.), Festschrift für Wulf Goette zum 65. Geburtstag, 2011, p. 397 et seqq.

[92] The proposal to extend such ESG-dialogues to the context of takeover bids fits into the groove of the tendency to diagnose in terms of governance, therefore of voice, problems

There is no doubt that the fulfilment of such a disclosure obligation (which implies, for the bidder, the duty to work out a business strategy, and thus to tell to the market so to wonder – even before telling the market – about the relevance of ESG factors to his own business targets) can be facilitated by the involvement of institutional investors and asset managers in the phase that closes negotiations for the purchase and in view of the communication required by Article 120(4-*bis*) *t.u.f.* In that context, institutional investors and asset managers could share with the bidder objectives and policy lines, and a trilateral dialogue, mediated by the board of directors, could certainly contribute to a more conscious and detailed declaration of intent.

It seems clear then that dialogues between the institutional investors and the board of directors have huge potential for development in listed companies' governance, to the point of involving – against the exclusion of some shareholders (or rather, of *all shareholders who are not blockholders*) – subjects that, by contrast, *are not even shareholders* [93]. Cleared the field of the principle of equal treatment (and this, to the extent that such a principle cannot sacrifice choices of governance based on the structural inequalities which divide some shareholders from others) [94], it does not seem impossible to envisage suitable forms of dialogue to promote some sort of bargaining – as for objectives, policies and commitments – between the bidder and the centres of power within the company [95].

---

traditionally thought in a strictly financial perspective, therefore in terms of exit. Besides, "exit's contribution to sustainability is therefore as slow as the impact of stock price and funding cost on managers' decision-making. Voice, instead, is all-or-nothing: company managers will have to pursue sustainability if a majority of the shareholders or a key investor want them to do so, or else be fired" [*Alessio M. Pacces*, (fn. 6), 14 of the manuscript].

[93] About the involvement of not shareholders, especially with reference to proxy advisors, see *Giulio Sandrelli*, "Il dialogo degli amministratori con gli azionisti dopo il Codice di Corporate Governance", Rivista di diritto commerciale e del diritto generale delle obbligazioni 2021, II, 695, 752 et seqq., 755.

[94] See, particularly from the perspective of sales of stake and takeover bids, *Dirk A. Verse*, Der Gleichbehandlungsgrundsatz im Recht der Kapitalgesellschaften, 2006, p. 539-552. Moreover, it cannot be excluded that, in case of competition between bidders, the directors decide to involve only one of them in the dialogue with institutional investors. "Eine allgemeine Regel, dass das Gesellschaftsinteresse grundsätzlich die Bietergleichbehandlung gebiete, lässt sich somit nicht aufstellen" [*Dirk A. Verse* (in this footnote), p. 552].

[95] And, therefore, those shareholders exercising some sort of *check on managerial slack*: see *Soumyadri Chattopadhyaya*, "The Effectiveness of Being Invisible: Hedge Funds, Hidden Ownership and Corporate Governance", European Company and Financial Law Review 2011, 305, 316.

Frank Andreas Schittenhelm

SUSTAINABLE TRANSPORT - PROFITABILITY AND RISK

Table of contents: 1. Preliminary remarks. – 2. Sustainable transport. – 2.1. Goals and measures of sustainable transport. – 2.2. Consequences of non-sustainable management. – 3. Financial decision-making processes in companies. – 3.1. Cash flow analysis. – 3.2. Risk-return analysis. – 3.3. Utility analysis. – 4. Risk assessment. – 4.1. Risk assessment within cash flow analysis. – 4.2. Conclusion. – 5. Implementation of quantitative enterprise risk management systems. – 5.1. Functions of enterprise risk management systems. – 6. Shareholder value. – 7. Limitations. – 8. Final remarks.

1. *Preliminary remarks*

This paper examines typical investment-decision processes of companies in the transport sector and focuses on the question why companies accept or reject projects, id est make decisions for or against an investment. It discusses how and why conventional investment-decision methods easily disadvantage sustainable investments [1] and what measures and methods are necessary to improve the situation.

When considering a sustainable orientation of a company's business model, inevitably, one is confronted with the competitiveness of the company. Many of the measures that sustainable management would require or at least make desirable can quickly be identified as profit-peeling. Competitors who forego similar measures can thus offer services and goods at lower prices (with the same profit claim). This connection is fundamentally trivial to begin with. In order to be economically successful in the long term (one could also say sustainably), other motivating aspects must be added to the pure profit consideration. In this context, authors often speak of enhancing features and qualities such as [2]:

[1] The term sustainability can have many facets in this context, of course. The aim of this article is not to discuss those in detail, but rather to allow an abstract view on sustainability within investment-decisions.

[2] Research has been done on this topic both from academia and business professionals.

- Reduction of energy consumption and waste production,
- Improving reputation and strengthening customer relationship,
- Improving access to capital and reducing capital costs,
- Facilitations in human resources management,
- Preparation for more restrictive regulations in the future.

Except for the reduction of energy consumption, that leads to direct cost savings, these positive characteristics remain rather abstract and do not help a lot when concrete investment-decisions are required and profitability is calculated. In this article, we will focus on classical investment-decision methods and discuss how these positive characteristics can be considered as part of an improved risk assessment.

2. *Sustainable transport*

The term sustainability is traditionally associated with the 3-pillar approach derived from the Brundtland report [3]. It refers to the 3 aspects of sustainability which are described by a social, an economic and an environmental pillar. Today, the economic component of the 3-pillar model, though, has been replaced by a focus on corporate governance aspects. As a consequence, many use the terms environment, social and governance or in short ESG [4] somehow as a synonym for sustainability. Environmental and social aspects are still in the foreground. However, economic success as a basic prerequisite for companies to survive in the long term, must be achieved in compliance with corporate governance regulations. The path to economic success is thus concretized and should take place transparently within a company specific (legal) framework.

For the transport sector, a number of environmental issues arise immediately. Obviously, transport in general involves a burden on the environment. However, considerations of sustainable transport should not be limited to environmental protection measures. Due to the high number of low-wage jobs, social issues are also of great importance in the transport sector. Since the transport sector is quite inhomogeneous in size and business, corporate

---

As an example, we refer to *Georgia Makridou*, Why should business embrace sustainability? Lessons from the world's most sustainable energy companies; ESCP Business School; ESCP Impact Paper No.2021-33-EN, *https://academ.escpeurope.eu/pub/IP%202021-33-EN.pdf*, p.2-3.

[3] The Brundtland Report can be found at *www.un-document.net/ocf-02.htm*.

[4] Environment (E), Social (S), Governance (G).

governance is not always a focus for the companies. In the case of small and medium enterprises (SMEs), the extent, to which corporate governance issues and requirements can be implemented and controlled, are to be examined.

2.1. *Goals and measures of sustainable transport*

First, we look at the possible goals of sustainable transport and the measures needed to achieve them.

The German Federal Environment Agency [5], for example, formulates the following goals with regard to sustainable mobility:

- A basic goal would be the general avoidance or reduction of traffic. Obviously, this requires an offering of alternatives. Digitalization is one of the aspects that are mentioned frequently, which might reduce the number of business trips. In logistics we expect an optimization of transport routes and avoidance of empty runs. In this context, production processes and EU policy, that favoured free markets and low-cost transport, might be questioned.
- Secondly, a shift to more environmentally friendly modes of transport is requested. Of course, transport cannot be completely avoided. This is obvious in the freight sector, but transportation could shift back from air and road to rail. In the passenger sector, we definitely face fundamental acceptance problems. It is possible though, to make sustainable transport financially more attractive.
- The third goal mentioned is an increase in energy efficiency. This requires investments in new technologies and an innovation-friendly environment. Companies evaluate their effort very precisely and assess the political framework before investing.
- Post-fossil, greenhouse-gas neutral fuels and electricity describes the concrete goal of changing the source of energy used in the transport sector without specifying one or another. The change refers to all modes of transport.

In addition to these ecological goals, social aspects are likely to be of great importance in the mobility and transport sector. Truck drivers, in particular, repeatedly complain about excessively long driving times and catastrophic working conditions [6]. Insiders report about slave-like conditions

---

[5] *https://www.umweltbundesamt.de/themen/verkehr-laerm/nachhaltige-mobilitaet, 19.07.2022*

[6] *https://www.t-online.de/finanzen/beruf-karriere/id_85627130/nachts-betaeubt-und-ausgeraubt-so-katastrophal-sind-die-arbeitsbedingungen-von-lkw-fahrern.html, 21.07.2022.*

in the container ship sector[7]. Legal measures are on its way[8] and on the other hand, we receive first signs of a shortage of workers and associated business restrictions and financial losses[9].

Relating to corporate governance the transport sector is hardly on focus. This is mainly due to the fact that the majority of companies in this sector are not listed on the stock exchange, so that little pressure is exerted on the company management by the owners and many companies are not affected by legal regulations. Smaller companies might complain about an additional bureaucratic burden and costs which are disproportionate to the benefit.

In summary, most of the goals (within the mobility and transport sector) and their associated measures require investments by the companies. In some cases, these investments (or innovations) may contribute to positive future cash flows. In other cases, they are likely to be pure cost drivers. Some measures may even jeopardize entire business models, for example restrictions on air and road transport. Therefore, one will have to reckon with a great deal of resistance. Alternatively, governments need to develop costly alternatives for the companies affected.

2.2. *Consequences of non-sustainable management*

The goals and possible measures together with some of the above-mentioned positive aspects of sustainability lead to possible consequences of a non-sustainable business. Companies that oppose sustainable business practices in the future run various risks[10]. On the one hand, there are reputational risks. These play an important role especially for larger companies in the field of individual transport or in the aviation sector. Poor working conditions, low wages and insufficient social security increase the risk of employee turnover. The current staff shortage in summer 2022 at many airports can serve as a harbinger of such a development[11]. However,

---

[7] *https://www.finanzen100.de/finanznachrichten/boerse/katastrophale-arbeitszustaende-an-bord-australien-setzt-deutschen-frachter-fest_H576982417_10510227/*, 21.07.2022.

[8] EU rules for working in road transport – Your Europe (europa.eu), *https://europa.eu/youreurope/citizens/work/work-abroad/rules-working-road-transport/index_en.htm*, 21.07.2022.

[9] *https://www.bundestag.de/dokumente/textarchiv/2022/kw20-pa-verkehr-berufskraftfahrer-892464*, 21.07.2022.

[10] In our context, we refer to risk as a negative event or consequence. Another common definition of risk is a deviation from the expected or most probable event.

[11] *https://www.merkur.de/welt/london-heathrow-flughafen-koffer-chaos-passagiere-stinkendes-gepaeck-91636014.html*, 19.07.2022.

major social grievances at subsidiaries or suppliers, as well as serious environmental damage, can also make access to finance more difficult (together with increasing financing costs) or even impossible. Finally, companies must take into account possible future penalties in the event of corresponding legal framework conditions. In the worst case, there are concrete bans and business restrictions [12].

At the same time, such developments tend to be of a long-term nature, despite the urgent need for action. The past makes it clear how strongly lobbyist associations delay or completely undermine such trends [13].

3. *Financial decision-making processes in companies*

In principle, companies in the transport sector do not differ decisively from other sectors when it comes to accept or reject a specific investment. In some areas, however, a strong fragmentation of the market can be observed, so that especially in the case of small, non-listed companies, decision-making processes are sometimes much more trivial than is outlined in the following.

There are three main methods for assessing investments, which we discuss here [14]:

1. Cash flow analysis (dynamic investment calculation)
2. Risk-return analysis
3. Utility analysis

3.1. *Cash flow analysis*

Cash flow analysis is based on a 3-step approach [15]. In step 1 investments are projected in terms of pro-forma financial statements (balance sheets and income statements) describing the development of sales and costs for a specific projection period. In step 2 these pro-forma financial statements

---

[12] A mandatory switch to electric vehicles or a ban of domestic flights.

[13] *https://www.euractiv.de/section/finanzen-und-wirtschaft/news/bosch-soll-versucht-haben-eu-klimapolitik-zu-behindern/*, 21.07.2022.

[14] Compare for details: *Frank Andreas Schittenhelm*, “Financial Management and Sustainability”, in: Ernst, Sailer (ed.): Sustainable Business Management, 2015, UVK, p.160 et seqq.

[15] *Serge Ragotzky/Frank Andreas Schittenhelm/Süleyman Toraşan*, Business Plan, UTB, 2nd ed., 2020, p. 91 et seqq.

are transformed into cash flow streams describing concrete cash inflows and outflows during the projection period. For the project (or company) perspective the free cash flow to the firm is determined, for the shareholders perspective we calculate the free cash flow to equity [16]. Eventually, step 3 serves to assess the cash flow streams and check them for profitability. The idea is to calculate the time value of future cash flows and using investment criteria which determine whether a predefined minimum return (hurdle rate; benchmark) is achieved.

The two most commonly used investment criteria are net present value and internal rate of return [17]. They relate cash inflows and outflows that occur at different points in time to a common point in time by discounting (or compounding) future cash flows. To simplify the discounting process, additional assumptions are sometimes made. For example, a uniform interest rate is usually used in the valuation of projects. The analysis is restricted purely to cash inflows and outflows [18].

Applying the net present value criterion, all future cash flows of a project are discounted to the present time. The net present value (NPV) of an investment or an investment project is simply calculated by subsequently adding up the discounted single future cash flows:

$$NPV(i) = -z_0 + \frac{z_1}{(1+i)^1} + \frac{z_2}{(1+i)^2} + \cdots + \frac{z_T}{(1+i)^T} = -z_0 + \sum_{t=1}^{T} \frac{z_t}{(1+i)^t}$$

where i describes the discount factor and z_t the respective (annual) future cash flows, id est cash inflows and outflows. The discount factor is derived from the predefined minimum return. For the project perspective, it corresponds to the weighted average cost of capital (WACC), id est the weighted average of return expectations of equity and debt providers. A net present value of 0 exactly fulfils these expectations, while a positive net present value can be interpreted as the additional value generated by the investment [19]. In the case of different investment alternatives, you choose the investment with the highest net present value.

The criterion of the internal rate of return (IRR) describes the geometric mean of yearly returns of an investment. Mathematically it is determined

---

[16] An alternative approach is the cash flow identity, see *Michael Flad/Peter Günther/Frank Andreas Schittenhelm*, “Finanzmanagement”, Pro BUSINESS, 2012, p153 et seqq.

[17] Some standard applications also foresee the criterion of the dynamic payback period, which is often interpreted as a risk measure.

[18] *Flad/Günther/Schittenhelm* (fn. 16), p. 57 et seqq.

[19] Please note: Additional value means in addition to the required return (= discount rate), that is already achieved at NPV=0.

by setting the NPV = 0 and solving for the unknown interest rate i*. An investment is considered as advantageous if the internal rate of return is greater than the given hurdle rate. Again, this minimum rate of return should correspond to the weighted average cost of capital, analogous to the consideration of the net present value. If there are several investment alternatives, the alternative with the highest (non-negative) internal rate of return is selected[20].

3.2. *Risk-return analysis*

In contrary to cash flow analysis, the method of risk-return analysis quantifies risk explicitly. It is based on modern portfolio theory introduced by the work of Harry Markowitz[21] in 1952. In most applications of risk-return analysis, risk is measured as the expected variance or standard deviation of the investment returns. This actually means any deviation from an expected return (or event) is interpreted as risk. Obviously, every risk measure has its drawbacks and limitations. Variance and standard deviation do not yield satisfactory results for many applications, and so a number of alternative risk measures have been developed over the years. Keywords here are beta, lower partial moments or value at risk.[22]

The basis for the analysis is provided by three parameters[23]:

- μ_i := Expected value of the return of an investment A_i ,
- σ_i := Standard deviation of the return to measure the risk of an investment A_i ,
- $\varrho_{i,j}$:= Correlation coefficient of the returns of two different investments A_i and A_j.

Since the parameters μ, σ and ϱ are unknown, they need to be estimated. In the case of securities, for which modern portfolio theory is most widely used, the estimations are based on historical data of returns and the appropriate statistical estimators for the three parameters. One major insight of portfolio theory is the so-called diversification effect.

---

[20] There are some mathematical issues when calculating an Internal Rate of Return such as non-uniqueness, which can make interpretation difficult or impossible.

[21] *Harry Markowitz*, "Portfolio Selection", Journal of Finance 7/1952, p77-91.

[22] Please refer to the relevant literature for more detailed information, for example *Holger Wengert/Frank Andreas Schittenhelm*, "Corporate Risk Management", Springer-Gabler, 2013, p. 58 et seqq.

[23] *Peter Günther/Frank Andreas Schittenhelm*, "Investition und Finanzierung", Schaeffer-Poeschel, 2003 p. 124 et seqq.

In summary, risk-return analysis helps to heal the weakness of the cash flow analysis, namely the lack of an explicit risk quantification. On the other hand, risk-return analysis is a single period model, which is more applicable in the world of (short-term) security investments. Applications in the transport sector are rather difficult to find. In particular for the acceptance or rejection of sustainable investments, risk should rather be measured as a shortfall event than as a deviation from an expected return.

3.3. *Utility analysis*

Utility analysis on the other hand deals with the fact that cash flow analysis does not allow non-financial or non-quantitative considerations. For complex investment decisions though, especially in our context of sustainable investments, qualitative or non-financial features are definitely important. For example, those features could be reputation or carbon footprint. Utility analysis allows a multidimensional set of criteria for the decision-making process in the form of a scoring model. Four steps can describe the methodology[24]:

1. Establishing the relevant quantitative and qualitative decision criteria.
2. Setting of weights for the criteria. Total for all criteria sums up to 100.
3. Assessing the criteria with the help of an established scoring system. For example, scores from 0 to 10.
4. Calculation of averages to arrive at the utility value of the alternative, id est the sum of all single scores multiplied by the respective weights.

The apparent advantage of the utility analysis is the incorporation of features that are not quantitative in nature. At the same time, this is also a weakness of the method, since the establishment of the criteria, their weights and scoring must be done in a subjective manner. Nonetheless, utility analysis provides a tool for a holistic perspective on the investment decision. Sustainable investments in the transport sector could profit from the approach but financial aspects of risk are not explicitly evaluated; this needs to be done as part of a specific criterion of the utility analysis. This is why we concentrate on cash flow analysis in our next chapter as the major financial analysis tool.

[24] *Ragotzky/Schittenhelm/Toraşan* (fn. 15), p. 48 et seq.

4. *Risk assessment*

We note that Cash Flow Analysis is rather popular with many decision makers thanks to its apparently objective precision. In some cases, it might be included into utility analysis and represents the basis for a profitability criterion. Modern portfolio theory, though, rather serves as the basis for the investment decisions of institutional investors. Every transport company that is depending on institutional investors and plans to focus on sustainability must take that into consideration. In conclusion, all three methods presented here are lacking a sufficient quantification of risk that arises from a lack of sustainable behaviour and development.

4.1. *Risk Assessment within cash flow analysis*

This paper focuses on the financial decision-making processes from a company perspective, in form of cash flow analysis. Risk assessment in this context usually means scenario and sensitivity analyses, in which different positive and negative constellations and developments are taken into account. However, there is no explicit risk measurement, unless you interpret payback period as such. A payback period determines the time necessary to compensate for the initial cash outflow with future cash inflows. The shorter this amortization period the lower the risk[25].

In companies, the lack of risk analysis can lead to misallocations of funds if a uniform company-wide discount factor is applied for the evaluation of every individual project. The problem arises from the fact that riskier investments (or assets) generally tend to generate higher expected positive cash flows. This statement can be explained by the above premise that more risk should lead to better expected returns. This assumption automatically implies that riskier investments (for the same unified discount factor) show better net present values than less risky ones. The same is true for the internal rate of return, which will be higher for the riskier undertakings. Therefore, both NPV and IRR are only useful if risk is considered appropriately. The following simple example illustrates these qualities.

Example:

A transport company considers two alternatives for a tour with its lorry. Alternative 1 with a well-paid employee of the company and alternative 2 with a poorly-paid driver (via a subcontractor) who might leave the com-

[25] Unfortunately, this criterion rather favours a short-term orientation and could therefore, seen as a contradiction to sustainability.

pany at short notice, because he is unhappy with the working conditions. For alternative 2 we consider two possible situations. With a 90% probability everything runs smoothly, with a 10% probability the tour will be impossible and the company loses everything.

The classical cash flow approach focuses on the most probable outcome and we determine the following cash flows for the two alternatives:

- Alternative 1: (–1.000 €; +1.250 €)[26]
- Alternative 2: (–1.000 €; +1.300 €)

Given a required return of 15% we calculate the following net present values:

- Alternative 1: NPV = –1.000 € + $\frac{1.250\text{ €}}{1{,}15^1}$ = 86,96 €
- Alternative 2: NPV = –1.000 € + $\frac{1.300\text{ €}}{1{,}15^1}$ = 130,43 €

Clearly, the company chooses alternative 2 as the more profitable one. This would also be a common way in practice.

But taking into account that there is a 10% shortfall probability for the undertaking in alternative 2, a company might (or should) decide differently[27]:

- Alternative 2 (positive case 90% probability): (-1.000 €; +1.300 € → NPV = 130,43 €
- Alternative 2 (negative case 10% probability): (-1.000 €; +0 €) → NPV = -1.000 €

This leads to an expected net present value of 90% * 130,43 € + 10% * –1.000 € = 17,39 €[28], which is worse than the NPV of alternative 1. Now, the company should and would opt for the first alternative[29].

---

[26] This notation means that the company invests 1.000 € today and receives 1.250 € after one period (for example one year).

[27] Please note that on more complex situations these alternatives are not always obvious. We use this extrem example for illustration.

[28] Under these premises alternative 2 could also be described with the following cash flow stream: (-1.000; +1.170), which leads to the same NPV of 17,39 €. This NPV expresses that in 9 out of 10 cases the company would generate a cashflow of 1.300 € but in 1 out of 10 cases it realizes 0 €.

[29] An alternative approach is to adjust the discount rate. For example, based on the additional risk the company could decide for a risk premium of 5 percentage points for alternative 2 and discount the original cash flow of alternative 2 with a discount rate of 20%. In this case the cash flow stream (-1.000 €; +1.300 €) results to NPV = 83,33 €

4.2. *Conclusion*

In summary, the greatest weakness of cash flow analysis is its purely quantitative orientation, which makes it difficult to incorporate qualitative factors. Although ecological and social objectives can be integrated, they generally lead to a reduction in risk rather than to an increase in returns. It turns out, that risk is indirectly considered as part of the applied discount rate. It is not explicitly assessed or calculated and, above all, in practice widely used incorrectly. Therefore, the risk-reducing positive effect of sustainable business behaviour is systematically underestimated and favours risky investment decisions. Utility analysis might allow risk consideration as a criterion, but it must be noted that risk is not systematically captured or measured. In addition, the disadvantages of utility analysis can lead to acceptance problems for financial aspects. The aim of sustainable financial management must therefore be to focus on risk management.

Of course, portfolio theory has the advantage that risk is explicitly measured and taken into account. This offers many possibilities, especially for the aspects of sustainability. However, the model is a single-period model and one is heavily dependent on historical data in order to be able to estimate the corresponding parameters. It can be stated that modern portfolio theory does not advance sustainability at the company level. More comprehensive approaches explicitly incorporate social and ecological aspects in addition to the parameters risk and return. This increases the number of relevant dimensions in the process of decision making. Such a methodology plays a role for example in the case of sustainable investments (ESG mutual funds). The core of the approach remains unchanged; the requirements from an ecological, social and governmental performance simply limit the spectrum of possible investments.

5. *Implementation of quantitative enterprise risk management systems*

The above statements show that in many areas, investment decisions are based on false hypotheses and negative consequences (risks) are often not at all or insufficiently calculated and integrated. This is also due to the complexity of the topic and the fundamental difficulty of a meaningful and generally accepted risk assessment. Especially for risks that are characterised by low probabilities of occurrence or by extreme long-term nature, an assessment is often seen as arbitrary. The conclusion, however, must not be one of abandonment, but should lead to increased efforts in the field of risk assessment.

5.1. *Functions of enterprise risk management systems*

The above explanations have already shown the central role of risk management within sustainable financial management. Risk management thus not only serves the purpose of controlling risks, but also enables a risk-adequate assessment of investments and financing. This reveals future negative effects of today's actions, which in turn helps to avoid short-term mispricing or provides opportunities for corrective interventions from the outside into the economic process.

Risk management is usually divided into a strategic and an operational component[30]. The strategic part of risk management deals with the integration of risk management into all business processes and creating the organizational framework for the corporate risk management. The objectives of risk management are defined, whereby the creation of corporate value and the fulfilment of legal standards are essential. In addition, however, social and ecological aspects should also be included by setting appropriate goals. Corporate Governance Codes typically include a requirement for establishing a risk management system[31].

Operational risk management is usually characterized by a four-step process[32]:

- Step 1 describes the identification of risks and thus captures systematically all risks the company is exposed to.
- Step 2 ensures that the identified risks are adequately quantified and classified. The complexity and soundness of the methods used follows from the strategic aims of risk management. Since transparency constitutes an important aspect within risk management, the comprehensibility of the method plays a major role when choosing a valuation model. The aim of risk management is to create awareness for risks in the entire company.
- Step 3 guarantees that measures to manage risks are taken. Fundamentally, the following possibilities exist:
  - Risks can be avoided completely if certain technologies are not used.
  - Risks can be reduced if a portfolio strategy is employed and diversification effects are captured. Risk reduction can also play a role in the social sphere, by implementing personnel measures, which reduce employee fluctuation in the company.

---

[30] *Wengert/Schittenhelm* (fn. 22), p. 11 et seqq.

[31] For example: Deutscher Corporate Governance Kodex (in der Fassung vom 28. April 2022), *https://www.dcgk.de//files/dcgk/userco*ntent/de/download/kodex/220627_Deutscher_Corporate_Governance_Kodex_2022.pdf.

[32] *Wengert/Schittenhelm* (fn. 22), p. 25 et seqq.

  - Risks can simply be limited, for example by defining upper boundaries for the use of resources that are not environmentally friendly.
  - For other risks, protection is possible. The strategies include security services to prevent theft, classical insurance products, and derivatives for the hedging of capital market securities or currency rate risk.
  - Finally, the company might be in a position to absorb the financial costs if necessary. Bearing a specific risk could also be part of the business model of the company. In these cases, it is possible to consciously accept risks.
- Step 4 in the process of risk management is focused on communication and reporting. This last step provides the transparency which was demanded earlier on and thus allows for a better risk assessment of the company which leads to a fairer valuation of the risk-return profile. In addition to preventing the mispricing of companies, risk management can thus also serve as the basis for risk adequate management remuneration.

5.2. *Assessment of risk*

The measurement and evaluation of risks in a company can be done in many different ways, and a wide variety of models are already available in practice and theory. The aim of this article is not to propose a "correct" model, but rather to integrate a risk focus into the evaluation of investments. It is reasonable to start with simple approaches to ensure acceptance. It is helpful to have everybody onboard when it comes to investment-decisions. Step by step, measures can be improved and adapted to criticism. There is never a general fit to all specific investment and risk questions. As part of the risk analysis, positive or negative effects of sustainable behaviour should be particularly highlighted and result in an adjustment of discount rates or scenario considerations in order to avoid any misallocation of capital, eventually.

6. *Shareholder value*

Eventually, we want to concentrate on the shareholder's point of view. The question is whether a revaluation of investment-decisions is also positive for shareholders[33]. A reassessment of possible future cash flows is not

[33] For the sake of simplicity, we assume here that other stakeholders will benefit from better risk assessment as described above, because it gives sustainable management a better justification basis.

changing the project itself, of course, but we imply that the reassessment leads to a more realistic calculation of an (expected) value of a project[34].

From a theoretical point of view, it can be said that the NPV valuations of the free cash flow to the firm and the free cash flow to equity[35] should be equal, id est both net present values should be the same. In other words, the same added value is created for the company (or the project) as for the shareholders. It is intuitively clear that the added value created by a project ultimately ends up with the owners, since lenders only receive their predefined return and do not participate in additional future profits. Therefore, it can be concluded that shareholders benefit directly from an improved valuation. For concrete calculations though, the NPVs for the two perspectives will differ. There are a variety of technical or mathematical reasons for that.

It must be said, however, that this refers more to a long-term view. Note that negative events (considered as risk as a consequence of non-sustainable business practices) typically occur with a certain probability. We do not talk about definite events. Thus, for all other (positive) cases, a non-sustainable behaviour actually could lead to better results. Shareholders might be happy with the idea of getting higher returns because of high-risk investments and not care about any sustainable issues. In the long run (expected value), this does not work of course if the risk assumptions are close to reality. The crucial point is that short-term misjudgements of company values on capital markets cannot be ruled out. This in turn has the consequence that investors in stock corporations that allow short-term investment decisions can profit from such price distortions. Here, transparency with regard to investment-decisions and risk assessments plays an extremely important role. The less transparency, the greater the probability of "wrong" prices on the market, at least in the short-term. Even in the area of unlisted or not yet listed companies, such a misjudgement of risks can be deliberately desired in order to profit from the sale of company shares to the disadvantage and expense of the buyers. The same applies, of course, to an initial public offering (IPO).

Nonetheless, sustainable financial management also needs to integrate portfolio theory. Modern portfolio theory provides information about the motives of investors and can explain their investment decisions. Therefore, a different perspective on and assessment of sustainable investments is possible and rather probable. The significant capital demand of companies implies that investors and companies are less and less connected. A purely

[34] Compare the example in chapter 4.1.

[35] The same applies to the cash flow from assets and the cash flow to shareholders when applying the cash flow identity.

quantitative assessment of the investments is the logical consequence. This knowledge about the motives of investors must be considered in sustainable business management.

7. *Limitations*

The development and continuous improvement of enterprise risk management systems will not necessarily lead the transport industry to exclusively sustainable behaviour. Obviously not all desirable measures will turn out to be profitable, so that legal restrictions and prohibitions will still be necessary in the future. But companies will increase their awareness of possible negative consequences of non-sustainable behaviour. Financial consequences of misconduct, be it environmental, social or corporate governance, need to be quantified and are included in the profitability calculation.

8. *Final remarks*

A realistic assessment of human beings does not make it very probable to expect altruistic behaviour in the near future. Therefore, financial profitability of invested capital remains a main requirement for companies. But, the definition and assessment of financial profitability needs a revision and shift to more realistic data. While classical approaches often lose sight of included risk (resulting from non-sustainable business practices), this article proposes a strong focus on risk assessment. This does not mean that classical approaches and models do not consider risk but it happens implicitly and without measuring. Especially in practice, quantitative risk assessment is mostly skipped completely.

The paper presented suggests the consequent implementation of an enterprise risk management system in the company in order to guarantee transparency of investment-decisions and a continuous improvement of risk assessment tools.

As a final remark it has to be said that measuring risk remains one of the most difficult tasks, as fundamental assumptions about future events have to be made. Creating awareness, however, helps to break up a view that has, so far, been one-sidedly oriented towards a most probable case and to create more sustainable solutions. It is important to understand that a more precise risk assessment provides a better basis for investment-decisions. It is not a matter of making a nice-to-have calculation of sustainable economic activity,

but rather of taking a multi-dimensional view of investment-decisions that are oriented towards the long term. This means in particular that misjudgements, which are mostly to the detriment of third parties, are avoided. Still, it needs to be said that external measures and regulations cannot be avoided on our way towards more sustainability – also within the transport sector.

Maria Cristina Quirici

GREEN BOND AS INSTRUMENT OF IMPACT INVESTING FOR FINANCING SUSTAINABLE TRANSPORTS

Table of contents: 1. Green Bond as instrument of Impact Investing: a definitory approach. – 1.1. Impact Investing as the most recent SRI strategy. – 1.2. Green Bond as Sustainable Development Bond. – 1.3. Green Bond Issuance according to the Green Bond Principles by ICMA – 2. The recent European Institutions' Initiatives for the growth of Sustainable Finance. – 2.1. The more significative European steps towards a sustainable financial system. – 2.2. A focus on the realisation of the *EU Green Bond Standard* according to the EU Taxonomy on Sustainable Activities – 3. Green Bond for financing Sustainable Transports. – 3.1. The Green Bond market in its recent evolution. – 3.2. About some indicators in Green Bond Impact Reporting. – 3.3. Some recente issuances of Green Bond financing Sustainable Transports. – 3.3.1. The example of an international corporate issuance: Mercedes-Benz (Daimler AG) (2021). – 3.3.2. The BTP Green (March 2021) as first Italian Sovereign Green Bond for financing (also) Sustainable Transports. – 3.3.3. The example of Scania as another corporate issuance of such Green Bond. – 4. Conclusions. – 5. References.

1. *Green Bond as instrument of Impact Investing: a definitory approach*

1.1. *Impact Investing as the most recent SRI strategy*

In a first meaning, Green Bond can be considered as instrument of Impact Investing (Revelli and Paranque, 2017). But it's necessary to have also more clearness regarding the same concept of "Impact Investing". In a first approach, it represents one of the investment strategies adopted by the Sustainable and Responsible Investment (*breviter* SRI) and, in particular, the last strategies of positive screening, as indicated in the European SRI Study 2014 by Eurosif (Eurosif, 2014). It is possible to point out that Impact Investing, even if almost low in stock if compared to the other SRI strategies, is increasing very rapidly, really faster than the other ones, growing + 385% from 2013 to 2015 (20.269 euro millions in 2013 and 98.329 Euro millions in 2015) (Eurosif, 2016), reaching at the end

of 2017 108.575 Euro millions, with a CAGR +5% from 2015 to 2017 (Eurosif, 2018, p. 16).

As a consequence of its recent introduction as SRI strategy in Europe, "*There is no common definition of Impact Investing among individuals, financial advisors, or even those currently in the Impact Investing universe*" (Simon & Barmeier, 2010). Consequently, it is possible to find in literature several different definitions of Impact Investing, such as, among the others (Quirici, 2020, p. 179):

– "*Investments intended to create positive impact beyond financial returns*" (O'Donohoe *et al*., 2010);
– "*Investment specifically targeted to create development outcomes in addition to a financial return*" (Simon and Barmeier, 2010);
– "*Actively placing capital in business and funds that generate social and/or environmental good and at least return nominal principal to the investor*" (Freireich and Fulton, 2009);
– "*Actively placing capital in enterprises that generate social or environmental goods, services, or ancillary benefits such as creating good jobs, with expected financial returns ranging from the highly concessionary to above market*" (Brest and Born, 2013);
– "*An investment approach that intentionally seeks to create both financial return and positive social or environmental impact that is actively measured*" (Drexler and Noble, 2013).

All these definitions are surely significatives, but the most referred one is the definition given by the Global Impact Investing Network (or GIIN): "*Impact Investing means investing with the intention to generate positive, measurable social and environmental impact alongside a financial return*" (GIIN, 2021) [1].

It is also possible to notice that there is an evolution in the same concept of Impact Investing, as pointed out in literature by Busch *et al.* (2021).

According to the European SRI Study 2018 by Eurosif, there are some key requirements for Impact Investing, which differentiate it from other SRI strategies (as underlined by Hockerts *et al.*, 2022), such as:

"*1. Intentionality: the intention of an investor to generate a positive and measurable social or environmental impact;*

[1] "*The Global Impact Investing Network is a non-profit organisation that focuses on the promotion of impact investing and which convenes investors, facilitating knowledge exchange, producing research and tools to support investors continue to develop this part of industry. (…) it produced an analysis of the activities of 209 of the world's leading impact investing organizations, including fund managers, foundations, banks, development finance institutions, family offices, pension funds and insurance companies.*" (Eurosif, 2018, p. 36)

2. Additionality: fulfilling a positive impact beyond the provision of private capital;

3. Measurement: being able to account for, in a trasparent way, on the financial, social and environmental performance of investments." (Eurosif, 2018, p. 36).

But it is necessary to add also an other requirement, represend by the *long-term oriented investment approach*, even if this can be considered a character that is requested for all SRIs that integrate ESF factors in the research, analysis and selection process of securities in an investment portfolio.

1.2. *Green Bond as Sustainable Development Bond*

It's difficult to give a clear definition of what makes a bond "green" and so it's possible to find different ways to define it. In fact, there isn't an official and univocal definition of Green Bond (Bongini *et al.*, 2020, pp. 23-24).

In a first definition, Green Bond, together with Social Bond and Sustainability Bond, can be considered *Sustainable Bond*, instruments where the proceeds have to be exclusively applied to eligible environmental and social projects or to a combination of both. In particular, it is possible to notice that Green Bond have the aim to finance environmental projects, Social Bond the social ones, while Sustainability Bond a combination both of green and social projects.

Sustainable Bond are known also as "*Sustainable Development Bond*" because they are able to underpin the Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda for Sustainable Development. The UN 2030 Agenda (UN, 2015), presented in September 2015 – and in January 2016 the 17 SDGs of the Agenda came into force – represents a very ambitious global project that aims to reduce inequalities, to end all the forms of poverty or discriminations, to tackle climate changes and their more and more negative effects, according to an environmental, social and economic point of view.

Green Bond represent a particular category of *Sustainable Development Bond* useful to reach the SDGs, surely the most important financial instrument of this category (in a quantitative approach), able to reorient flows of capital to Sustainable Green Projects. In fact, Green Bond' use of proceeds are specifically aimed at financing environmental or climate–change projects and this character makes Green Bond perfectly aligned with the SDGs (Sustainable Banking Network, 2018; UN-Environment, 2018; ICMA, 2020).

The current levels of investments are not sufficient to support an environmentally and socially sustainable economic system. If a -2°C compati-

ble pathway is to be achieved, an enormous investment gap exists and this will need to be financed both with public and private funds (MSCI, 2017; Horsch and Richter, 2017).

It's necessary to reorient capital flows towards sustainable investments, in order to achieve sustainable and inclusive growth and Green Bond have the potential to assume a crucial role in mobilizing financial funds for the low-carbon transition. There are some different reasons to explain this consideration. "*First, green bonds enhance the trasparency on the uderlying assets by disclosing the use of proceeds. Second, with long-dated maturities, they can match the long-term nature of issuer investment horizons with investor time horizons. Third, green bonds can augument issuers' reputation. Fourth, green bonds can attract a larger and more diversified investor group*." (Berensmann, 2017).

This potential is reflected in the exponential growth of the Green Bond market in the last years. But this isn't sufficient. While the green bond market has expanded sizably, the biggest problem in its further development is represented by the lack of harmonized standard. The existing gap in a larger diffusion of green bond can be considered a consequence of the lack of clarity among investors regarding what constitutes a sustainable investment and, in particular, of the lack of clarity about what makes a bond "green" (International Finance Institutions, 2015). The various existing definitions and labels for Green Bond so cause problems both to investors and issuers, who could have benefits from more consistent standards.

Several definitions can be found in literature regarding Green Bond (see Quirici, 2020, p. 180), such as:

- "*Green Bonds are fixed income securities which finance investments with environmental or climate-related benefits*" (Ehlers and Packer, 2017);
- *"Green Bonds offer new possibilties for investors who are looking for opportunities that incorporate environmental, social and sustainability considerations"* (Eurosif, 2018);
- *"(…) bonds or debt securities specifically issued to finance environmental protection, sustainability or specific climate mitigation and adaptation measures*" (Sean and Padraig, 2014);
- "*a Socially Responsible Investment (SRI) instrument*" (Panda Pradiptarathi, 2017);
- " (…) *when considering if a bond is green is what it's going to be used for (use of proceeds), not the issuer (…)*" (Labbé, 2017);
- According to Kidney and Boulle, the term "climate bond" can be used interchangeably with the term "green bond" "*when the use of proceeds is used to finance – or refinance – projects addressing climate (…) although technically the use of proceeds from a green bond could be allocated to*

wider environmental projects with no impact on climate" (Kidney and Boulle, 2015);
- "*Green Bonds can be seen also as a particular category of the Sustainable Development Bonds*" (ICMA, 2017a)

But surely the most referred one is the definition given into *The Green Bond Principles* (*breviter* GBPs), that are voluntary process guidelines drawned by the *International Capital Market Association* (*breviter* ICMA) – first in 2014 and then updated in 2015, in 2016, in 2017, in 2020 and in 2021 – to promote integrity in the Green Bond market, recommending transparency, disclosure and reporting.

According to GBPs 2017, "*Green Bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Project (…) and which are aligned with the four core components of the GBP*" (ICMA, 2017b).

According to this approach, a green bond has to be aligned with the four core components of Green Bond Principles:

- Use of Proceeds;
- Process for Project Evaluation and Selection;
- Management of Proceeds;
- Reporting.

But these components need a deeper analysis, pointing out that *Sustainable Bond* should not be considered fungible with bonds that aren't aligned with the four core components of the *Green Bond Principles* and/or of the *Social Bond Principles* (ICMA, 2018).

1.3. *Green Bond issuance according to the Green Bond Principles by ICMA*

Considering that the Green Bond market aims to develop the key role that debt markets can play in funding projects able to contribute to environmental sustainability, the *Green Bond Principles* (GBPs) by ICMA want to fight against the so called "*greenwashing*", that can be defined as "*the selective disclosure of positive information about a company's environmental or social performance, without full disclosure of negative information on these dimensions, so as to create an overly positive corporate image*" (Lyon and Maxwell, 2011). According to the *European Securities and Market Authority (breviter* ESMA), "*the term greenwashing may be defined in a number of ways, but it intuitively refers to market practices, both intentional and unintentional, whereby the publicly disclosed sustainable profile of an issuer and*

the characteristics and/or objectives of a financial instrument or a financial product either by action or omission do not properly reflect the underlying sustainability risks and impacts associated to that issuer, financial instrument or financial product" (ESMA, 2022, p. 8)

As such, greenwashing tipically gives rise to potential detriment to investors who wish to allocate resources to sustainable investments. Surely, investors, banks and other stakeholders are well aware of potential greenwashing (Creed and Horsfield, 2021), so "*the goal of the market is to mobilize finance for environmental challenges at scale*" (Kidney and Boulle, 2015, p. 593). Ensuring that the market maintains its credibility, *"investors need to be clear about why they are investing in green bonds and what they aspect to achieve. (…) work is still needed around standards, wording and definitions before green bond investments become mainstream"* (Baker, 2018). In this direction GBPs by ICMA are working.

The GBPs clarify the approach for issuance of a Green Bond: in other terms, "*they provide issuers with guidance on the key components involved in launching a credible Green Bond; they aid investors by promoting availability of information necessary to evaluate the environmental impact of their Green Bond Investment; they assist underwriters by moving the market towards expected disclosures that will facilitate transactions*" (ICMA, 2017b).

The GBPs recommend – but it's necessary to underline that it's a "voluntary recommendation" – a clear process and disclosure for issuers, useful for the other actors of the investment to understand the characteristics of that Green Bond, emphasising the required transparency, accuracy and integrity of information that will be disclosed and reported by issuers to the variou stakeholders.

The first core component of GBPs is represented by the *Use of Proceeds*:

- the proceeds have to be used to finance «Green Projects», namely projects being able to provide clear environmental benefits (in activities linked to climate change, natural resources depletion, loss of biodiversity, air, water or soil pollution);
- it is also necessary an assessment of these benefits and, where it is possible, it has to be quantified by the same issuer;
- it is also possible to refinance an existing project: in this case, it is recommended to communicate the amount of resources that will be used for refinance and which project is going to be refinanced.

The second core component of GBPs is represented by the *Process for Project Evaluation and Selection*. According to ICMA, the Green Bond issuer should communicate to investors some informations such as:

- the environmental sustainability objectives;

– the process by which the issuer determines how the Projects fit within the eligible Green Projects categories;
– the related eligibility criteria, including, if applicable, exclusion criteria or any other process applied to identify and manage potentially material environmental and social risks associated with the Projects.

The third core component of GBPs is represented by the *Management of Proceeds:* the proceeds of the bond have to be set aside in un sub-account, or in a sub-portfolio or in any event in a system that can be tracked by the issuer in the best way (ICMA, June 2017b).

The fourth core component of GBPs is represented by *Reporting*: issuer should provide clear, up-to-date information regarding the use of proceeds, renewed at least annually until the full allocation. There is also the indication to show a list of the projects in which the proceeds were channelled and a description of these projects. Moreover qualitative indicators and, if it is possible, quantitative performance measurements are recommended (ICMA, June 2017b).

In GBPs it's also recommended that issuers use an «*external review» to confirm the alignment of their GBs with the key features of the same GBPs*. There is a variety of ways for issuers to obtain outside input into the formulation of their Green Bond process and there are several levels and types of review that can be provided by the market. Such external reviews might include (ICMA, 2017b):

Consultant Review: an issuer can seek advice from consultant and/or institutions with recognised expertise in environmental sustainability or other aspects of the issuance of a Green Bond. "*Second party opinions*" may fall into this category.

Verification: an issuer can have its Green Bond or underlying assets independently verified by qualified parties, such as auditors. In contrast to *certification*, verification may focus on alignment with internal standards or claims made by the issuers. The evaluation of the environmentally sustainable features may be termed verification and may reference external criteria.

Certification: an issuer can have its Green Bond or Use of Proceeds certified against an external green assessment standard if qualified third parties/certifiers can test the alignment with the criteria defined by the assessment standard.

Rating: an issuer can have its Green Bond or associated Green Bond framework rated by qualified third parties, such as specialised research providers or rating agencies. Green Bond ratings are separated from an issuer's ESG rating as they typically apply to individual securities or Green Bond framework.

It's also necessary to underline that an external review may be partial, covering only certain aspects of an issuer's Green Bond, or full, assessing in this case the alignment with all four core components of the GBPs.

Actually, there is more than one way for deciding if a bond can be considered a green bond: in fact, there are many ways of certifications, that aren't equivalent.

As examples of external review we can mention the following[2]:

- The *Climate Bond Certification* (by *Climate Bond Initiative*, an international non-profit organisation that provides this certification if the green bond issue can satisfy the Climate Bond Standards) (Climate Bond Initiative, 2015; Climate Bond Initiative, 2017);
- *Cicero Second Opinion* (one of the Second-Party Opinions provided by some important organisations, such as Deloitte, Ernst & Young, KPMG or Sustainalitics) (Cicero, 2016; Clapp *et al.*, 2016)
- Rating Agencies' Valuations, such as *Moody's Green Bond Assessements* (Moody's, 2016) or *Standard & Poor's Green Evaluations* (Standard & Poor's, 2017).

In conclusion, it is possible to see a wide range of Green Bond assessments and certifications and this is the proof of how important these instruments are becoming (Ehlers and Packer, 2017). However, just a too high number of certifications could prevent the Green Bond market from reaching a full evolution, since all the existing certifications may give to investors different indications about each bond and its greenness (Quirici, 2020, pp. 187-188).

In this process, the *Green Bond Principles* represent surely an important step to encourage the development and the use of standards for certification, but they are, and remain, only recommended and this is a limit and a problem for investors, who could have benefits from more consistent standard. The current market best practices are not completely satisfying and this leads to several critical issues:

- confusion on green project definitions;
- doubts on the quality of certain green projects and their impact (risk of *greenwashing*, for example when green bonds are used to re-label existing investments);
- insufficient disclosure and data on how green bond lead to the scaling up of investments in green projects and activities;
- too many certifications, problem both for issuer and investors in terms

[2] For a deeper analysis of these certifications, it is possible to see, among others: Quirici (2020), pp. 182-187; Ehlers and Packer (2016) and Ehlers and Packer (2017), *passim*.

of inconsistencies in the quality of certain external reviews and verifications, or the qualification of their providers, still "recommended" and not "required".

These lacks of clarity in definition, assessment and certification of Green Bond represent a problem for the evolution of the relative market. Europe has to close a yearly investment gap to support a sustainable economic system of almost Euro 180 billion to achieve EU climate and energy targets indicated in the UN 2030 Agenda. This existing relevant gap could be reduced through a clarification about the meaning of sustainability and the creation of a label and stardard for sustaible financial products, regarding expecially green bond. The European Institutions, in the consciousness of the essential importance of this, have pointed the necessity to build up both a common taxonomy in sustainable finance and a *EU Green Bond Standard* to contrast the existing limits, enhancing a sustainable financial system (ESMA, 2022). Only at these conditions Green Bond can really become a "bridge" to the SDGs of UN 2030 Agenda (Climate Bond Initiative, 2018; Maltais and Nykvist, 2020).

2. *The recent European Institutions' Initiatives for the growth of Sustainable Finance*

2.1. *The more significative European steps toward a sustainable financial system*

According to the previous considerations, the European Commission (EC) in the last years has recognized the need to develop and to strengthen various economic and financial strategies oriented towards the long-term sustainable and climate-resilient development, for achieving ambitious goals of economic prosperity, social inclusion and environmental regeneration (Eurostat, 2017).

The transition to a sustainable financial system has just started at a global level, but urgent actions are more an more required (World Economic Forum, 2021; Boffo and Patalano, 2020; Global Sustainable Investment Alliance (GSIA), 2021). Positive steps into this process can be surely seen, but they are clearly insufficient. In 2015 the signature of the Paris Agreement on climate change, known as Cop-21 (in December 2015) and the implementation of the UN 2030 Agenda, with its 17 Sustainable Development Goals (United Nations, 2015), can be considered the foundations for the consequent European transition towards decarbonisation and a sustainable growth of its economy.

In fact, in 2016, the European Commission decided to establish a *High-Level Expert Group on Sustainable Finance* (*breviter* HLEG) with the aim to provide a road-map towards a sustainable financial system. The EU HLEG was asked to have particular regard for harnessing financial markets in response to climate and environmental changes. This group, example of involving different stakeholders in a financial reform, elaborated an *Interim Report*, presented in July 2017, and then a *Final Report*, presented on 31th January 2018. This *Final Report* proposed a set of eight key recommendations addressed to the EC that can be considered as essential building blocks for wider actions (EU HLEG, 2018). The HLEG in this way answered to its duty to "*provide recommendations on how to "hard-wire" sustainability into the EU's regulatory and financial policy framework and how to mobilise more capital flows towards sustainable investments and lending*" (EU HLEG, 2018).

Considering in particular the recommendation regarding Green Bond, it's possible to point out that, as a first step, according to the EU HLEG *Final Report*, the European Commission should introduce an official *EU Green Bond Standard* (EU GBS), considering, as a second step, a *EU Green Bond label* or certificate as fundamental to help the market to develop fully and to maximise its capacity to finance green projects, contributing so to wider sustainable objectives (Cox, 2018; Baker, 2018).

In the HLEG's point of view, the *EU Green Bond Standard* would incorporate all the existing best market practises and considering the relevant role represented by the *Green Bond Principles* (GBPs), the HLEG *Final Report* provided a comparison between GBPs and the arising *EU Green Bond Standard*. In particular, all the recommendations provided by GBPs result instead "required" by the *EU Green Bond Standard* (Quirici, 2020, pp. 190-192; EC HLEG, 2018). The HLEG *Final Report* contained all the compulsory criteria necessary in order to consider a bond as a green bond by the EU. In other terms, for a bond, in order to be included in the EU Green Bond list, the issuance documentation should provide an intended alignment to the *EU Green Bond Standard*; then an independent and accredited external reviewer had to verify if the bond had really fulfilled all the required duties. The external reviewer role ought to become central just considering its compulsoriness (EU HLEG, 2018).

Moreover, it is possible to point out that all the projects being able to be financed with the Green Bond proceeds should be compliant with the European Taxonomy, in order to create an evolving list of activities that a Green Bond could finance, taxonomy able to help Europe to fulfil its environmental goals being aligned with the Paris Climate Agreement and the 2030 Sustainable Development Goals dispositions (Tolliver *et al.*, 2019).

The European Commission, building upon the HLEG *Final Report*'

recommendations, presented on March 8, 2018 its *Action Plan: Financing a Sustainable Growth*, that underlines the necessity to realize ten "actions" in 2018-2019 (really in a short time), specifically with the aim "*to:*

- *reorient capital flows towards sustainable investments in order to achieve sustainable and inclusive growth;*
- *manage financial risks stemming from climate change, resource depletion, environmental degradation and social issues; and*
- *foster transparency and long-termism in financial and economic activity."*(European Commission, 2018a, p. 2).

Considering that, as seen before, it's fundamental that investors more and more channel their money into sustainable projects in order to achieve the 2030 SDGs, the existing financial gap can be reduced through a clarification about the meaning of sustainability. In other words, "*a shift of capital flows towards more sustainable economic activities has to be underpinned by a shared understanding of what "sustainable" means. A unified EU classification system –or taxonomy- will provide clarity on which activities can be considered 'sustainable'. It is at this stage the most important and urgent action of this Action Plan*" (European Commission, 2018a).

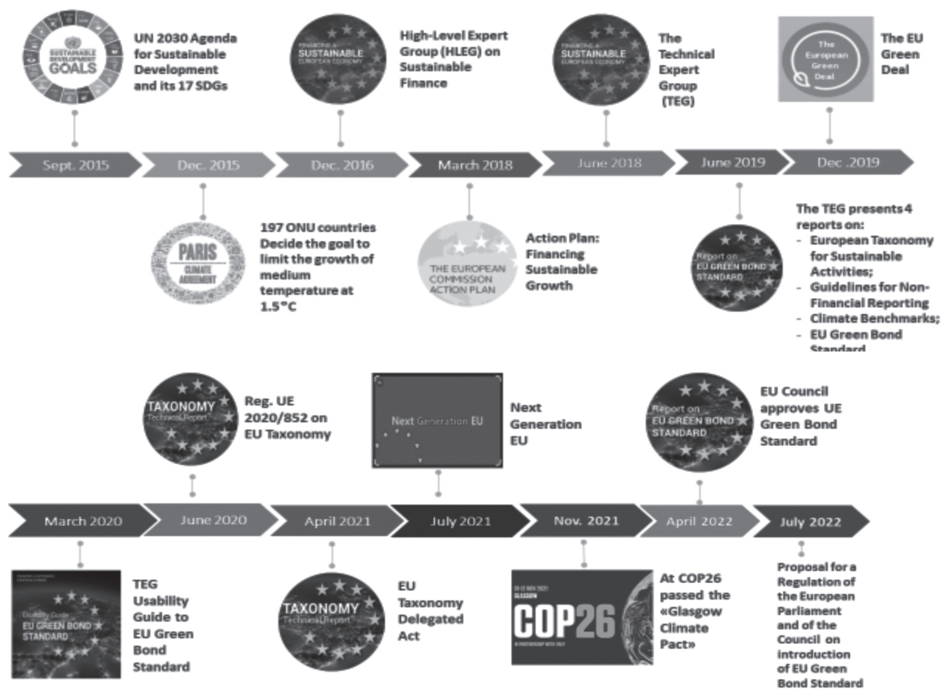


Fig. 1. *Some UE steps towards Sustainable Finance – Source: Personal elaboration.*

In fact, just considering this, the first action of the EC Action Plan for Financing Sustainable growth is the following:

Action 1: Establishing an EU classification system for sustainability activities (European Taxonomy)

But the importance that this EC Action Plan gives to Green Bond – as instruments that, building on the future EU taxonomy, can offer new possibilities for investors who are looking for opportunities of sustainable and responsible investments, with an easier access to green projects – can be well understood by reading the following Action 2 of the plan:

Action 2: Creating standards and labels for Green Financial Products

Also the Action 3 of the plan gives an idea of the importance given by the 2018 EC Action Plan to the investments in sustainable investments:

Action 3: Fostering investments in sustainable projects (such as sustainable infrastructures, clean transports and so on)

If we consider the deadlines of these actions, it's possible to point out that the EC Workplan indicated a very short time to provide both a European Taxonomy and a European ecolabel for financial products based on this taxonomy and this reflects the consciousness of the necessity to realise these actions really in a very fast way (European Commission, 2018a) [3].

In June 2018, the European Commission set up a *EU Technical Expert Group on Sustainable Finance* (EU TEG) "*to assist in four key areas of the Action Plan through the development of the following: 1) a unified classification system for sustainable economic activities, 2) a European Union (EU) Green Bond Standard, 3) benchmarks for low-carbon investment strategies, and 4) guidance to improve corporate disclosure of climate-related information*."

The TEG began its work in July 2018 and published its *Interim Report* on an *EU Green Bond Standard* (EU GBS) on March 6, 2019 for a public feedback. Then EU TEG presented its "*Report on EU Green Bond Standard*" on June 18, 2019, having the content of a draft EU GBS, explaining

[3] The other seven actions of the *EU Action Plan on Financing Sustainable Growth* are the following: *4) Incorporating sustainability when providing investment advice; 5) Developing sustainability benchmarks; 6) Better integrating sustainability in rating and research; 7) Clarifying institutional investors and asset managers' duties; 8) Incorporating sustainability in prudential requirements; 9) Strengthening sustainability disclosure and accounting rule-making; 10) Fostering sustainable corporate governance and attenuating short-termism in Capital Markets.* For the deadlines of all the ten actions it's possible to see the relative Annex III "*Workplan of the initiatives set out by this Action Plan*" (European Commission, 2018a), while for considerations about the impact of these actions see European Commission (2018b) and European Commission Press Release (2018c).

its purpose, setting its ambitious level and explaining a possible way for its establishment (EU TEG, 2019a). Together with this report, the TEG presented also the other ones, regarding the indicated three other issues given to this TEG by the European Commission: *Taxonomy Technical Report* (EU TEG, 2019b)*, The Guidelines for Non-Financial Reporting and the Climate Benchmarks.*

In December 2019, the new president of the European Commission, Ursula von der Leyen, presented the *European Green Deal* (European Commission, 2019), that is a strategic plan to more effectively implement the 2030 Agenda and the United Nations program for sustainable development, having the aim to make Europe the first climate-neutral continent by 2050. In fact, the key objectives of the *EU Green Deal* are:

a) to increase the efficient use of resources, by promoting a clean and circular economy;
b) to curb climate change;
c) to prevent the loss of biodiversity by reducing polluting emissions.

With particular reference to the latter one, the *Special Report on Climate Change* of the *Intergovernmental Panel on Climate Change* of the United Nations (UN-Intergovernmental Panel on Climate Change (IPCC), 2018) had identified 45% as the minimum value of their reduction, to be achieved in order to contain the increase in global temperature within 1.5° C by 2030 and a complete zero by 2050, but the European Commission has ambitiously raised its emission reduction target from 40% to 55% by 2030.

Obviously, a further reduction in emissions, combined with the sustainable transformation of the economy, represent together a greater commitment in terms of resources necessary for public investments and in terms of incentives and regulatory changes to direct private capital towards investments able to benefit climate and environment.

The EU intends to mobilize around € 1 trillion from both its own budget and associated instruments. The *EU Green Deal* will include also the so-called "*Just Transition Mechanism*" which will spend $ 150 billion between 2021 and 2027 to support the regions most dependent on fossil fuels.

In July 2021, considering the diffusion of pandemic Covid-19 (United Nations, 2020), the European Commission presented its recovery plan, called "*Next Generation EU*" (European Commission, 2021a; European Commission, 2021b), that represents a 750 billion euro plan for the revival of the European economy, with the aim to support the countries most affected by the pandemic crisis and to finance recovery plans that primarly pursue climate objectives, in line with the *EU Green Deal*, fostering digital transformation too (ASVIS, 2020).

It's important to underline that 30% of the *Next Generation EU* plan, corresponding to 260 billion euros, will be issued in the form of Green Bond. If we add to this the expected increase in corporate issues, that will increase the sectoral diversification of Green Bond, the introduction of new types of issues, such as *transition bonds*, linked to the transition process of companies towards ESG profiles, as well as the definition of standards more uniform for the issuance of these instruments, the broad growth potential of the Green Bond market emerges. It is possible to expect that this growth will translate into a "green revolution" of the European and global bond market, thanks to which it will be possible to pursue, having more probabilities in achievement them, the global climate objectives of the 2015 Paris Agreement and of 2021 Glasgow Agreement (or Cop-26) too (United Nations, 2022).

But in relation to the realization of Action 1 and Action 2 of the EC 2018 Action Plan, it is necessary the specific following focus.

2.2. *A focus on the realization of the Eu Green Bond Standard according to the European Taxonomy on Sustainable Activities*

As seen previously, the European Commission, in June 2018 had commissioned a group of experts, the Technical Expert Group (EU TEG), to develop a EU standard for Green Bond. In June 2019, the EU TEG presented a first report containing a series of recommendations on how to support and monitor the implementation of the *EU Green Bond Standard* (EU TEG, 2019a), ensuring that the market could use it in a maximum way. On 9 March 2020, the EU TEG published, together with the *Final Report on Taxonomy for Sustainable Activities* (EU TEG, 2020a), a "*Usability Guide*" for the *EU Green Bond Standard* (EU GBS) (EU TEG, 2020b), drafted focusing the attention on two main objectives: supporting the growth of the Green Bond market and promoting its transparency and integrity.

From a regulatory point of view, the EU TEG recommended the implementation of the EU GBS according to a two-step approach: first, the initial adoption of a non-binding EU act, such as a recommendation or communication, applicable according to a voluntary decision. Then, monitoring the impact of the implementation of the standard, EU TEG recommended to consider a possible legislation EU act, just after an estimated period of three years.

According to the EU GBS by TEG, it is possible to define a EU Green Bond as "*any type of listed or unlisted bond or capital market debt instrument issued by any European or international issuer that is aligned with the*

EU GBS and is therefore meeting the following requirements" (EU TEG, 2020b, p. 34) (Fig. 2):

1) *the use of proceeds approach*: the issuance documentation must clearly define the green projects' alignment with activities that can be considered sustainable according to the *EU Taxonomy*;
2) the indication by the issuer of a comprehensive *Green Bond Framework,* as specified by the EU GBS, which shall confirm the so called alignment, providing details on all the key aspects of the issue;
3) a *mandatory verification* by an accreditated External Verifier, that will provide a professional validation of the green bond qualities. The required formal accreditation of the external reviewer (registered in a public list held by ESMA) will armonise the market for esternal reviews and standardise verification procedures;
4) a *Mandatory Allocation* and *Impact Reporting* that will improve transparency on allocation of proceeds (*Allocation Reporting,* annual and final) and the environmental impacts of the green bond (*Impact Reporting).* The reporting requirements have been standardised providing standard reporting templates and the Green Bond Framework has to establish clear reporting methodology.

For the Projects alignment to EU Taxonomy, it is necessary that proceeds deriving from the EU Green Bonds must be allocated to finance or refinance exclusively green projects aligned with the requirements of the European Taxonomy. In particular, these eligible projects are those ones which can provide for:

– contribution substantially to at least one of the six environmental objectives indicated by EU TEG in its *Taxonomy Final Report* (EU TEG, 2020a);
– compliance with the "*Do not significant harm*" (DNSH) principle, so that projects must not significantly damage any of the other environmental objectives;
– compliance with minimum social guarantees referring to the OECD guidelines for multinational enterprises and the *United Nations Guiding Principles on Business and Human Rights*, including the *International Labor Organization (ILO) Declaration on Fundamental Rights and Principles of work*;
– compliance with the *Technical Screening Criteria* established by the European Taxonomy.

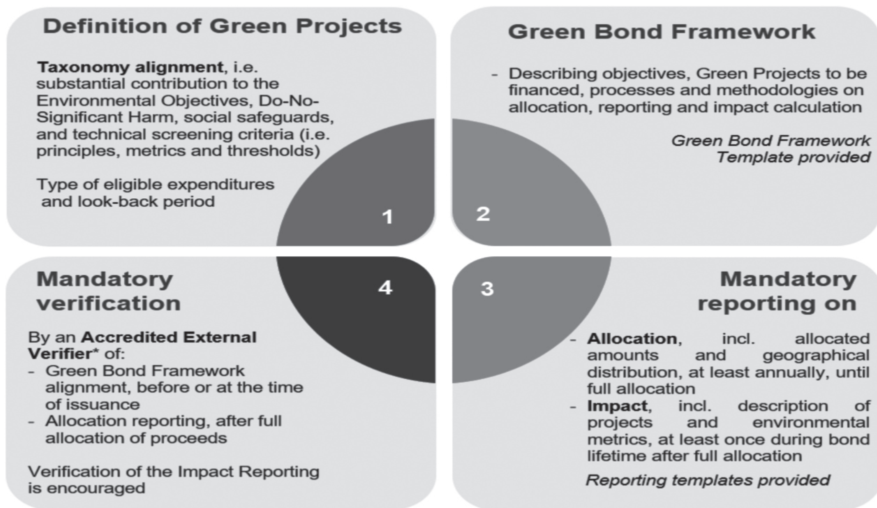


Fig. 2. *The four core components of EU GBS by TEG – Source: Chesné and Azoulay (2020), p. 9.*

It is clear that the EU Taxonomy is essential for creating the EU GBS and to define a EU Green Bond. The Final Taxonomy Regulation has been drafted in the *EU Regulation 852/2020*, approved on 22 June 2020 (Official Journal of the European Union, 2020) and, as undelined by EU TEG, in its *Usability Guide for EU GBS*, it has to be progressively implemented through the publication of subsequent delegated acts (scheduled for publication until the end of 2022).

According to EU TEG, a transition period has to be considered until the definition of the *EU Taxonomy* and of the *Technical Screening Criteria* (that include overarching principles, metrics and related thresholds on sectors that are deemed envinromentally sustainable). Effectively, the *EU Taxonomy Climate Delegated Acts* have been presented on April 21, 2021, while it is necessary to wait for April 2022 to see the EU Concil that approves the *EU Green Bond Standard* and on Jule 6, 2022 to read the *EU Proposal for a Regulation of the European Parliament and of the Council on European Green Bonds* (COM (2021) 391 final) (European Commission, 2021c).

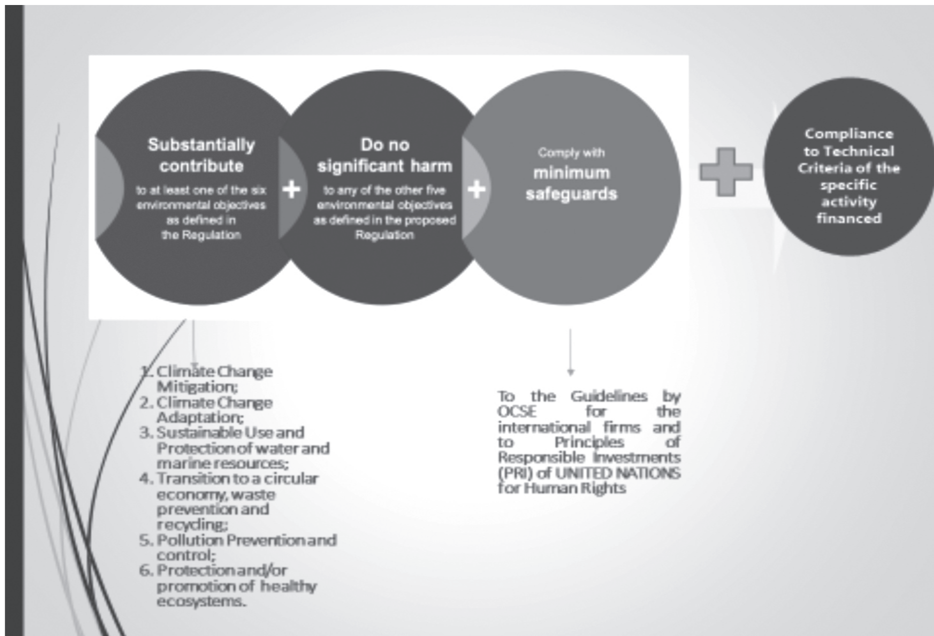


Fig. 3. *EU Taxonomy for Sustainable Activities (Reg. 2020/852, June 2020) – Source: Adapted from EU TEG (2020), Final Report on European Taxonomy, June.*

Considering the six sustainable activities indicated by the *EU Taxonomy Regulation* (see Figure 4), the first delegated act under the Taxonomy will focus on climate change mitigation and adaptation activities. In later steps, it is planned to address other environmental aspects and finally social and ethical ones.

Fig. 4. *Sustainable Activities according to the EU Taxonomy Regulation – Source: Chesné and Azoulay (2020), p. 11.*

Within the four core components of EU GBS, it is necessary to underline the importance of the *Green Bond Framework*, a document produced by the issuer which confirms the voluntary alignment of the Green Bond issued with the EU GBS and provides details on all the key aspects of the

proposed use-of-proceeds and on its green bond strategy and processes (EU TEG, 2020b, p. 36). In particular, the *Green Bond Framework* must have a structure based on five key elements, as illustrated in Figure 5. A template of the document is indicated by EU TEG (Annex 2- *Usability Guide* – EU GBS, 2020b, p.40).

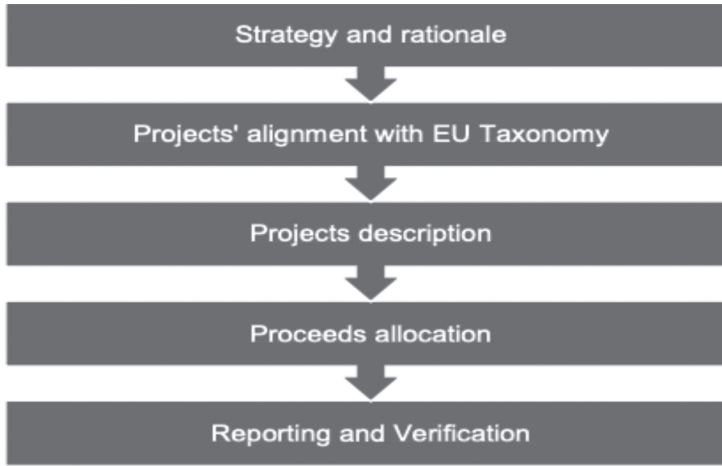


Fig. 5. *The Green Bond Framework structure – Source: EU TEG (2020), Usability Guide EU Green Bond Standard, March, p. 21.*

In relation to the last two elements of the document, *Proceeds Allocation* and *Reporting and verification*, the EU GBS requests to issuers to draft two different reporting patterns: the *Allocation Reporting* and the *Impact Reporting*.

The issuers can decide to publish these two reports in a unique document or separately. In every case, the issuers are encouraged to use the Reporting Templates provided in Annex 3 of the EU TEG *Usability Guide EU GBS,* that provide guidance on four topics:

1) *Basic Informations* (Reporting Templates Part 1);
2) *Scope and Approach of Reporting* (Reporting Templates Part 2);
3) *Allocation Reporting Templates* (Reporting Templates Part 3);
4) *Impact Reporting Templates* (Reporting Templates Part 4).

Within the *Allocation Report*, the issuer must communicate the total revenue collected, the amount allocated at the end of the reporting period, as well as the subdivision of the proceeds based on the activity for which they are destined, the area geographical and with reference to the environmental objectives pursued. Furthermore, for projects contributing to climate change mitigation, it is recommended to indicate whether these

already have a zero impact in terms of emissions or whether they contribute to the energy transition. The *Allocation Report* must be published at least annually until the complete allocation of the proceeds and, if there are significant changes in the allocation, the issuer must promptly publish an updated report. The last allocation report after full allocation is the "*Final Allocation Report*".

The *Impact Report*, on the other hand, must contain a description of the green projects and relative environmental objectives pursued. In particular, the issuer will have to communicate the estimated impact that it will have on the environment using the metrics and thresholds described in the Green Bond Framework. *Impact Report* has to be published at least once during the entire lifetime of the EU Green Bonds after the full allocation of the bond proceeds, thereafter subsequently in the event of significant material changes.

Allocation Report and *Impact Report* shall be published in a manner that investors easily have access to them. In fact, the EU GBS, as proposed by the TEG, requires issuers to publish these reports on the issuers's web page or any other accessible communication channel, making reports available until maturity of the EU Green Bond.

As regard the external verification of these reports, the EU GBS provides that only the *Final Allocation Report* has to be verified externally, while the verification of the *Impact Report* is only recommended, but not mandatory. In any case, the verification phase must be carried out by an accredited external auditor, appointed by the issuer and registered in a public register managed by ESMA.

It is important to note that the initial mandatory verification (before or at the time of issuance) can be valid for several bonds issued under a programme with the same Green Bond Framework. For transations that are fully allocated at issuance (e.g. in the case of refinancing) the verification of the Allocation Reporting can be incorporated in the initial verification.

Various researches suggest that external reviews are essential to reduce informational asymmetries for market participants, being able to promote the integrity, credibility, harmonization and efficiency of the Green Bond market.

All the principle elements of EU GBS are drafted and summarized into the EU TEG *Usability Guide of EU GBS* (2020), as showed in Figure 6.

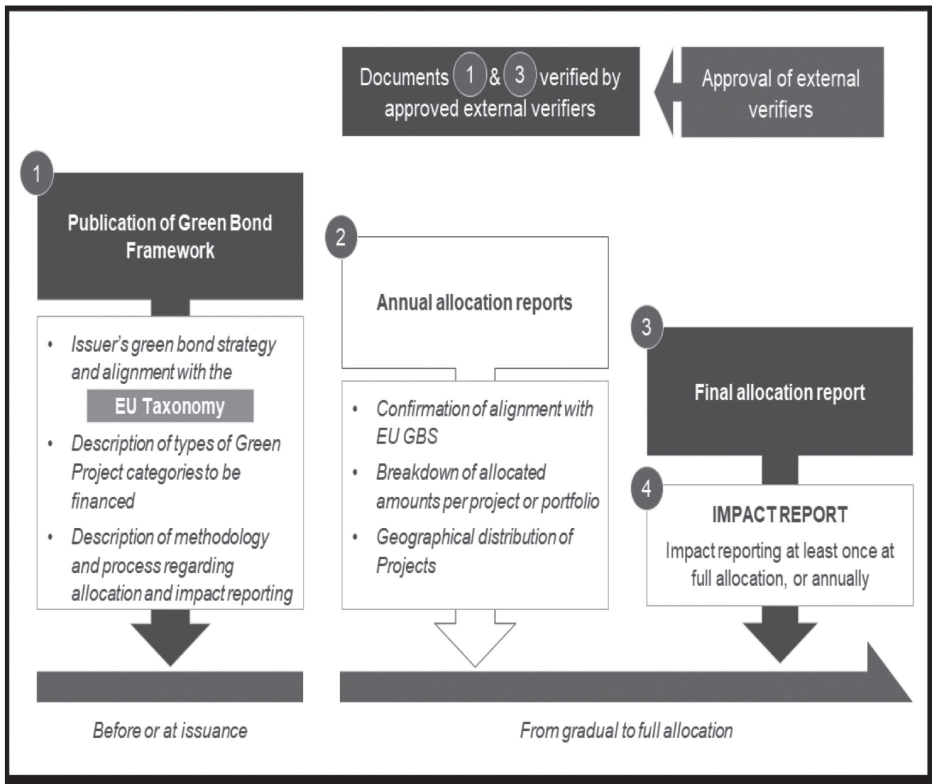


Fig. 6. *Highlights of EU Green Bond Standard by TEG – Source: EU TEG (2020), Usability Guide EU Green Bond Standard, March, p. 10.*

Finally, if we compare the *Green Bond Principles* by ICMA and the *EU Green Bond Standard* by EU TEG, it is possible to underline that the fundamental novelty introduced by the EU GBS lies in the different notion of "*green project*". In fact, while the GBPs don't require the issuer to refer to a specific taxonomy to assess the sustainability of the eligible project that the bond wants to fund, the European Commission requires to use only the criteria established in the EU Taxonomy Regulation for Sustainable Activities.

A further difference concerns the documents that the issuer must provide to the investors. Unlike GBP where the publication of the report on the assessment and, where possible, the environmental impact of the funded projects is recommended, the EU GBS mandatory requires that the issuer, before or at the time of issue, must make available to investors the *Green Bond Framework.*

The third fundamental difference is the establishment of a register of accredited certifiers, or experts in the sector, who provide an external audit, which must be registered in a public register managed by ESMA

(the *European Supervisory Authority for Financial Markets*), with the task of certifying the alignment of the Green Bond with the European Guidelines. These main differences and others less significative are reported in the following Tab. 1.

Tab. 1. *EU Green Bond Standard by EU TEG compared to GBPs by ICMA.*

Specific Topic	Green Bond Principles provision	EU Green Bond Standard provision
Reference of alignment with GBPs/EU GBS in legal documentation	Recommended	Required
Eligibility criteria for green projects	Guidance on high-level categories	Compliance with a detailed EU Sustainability Taxonomy
Disclosure of proportion of proceeds used for refinancing	Recommended	Required
Impact monitoring and reporting	Recommended, wherever possible	Required to report whether issuer is monitoring impact or not and if so, disclose estimated/actual impact
External review requirements	Recommended	Required
	External review may be partial, covering only certain aspects of an issuer's green bond or associated Green Bond framework or full, assessing alignment with all four core components of GBPs	External review must confirm, at a minimum, the alignment, at issuance, of the Eu green bond with all four core components of the EU GBS, or alternatively, confirm the alignment of the EU Green Bond Programme as a whole
Publication of external review	Recommended	Required
Accreditation of external reviewers	Not addressed in GBPs	Sets out accreditation requirements for external reviewers

Source: Adapted from EU TEG (2019), Report on EU Green Bond Standard, June 2019.

3. *Green Bond for financing sustainable transports*

3.1. *The Green Bond Market in its recent evolution: some numbers*

The overall goal of the Green Bond market is to promote and amplify the important role that financial markets can play in helping to address environmental issues. By explicitly specifying the environmental beneficial projects to which the bond proceeds are directed, Green Bond allow investors to assess and direct their capital to such sustainable investments without sacrificing liquidity and returns.

In recent years, international bodies have increasingly seen Green Bond (GB) as a valid tool to achieve the environmental objectives set at global level and, as a result, the market has considerably grown. The growing diffusion of 'sustainable' and 'socially responsible' investment strategies has led investors to integrate ESG factors into their investment strategies. Green Bond demand has increased accordingly, reflecting the need to make the asset allocation consistent and compliant with the ethical values increasingly recognized by the public (Doronzo *et al.*, 2021; Bongini *et al.* 2020; UN-Environment, 2019; Sustainable Banking Network (SBN), 2018).

The origins of Green Bond date back to 2007, when the European Investment Bank (EIB) launched its first *Climate Awareness Bond*. Successively, the World Bank issued its inaugural Green Bond in 2008. These were followed by a small but growing stream of issuances from government-related entities and local authorities. But the Green Bond market really started to blossom after the launch of the ICMA *Green Bond Principles* in 2014. The introduction of these principles, in fact, marked a first step in increasing transparency for both investors and issuers (Reichelt and Keenan, 2017; Sean *et al.*, 2015), clarifying requirements for issuers. This gave a strong boost to both the volume and diversity of issuers (SEB, 2018; Liberati and Marinelli, 2021).

In less than a decade, the Green Bond market has transformed from a niche impact market to one of the most dynamic segments in fixed income, becoming a mainstream market in its own right. In the last years, the Green Bond market has just seen an exponential growth. It reached its substantial milestone, with USD 1 trillion in cumulative issuance since its inception in 2007 until december 2020 (as shown in Fig. 7). In these 13 years, it is possible to calculate an average annual growth rate at approximately 95% (Climate Bonds Initiative, 2021). Surely, the pandemic crisis arrived in Europe at the beginning of 2020, becoming rapidly a global event, caused to re-establish priorities and focus on what we need to do to secure the future of our planet (World Economic Forum, 2022). Green Bond, with

their clear use-of-proceeds structure, can target climate-related projects and can have direct environmental impacts too.

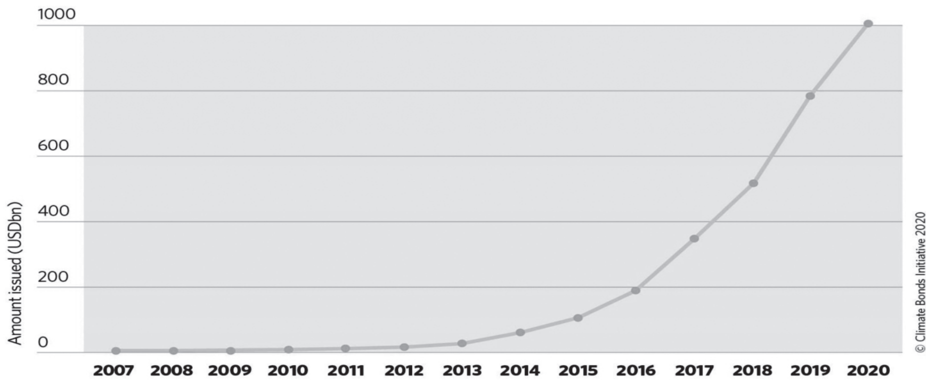


Fig. 7. *Cumulative progression of Green Bond Market (2007-2020) – Source: Climate Bonds Initiative, 2021.*

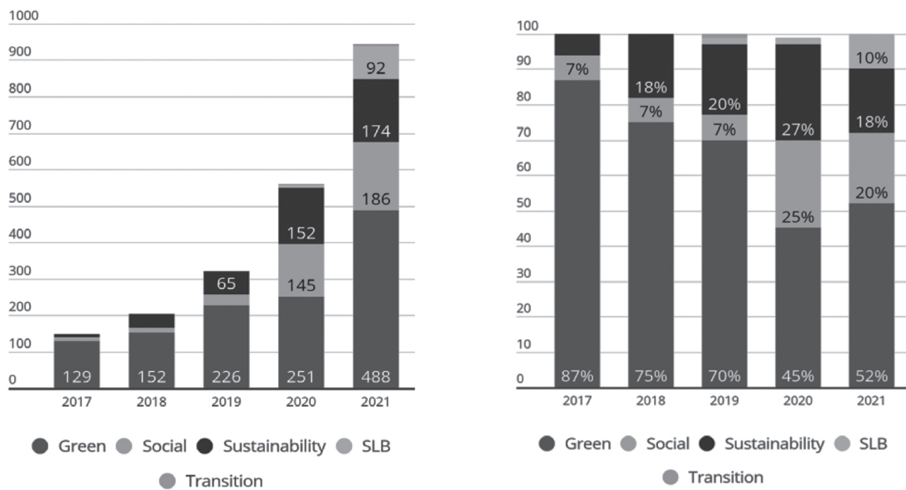


Fig. 8. *GSS Bond issued by stocks (a) and by bond type (b) (2017-2021) – Source: Mainstreet Partners, 2022.*

If we consider the Green, Social and Sustainibility (GSS) Bond market (Figure 8a), it is rapidly approaching US$ 3 trillion, with almost US$ 1 trillion of stock coming from 2021 alone. In particular, yearly issuances of Green Bond increased 94% in 2021, reaching US$ 490 billion. The total of GSS Bond in 2021 was US$ 945 billion, +69% vs 2020 (Climate Bond

Initiative, 2022). In the last 5 years, from 2017 to 2021, the GSS Bond market is raising of more than 50% each year (MainStreet Partners, 2022, p.7).

Considering the GSS issued in the same period (2017-2021) by bond type (Figure 8b), it is possible to see a more consistent growth of Social Bond in 2020 e 2021 (respectively 25% and 20% in 2020 and 2021, respect to 7% in the previous years): this can be considered an effect of the pandemic crisis, that has underlined the social topics in a dramatic way (World Economic Forum, 2022).

To have a comparison respect to the total amount of ESG issuances, we can releave that 29% of Western Europe Investment Grade credit issuance in 2021 was represented by GSS issuances, marking a strong increase from 8% and 9% respectively in 2019 and 2020 (Figure 9).

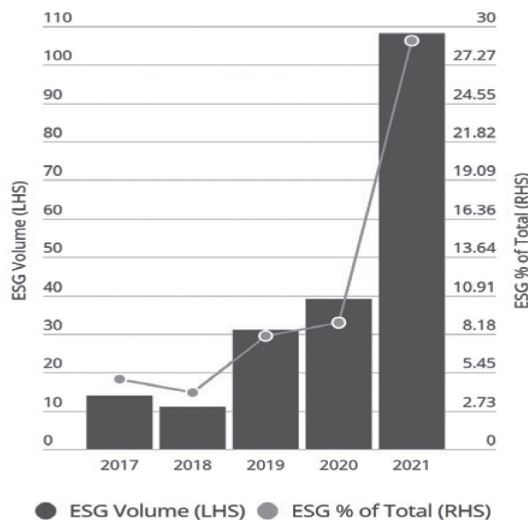


Fig. 9. *EUR Corporate Sustainable Bonds issued (2017-2021) – Source: Mainstreet Partners, 2022.*

In 2022 it is possible to expect an uptake in new launches of fixed income funds dedicated to GSS Bond, with the possibility to see more than US$ 1 trillion in GSS Bond issued. Such growth is driven not only by momentum from the UN's COP26 Summit, but also by the European Initiatives, such as EU Taxonomy, EU GBS, SFDR EU Regulation, EU Green Deal and Next Generation EU.

An other element that has to be considered is represented by the issuers of the Green and other Sustainable Bond. They can include supranational bodies, governments and government-related entities as well as companies (for a relative evolution from 2014 to 2021 see Figure 10).

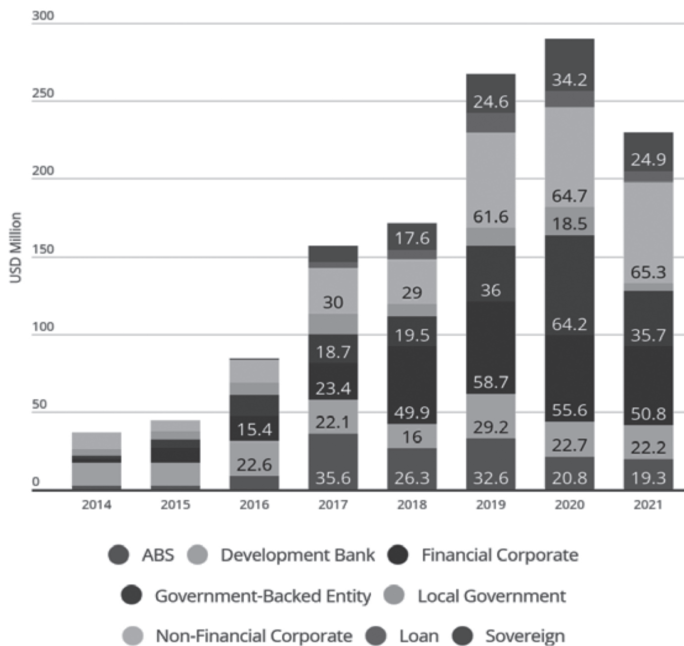


Fig. 10. *Different typologies of Sustainable Bond Issuers (2014-2021) – Source: Climate Bonds Initiative, 2022.*

In 2021 we can see also a relevant growth of European Sovereign GSS Bond, thanks above all to the *Next Generation EU Programme* (July 21, 2020), that considers a total amount of EU issues of 750 mld US$, of which 30% (250 mld US$) will be in Sovereign Green Bond (ASVIS, 2020).

Government schemes to support infrastructure investment can likely drive a further growth. Governments move at a much higher scale. In 2021 alone UK, Germany, Italy and Spain issued € 50 billion in Green Bond. Considering the larger size of sovereign issuances compared to the corporate ones, governments can play a major role in shaping the energy transition through GSS Bond. In particular, in 2021 the European Union Green Bond's orderbook, reaching a € 135 billion, can be considered the largest ever orderbook for a Green Bond (Doronzo *et al.*, 2021; NN Investment Partners, 2022).

At a global level, we can point out that in USA the most relevant issuer is US Agency Fannie Mae (with USD 24.9 bn.), while in China the Green Bond market is dominated by private banks (74% of issuances) and in France the main issuance is constituted by French Sovereign Bond.

All these GSS Bond issuances enable investors to finance concrete real-world impact on all levels. These can range from the EU's Europe-wide green spending plans and more sustainable national public transport sys-

tems to individual corporate projects for low-emission vehicles or new wind farms Investors and other stakeholders are increasingly demanding more tangible evidence that theur money is making a positive difference in the world. Allocating to Green bonds, that are characterized by a specific and verified Use-of-Proceeds, these investors' objectives can be satisfied (NN Investment Partners, 2021)

Considering the different GSS Bond Eligible Project Categories, it is possible to point out (as shown in Figure 11) that the relative three main categories are represented by Energy (35,35%), or Waste Buildings (28,28%) and Transport (18,18%). Together these three largest Use-of-Procedees (UoP) categories represent more than 81% of the UoP categories of the GSS Bond, considering the period from 2014 to 2021, (Harrison *et al.*, 2022; Mainstreet Partners, 2022). Less importance is given to Project Categories as Water, Land Use or Waste. Surely all these objectives are able to contribute in pursuing the SDGs of UN 2030 Agenda.

But the issuances of Green Bond for financing Sustainable Transport have to be analised in a more detailed way in the following part of the present work, representing a goal of this research.

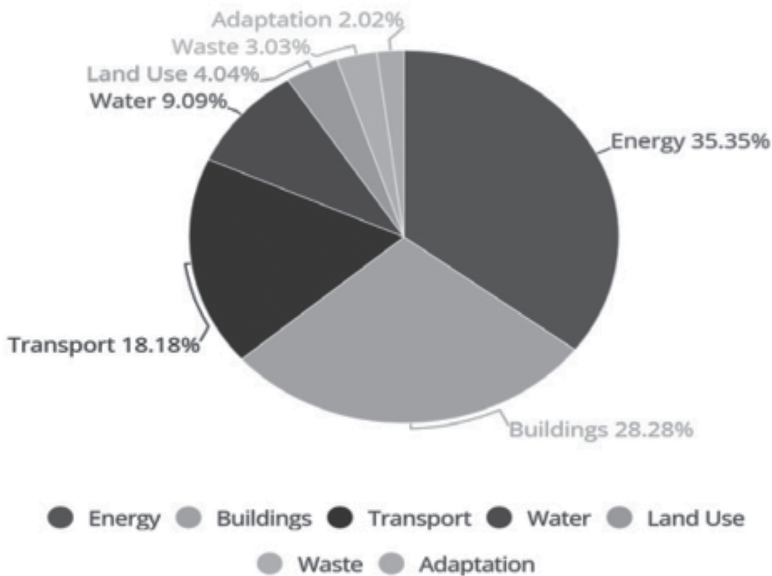


Fig. 11. *GSS Bonds by Eligible Project Category (2014-H1_2021) – Source: Mainstreet Partners, 2022, p. 7*

3.2. *About some indicators in such Green Bond Impact Reporting*

The GBPs help to enhance the integrity and transparency of environmental finance, including through recommending impact reporting. In December 2015, a working group of eleven *International Financial Institutions* (IFIs) published a study on the advantages connected to a more harmonized framework for Impact Reporting in Green Bond issuances for financing sustainable tranports (IFIs, 2015). The framework outlined core principles and recommendations for impact reporting in order to provide issuers with reference and guidance for the development of their own reporting, providing also core indicators and reporting templates for energy efficiency and renewable energy projects.

It is interesting to underline that the indicators proposed in this document aim to capture and illustrate the environmental and sustainability benefits of projects relating to clean transportation, which are recognised by the GBP (2017) for Green Projects under one of the ten broad categories of eligibility for Green Projects: "*clean transportation (such as electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions)*".

This document proposes certain quantitative impact reporting metrics, considering that the GBPs also encourage issuers to provide qualitative information in relation to their clean transportation projects, whether focused on reducing pollution or focused on improved use of resources. Such qualitative information is also encouraged to provide for a meaningful contextualisation of the baseline situation and the improvement as a result of the project. For clean transportation projects, this information may be especially meaningful when it covers the entire life-cycle, including the decommissioning of vehicles, as well as the local and/or regional context in which the project is undertaken.

In evaluating the environmental and sustainable benefits of clean transportation projects, it may be useful for issuers to reference the "*sustainable transport hierarchy*" in any qualitative reporting on their transportation strategy. This seeks to prioritise those activities that are optimal in managing resources and protecting the environment. This sustainable transport hierarchy may be presented in a schematic form as represented in Figure 11-1.

Clean transportation activities at each level of the ASI sustainable transport hierarchy may be described as follows:

- *Avoid/Reduce*: any operation that avoids the need to travel or reduces the length of travel, including through integrated land-use planning, and transport demand management;
- *Shift/Maintain*: any operation that moves people or freight to a more

sustainable and less polluting means of transportation, such as cycling, walking, buses, ferries, trains and trams;
- *Improve*: any operation that reduces the emissions (both GHG and local pollutants) of vehicles or the transport system.

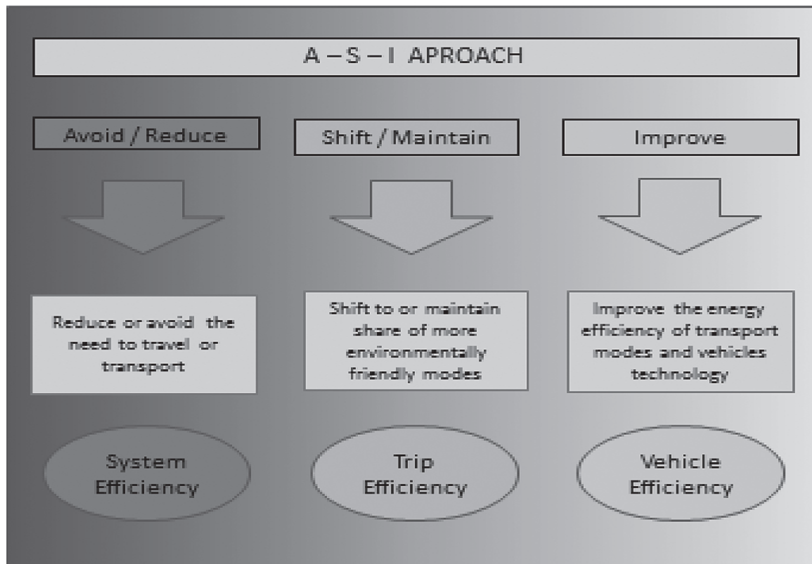


Fig. 11-1. *"Avoid-Shift-Improve (ASI)" Approach – Source: GBP Impact Reporting Working Group (2018), Green Bonds. Working towards a Harmonized Framework for Impact Reporting for Clean Transportation, ICMA, June.*

Demand reduction is the preferred option, followed sequentially by modal shift and, finally, by transport efficiency improvements.

The proposed core indicators for clean Transportation Projects are indicated as following:

A) *Clean Transportation Projects*

1) *Procurement and/or deployment of clean transportation (modal shift):* any operation that moves people or freight to a significantly more sustainable and less polluting means of transportation;

2) *Deployment of clean transportation (low emissions)*: any operation that reduces GSH emissions and/or air pollutants per unit of service provided through, for example, fuel switch or technology switch taking account of fuel production or electicity generation, including projected changes [4].

[4] For example, deployment of electric vehicles may be considered a clean tranpostation project although it may not necessarily reduce GSH emissions in the near term (GBP Impact Reporting Working Group, 2018).

B) *Construction of Clean Transport Infrastructure*
1) *Construction, extension and/or improvement to core sustainable transport infrastructure*: e.g. constructingor electrifying train tracks, clean utility connections in port, constructing or improving bicycle lanes, bicycle parking and bicycle sharing schemes;
2) *Construction and/or improvement to the auxiliary sustainable transport infrastructure:* e.g. stations, terminals, electric vehicle charging infrastructure, network and traffic management systems, connected and automated transport technologies, smart mobility systems and the development and deployment of alternative transport fuel.

These indicators, as other similar ones, are designed to facilitate quantitative reporting at a project and/or at a portfolio level across geographies. The importance of the geographic context in the assessment of solutions reinforces the benefit of providing additional relevant information. Therefore, disclosure on the national, regional and local context, including information on the population served, pollution levels, and specific CO_2 electricity grid baselines, is encouraged. Such informations, as well as the rate and level of shift under the ASI approach, help to understand and provide more accurate assessments of the environmental impacts/benefits of the project in its context. Additional qualitative reporting is also encouraged. Thus, for the purpose of data quality, issuers are encouraged to disclose additional technical reports and/or data verification protocols, where additional information could be provided as well as links to the sources of such data and methods of calculation. The robustness of disclosures and/or the underlying methodology may be enhanced by making available any independent assessment from consultants, verification bodies and/or institutions with recognised expertise in environmental sustainability (GBP Impact Reporting Working Group, 2018).

3.3. *Some recent issuances of Green Bond financing Sustainable Transports*

3.3.1. *The example of an International Corporate Issuance: Mercedes-Benz (Daimler AG) (2021)*

Considering the most recent International Issuances of Green Bond in Transport Project Category in 2021, it is possible to notice that Daimler AG, Toyota Motor and Ford Motor issued inaugural Green Bond in 2021, with proceeds allocated to enhance the development of electric vehicles and related infrastructures. In particular, Ford issued the largest Green Bond by a US Corporation (US $ 2.5 billion), while in 2021 AP Moller Maersk issued a Eur 500mln Green Bond to fund the construction of container

vessels able to operate on carbon neutral methanol by 2023 (Mainstreet Partners, 2022, p. 7).

Daimler AG issued its first Green Bond under its Green Finance Framework in September 2020 and a second Green Bond in March 2021.

Considering the Mercedes-Benz Car&Vans (part of Daimler AG) issuance in 2021, it is possible to releave that Mercedes-Benz is a global automaker that aims to achieve CO_2 neutrality for its new passenger fleet and all of its manufacturing facilities by 2039. Its Green Bond issue in 2021, in particular, aims to contribute to refinancing the development of electric vehicles (Daimler, 2021).

The main features of this Green Bond issuance 2021 are as following indicated:

- *Impact attributable to the bond*: 60 metric tons of GHG emissions are avoided annually per EUR 1 million of investment.
- *Volume*: EUR 1 billion.
- *Term*: twelve years with an annual coupon of 0.75%.
- *Use of proceeds*: Development of a modular *Battery Electric Vehicle* (BEV) architecture that is flexibly scalable for the company's range from compact to luxury cars.
- *Project contributing to the impact*: The BEV architecture is suitable for a wide variety of vehicle types because of its modular design, its variable wheelbase and wheel gauge, and its other components, notably the batteries. It has supported delivery of the EQ-line including EQS, EQA and EQB. Life-cycle carbon-footprint analysis of the EQS, the company's first all-electric luxury model, shows it could save about 48% of CO_2 compared with a similar model with a combustion engine.
- *Company target alignment:* Being part of measures to help Mercedes-Benz achieve its CO_2 neutrality target, financing for the modular BEV architecture and the production of electric vehicles will help it reduce scope 3 emissions. The bonds in this portfolio also refinance a project that gives batteries that can no longer be used in vehicles a second life as part of a system for storing electricity.

At Mercedes-Benz's "Factory 56" in Sindelfingen, Germany, the batteries are connected to a photovoltaic system on the factory roof and act as buffers for excess solar power. This is key to its target of realizing CO_2 neutrality at all of its plants by 2039.

In the Green Finance Framework (Daimler, 2020), we can read that the proceeds raised from the Green Financing will be allocated to four eligible catgories:

1) Clean Transportation;

2) Energy efficiency;
3) Pollution prevention and control;
4) Renewable energy.

It is also pointed out that 50% of proceeds will be allocated to the category “Clean Tranportation” (Daimler, 2020, p. 9)

The following Tab. 2 shows the only part (regarding “Clean Trasportation”) of the original table containing all the four eligible categories before indicated.

Tab. 2. *Daimler Eligible Assets regarding the Clean Transportation*

<table>
<tr><th>GBP & GLP Categories</th><th colspan="2">ELIGIBLE ASSETS</th></tr>
<tr><td>Clean transportation</td><td colspan="2">Development and production of zero emission vehicles such as Battery Electric Vehicles (BEV) and Fuel-Cell-Electric (FCEV)/hydrogen-powered vehicles as well as development, production and recycling of batteries/fuel cells and related infrastructure throughout the value chain including:

• Research and Development
Research and development of:
– Electrified drivetrain systems including sourcing, tooling and testing concepts, products and production processes;
– Charging/supporting infrastructure
Design for Environment (DfE) solutions including sourcing, tooling and testing concepts, products and production processes

• Manufacture of zero emission Vehicles and its drivetrains
– Upgrading and retrofitting of manufacturing facilities for the purpose of enabling and/or expanding the production of zero emission vehicles
– Construction of new manufacturing facilities used for the production of zero emission vehicles, its drivetrains and/or the production and recycling of batteries/fuel cells.

• Charging /supporting infrastructure
Development and installation of elecric charging infrastructure such as charge@home, charge@daimler, charge@public (e.g. charge@highway [High Power Charging (HPC)] and charhe@fleet</td></tr>
<tr><td rowspan="2">Targeted Objectives</td><td>SDGs</td><td>EU Environmental Objective</td></tr>
<tr><td>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
11 SUSTAINABLE CITIES AND COMMUNITIES
13 CLIMATE ACTION</td><td>Climate change mitigation</td></tr>
</table>

Source: Adapted from Daimler (2020), *Green Finance Framework*, 18 June 2020, p. 10.

3.3.2. *The BTP Green (March 2021) as first Italian Sovereign Green Bond for financing (also) Sustainable Transports*

If we consider the recent Italian Issuances of Green Bond for financing Sustainable Transport, we can illustrate, as example, the first Italian Sovereign Green Bond, BTP Green (March 2021) having, among others, also this kind of eligible project. An other Corporate Issuance by Scania will be described in a more detailed way too.

BTP Green is the new sustainable finance government bond designed to support, through its proceeds, public expanditures with positive environmental impact, contributing at the same time to the country's ecological transition (Doronzo *et al.*, 2021).

The issuance of BTP Green in March 2021can be considered the first Italian Sovereign Green Bond having, among others [5], as eligible asset the Tranport Project. According to the Sovereign Green Bond (SGB) framework (MEF, 2021), Italy will finance public expenditures giving a contribute to the achievement of some of the environmental objectives of the EU Sustainable Finance Taxonomy. The use of proceeds will help Italy to support the 2030 SDGs, by contributing to:

Goal 6: Clean Water and Sanitation
Goal 7: Affordable and Clean Energy
Goal 11: Sustainable Cities and Communities
Goal 12: Responsible Consumption and Production
Goal 13: Climate Action
Goal 14: Life below Water
Goal 15: Life on Land

For the purpose of the Sovereign Green Bond an Inter-Ministerial Committee has been set up, which is responsible for setting out the information concerning expenses that will be eligible in relation to the issuance of this SGB. Eligible expenses, included in the Italian State budget, will be selected from a period between three years before and one year after the bond issuance.

The "*Italian Sovereign Green Bond Allocation and Impact Report*" will be published annually (in English on the website of the Ministry of Economy and Finance) to show the allocation of proceeds arising from the SGB, providing informations both on contribution of each project to the

[5] According to the SGBs Framework, the eligible projects are indicated in the Green Sectors below: 1. Renewable electricity and heat; 2. Energy Efficiency; 3. Transport; 4. Pollution preventionand control and circular economy; 5. Protection of the environment and biological diversity; 6. Research. (MEF, 2021, pp. 9-16).

indicators of sustainability and the achievement of the objectives, both on environmental impact of green expenditures.

The main features of this BTP Green 2021 are as following indicated:

- Issued 3rd March 2021 by the Italian Treasury, with maturity 30th of April, 2045;
- Medium-long term government bonds that guarantee fixed semi-annual coupon payments (as the other nominal BTPs) determined by the coupon rate and the reimbursement of the face at maturity; possible discount at issuance;
- Currency: Euro (Total amount issued 13.5 mld Euros)
- Trading venues:
  1) Individual investors can trade the bond on the MOT (electronic retail market managed by Borsa Italiana SpA) for trades with a minimum lot purchasable of 1.000 Euros (or on other trading platform according to the best execution principle introduced with MiFID Directive);
  2) Institutional Investors for trades greater than 2 million of Euros can trade Green BTPs Listed and traded on MTS (regulated wholesale secondary market managed by MTS SpA).
- Second Party Opinion: VIGEO-EIRIS

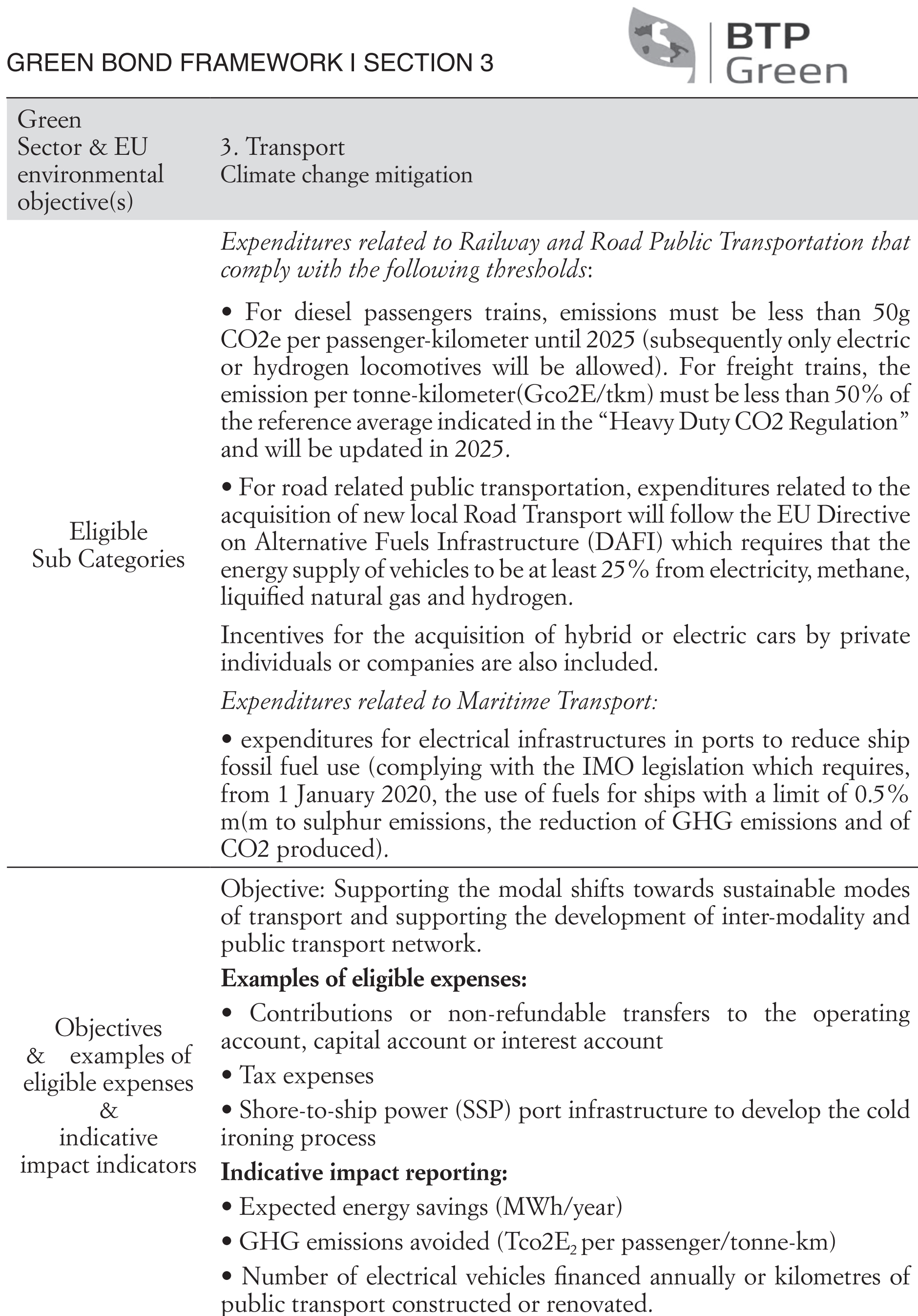
Considering in particular the *Use of Proceeds for Transport as eligible project,* in the Section 3 of the Sovereign Green Bond Framework we find:

- *Railway Transport*, that comply with the different thresholds for diesel passenger trains and freight trains (example of this objective could be the realization of the Brennero railway tunnel);
- *Road-related public transportation*, following the EU Directive on Alternative Fuels Infrastructure (DAFI);
- *Maritime port related infrastructures*, facilitating emissions reduction in shipping (e.g., “cold ironing”).

The UN SDGs indicated in this section 3 of the SGBs Framework are:

Goal 11*: Sustainable cities* and communities
Goal 13*: Climate Action*

Tab. 3. *Italian BTP Green (March 2021) Eligible Transport Project*



GREEN BOND FRAMEWORK I SECTION 3

Green Sector & EU environmental objective(s)	3. Transport Climate change mitigation
Eligible Sub Categories	*Expenditures related to Railway and Road Public Transportation that comply with the following thresholds*: • For diesel passengers trains, emissions must be less than 50g CO2e per passenger-kilometer until 2025 (subsequently only electric or hydrogen locomotives will be allowed). For freight trains, the emission per tonne-kilometer(Gco2E/tkm) must be less than 50% of the reference average indicated in the "Heavy Duty CO2 Regulation" and will be updated in 2025. • For road related public transportation, expenditures related to the acquisition of new local Road Transport will follow the EU Directive on Alternative Fuels Infrastructure (DAFI) which requires that the energy supply of vehicles to be at least 25% from electricity, methane, liquified natural gas and hydrogen. Incentives for the acquisition of hybrid or electric cars by private individuals or companies are also included. *Expenditures related to Maritime Transport:* • expenditures for electrical infrastructures in ports to reduce ship fossil fuel use (complying with the IMO legislation which requires, from 1 January 2020, the use of fuels for ships with a limit of 0.5% m(m to sulphur emissions, the reduction of GHG emissions and of CO2 produced).
Objectives & examples of eligible expenses & indicative impact indicators	Objective: Supporting the modal shifts towards sustainable modes of transport and supporting the development of inter-modality and public transport network. **Examples of eligible expenses:** • Contributions or non-refundable transfers to the operating account, capital account or interest account • Tax expenses • Shore-to-ship power (SSP) port infrastructure to develop the cold ironing process **Indicative impact reporting:** • Expected energy savings (MWh/year) • GHG emissions avoided (Tco2E$_2$ per passenger/tonne-km) • Number of electrical vehicles financed annually or kilometres of public transport constructed or renovated.

Source: *Adapted from MEF (2021), Framework for the Issuance of Sovereign Green Bonds, BTP Green, February 2021, p. 12.*

Reading the considerations present in the "*Second Party Opinion on the sustainability of the Republic of Italy' Green Bond Framework*" (Vigeo-Eiris, 2021), it is possible to see that Vigeo-Eiris considers this framework aligned with the four core components og the Green Bond Principles 2018. It is also considered coherent with the country's strategic sustainability priorities, contributing to the realization of its environmental commitments and targets. As shown in Figure 12, the *Contribution to Sustainability of the Framework* (Figure 12) is assessed as "Robust", but not "Advanced" and this means that regarding this component some elements are not present to reach the perfection – considering that "Advanced" represents the maximum evaluation that Vigeo-Eiris could give – while the *Sustainability Performance of the Issuer* has been assessed as "Advanced", reaching the best evaluation (see Figure 13) (Vigeo-Eiris, 2021).

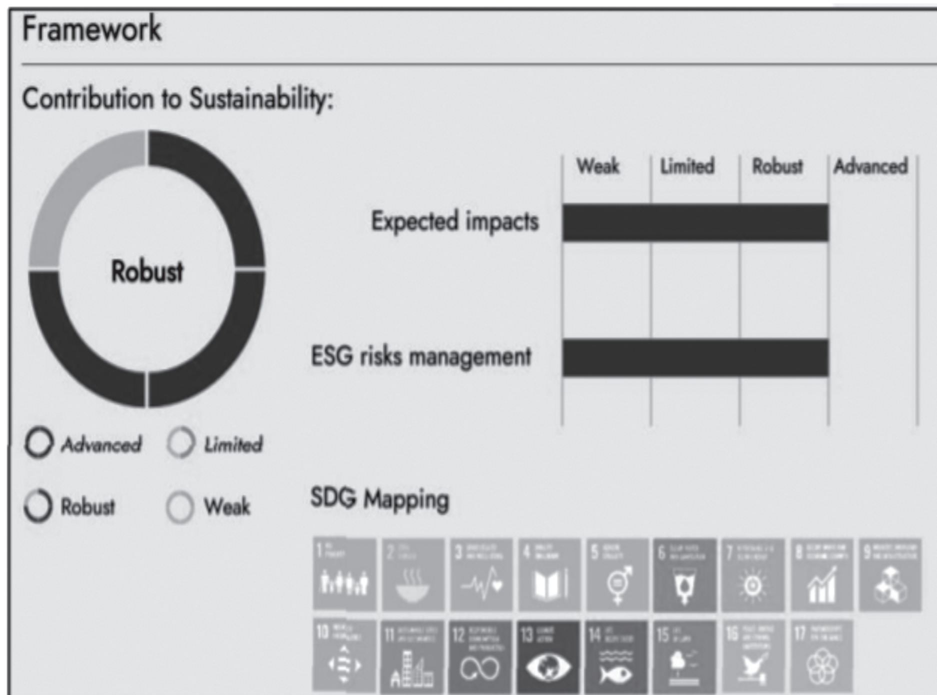


Fig. 12. *Assessment of Sustainability in SGBs Framework by Vigeo-Eiris – Source:* Vigeo-Eiris (2021), *Second Party Opinion on the sustainability of the Republic of Italy's Green Bond Framework,* p. 1.

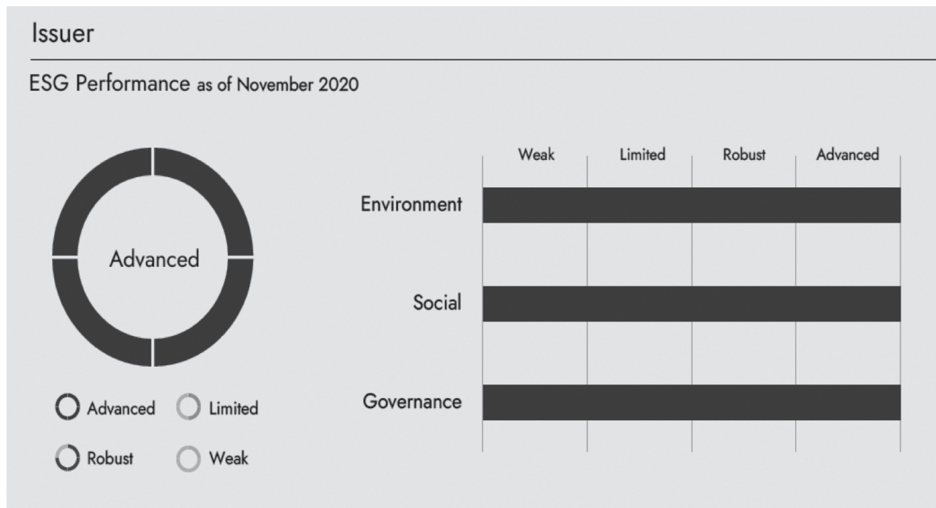


Fig. 13. *Assessment of ESG performance in BTP Green (2021) Vigeo-Eiris – Source: Vigeo-Eiris (2021), Second Party Opinion on the sustainability of the Republic of Italy's Green Bond Framework*, p. 1.

3.3.3. *The example of Scania as another corporate issuance of such Green Bond*

Scania (ordinary shareholders of TTS Italia) is a world leader in providing transportation solutions, with offices and employees in over 100 countries all over the world.

At the end of 2020 Scania, as the first pure manufacturer of commercial vehicles, received approval for the company's framework for issuing a Green Bond.

About 30 Nordic banks, insurance companies and pension fund managers participated to Scania's Green Bond issuance. The bidding resulted in Scania raising loans totalling SEK 1.25 billion, with a 4-year maturity for investments that the company is making to convert to production of electric vehicles.

«*Scania is determined to lead the shift towards a fossil fuel-free transportation system and the Green Bonds will allow us to accelerate this transition. We are aware of the fact that the decarbonisation of the transport system worldwide will require, in the coming years, to create partnerships between the various sectors, including the financial world (…). The entire transport ecosystem has the fundamental and unprecedented task of making the transition from total dependence on oil to complete decarbonisation, all in one generation,"* said Andreas Follér, Head of Sustainability at Scania. "*It is*

certainly a complex challenge but at the same time one of the most exciting of our times. We therefore invite investors to join us on this journey" (Scania Press Info, 2020).

Proceeds from Scania's Green Bond will go exclusively to projects that will have a profound impact on reducing CO2 emissions. These may include projects able in improving the performance of industrial vehicles and electric buses, in creating public transport systems with electric buses, and in building efficient charging infrastructures for electric vehicles and buses.

Scania's Green Bond Framework (GBF) aligns its strategy with financing opportunities towards a fossil free transport system. The Green Bond Framework, that forms the basis for the identification, selection, verification and documentation of projects, deemed suitable to be financed by proceeds deriving from Green Bond, has been developed in cooperation with the Skandinaviska Enskilda Banken (*breviter* SEB bank). The GBF is aligned with both the ICMA Green Bond Principles (GBP) and the LMA Green Loans Principles (GLP).

According to the Green Bond Principles, the proceeds will be managed in separate accounts and the allocations of funds will be reported in a transparent way together with the emission reductions obtained.

The Norwegian Cicero, as Second Party Opinion, has assigned a "dark green" rating to this framework (considering Cicero shades of Green, the "dark green" means that projects and solutions correspond to a long-term vision of a future with low carbon emissions and resilience to climate change) and Scania's governance performance is rated as "Excellent" (Scania, 2020).

Considering Scania's Green Financing Governance, it is possible to point out that Scania has a Green Bond Committee that consists of the Head of Sustainability and the Head of Treasury. The Green Bond Committee evaluates potential Eligible Assets. Decision is made in consensus on which assets that meet the requirements of the Framework and will be financed with proceeds from Scania's Green Bonds. Only projects with a high likelihood that the net, long-term environmental effects are positive are approved.

An amount equal to the net proceeds from the issue of Green Bond was credited to a segregated Green Account with the purpose to finance Scania's Eligible Assets. As long as Green Bond are outstanding and proceeds from issues are available on the Green Account, Scania, at the end of every fiscal quarter, shall deduct funds from the Green Account in an amount equal to disbursements for the financing of Eligible Assets made during that quarter. Until disbursement to Eligible Assets, the Green Account balance will be placed on a bank account. If, for any reason, a financed Eligible Asset no longer meets the eligibility criteria, it will be removed from the pool of projects financed with proceeds from Scania's Green Bond.

The Green Bond Impact Report (Scania, 2021) has been approved by Scania Sustainability Board (SSB), an internal forum for sustainability coordination, decision making and follow up. SSB is reporting directly to Scania's Executive Board (ExB).

According to this Green Bond Impact Report, the total nominal amount of Green Bond issued and outstanding is 1,250 MSEK, on December 31, 2021. 100% of total proceeds from Scania Green Bond has been used to finance internal projects within the scope of Scania Green Bond Framework (Scania, 2021, p. 5).

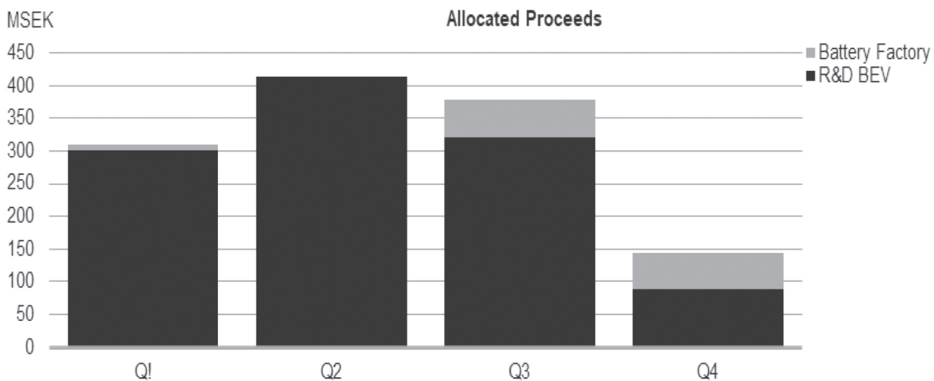


Fig. 14. *Scania's Green Bond Allocated Proceeds – Source*: Scania (2021), *Green Bond Impact Report*, p. 5.

"*The great interest in our green bond confirms the financial community's willingness to enter into the partnerships needed to phase out fossil dependence in the world. At the same time, it also confirms the financial community's confidence in our work to drive the transition to a sustainable transport system,*" said Johan Haeggman, Scania's Chief Financial Officer (Scania Press Info, 2021).

Scania Electrification R&D fully focuses on developing Battery Electric Vehicles (BEV) for heavy commercial use. Scania's aim is to develop a great number of applications to have a complete BEV-product portfolio before 2030. Increasingly, Scania's focus is to provide sustainable transport solutions, offering its customers a complete e-mobility solution from the sourcing of renewable energy to the installation and maintenance of charging equipment. Electric batteries – including the supply of modules, packs and battery management systems – will become an increasingly important part of Scania's business too.

Electric vehicles are key to cutting transport emissions. But for electric transport, to be truly sustainable, it is necessary to reduce impacts at every

stage of their life cycle, from operating on fossil-free energy, to the carbon impact of manufacturing vehicles and all the way to the disposal the batteries. During 2021 Scania strengthened its partnership with Northvolt with a further investment in the pioneering sustainable battery company. Northvolt uses a circular model of production, where end-of-life battery materials are recovered and used to make more batteries. Thanks to the backing of Scania and other investors, Northvolt has been able to expand its Swedish factory from 40 GWh to 60 GWh. This makes possible for the company to meet increased demand as more customers switch to electric vehicles. Scania's target is for electric solutions to make up 10% of its total vehicle sales volume by 2025 and 50% by 2030 (Scania, 2021, p. 8).

4. *Conclusions*

The present analysis is able to confirm the growing importance of Green Bond as financial instruments to reorient capital flows towards a more sustainable economy, reducing the existing investment gap in supporting the actions to reach a low-carbon climate-resilient economy, aware that the transition towards a low-carbon economy requires enormous investments. Pursuing the SDGs of the UN 2030 Agenda is clearly important, tackling in particular the climate change and its disruptive effects, that are more and more evident and urgent to solve.

In fact, climate change and its impact on financial markets and institutions have recently become a significant topic in the economic debate. The development of a transitional economic model allowing a sustainable growth is one of the key-challenges for policy makers, economic agents and financial markets in the coming years (Liberati and Marinelli, 2021, p. 5). The pandemic crisis brought about a wake-up call on the correct assessment of the climate-related risks, as pointed out both by Schumacher (2020) and Schnabel (2020):

"*The pandemic is therefore a stark reminder that preventing climate change from inflicting permanent harm on the global economy requires a fundamental structural change to our economy, inducing systematic changes in the way energy is generated and consumed.*"

The *green finance gap*, in other terms the lack of the necessary financial resources to be addressed towards green investments, represents a relevant limitation for the green structural change of the economy. In relation to this, an event that can be considered of great importance that broadens prospects and possibilities of green and sustainable finance is the *2021 United Nations Climate Change Conference* (or COP26), held in Glasgow (UK) in Novem-

ber 2021, in which passed the *Glasgow Climate Pact* (UNFCC, 2021), that requested governments from 153 countries to update and strenghten their nationally determined contributions by mobilizing billions of US dollars. Business and government also agreed on more aggressive investments in clean technologies (GFANZ, 2021), including a faster transition to electric vehicles and landmark pledges on methane emissions and deforestation (World Economic Forum, 2022, p. 19).

The Scottish Summit has marked a systemic evolution of the global approach to climate change (UN, 2022), with important steps towards the 1.5° scenario[6]. This is evident considering that Mark Carney, present at the meeting as UN Special Envoy on Climate Action and Finance, has underlined that "*If in Paris in 2015, during the COP21, there was no awareness in the financial system of the need to act on the climate, after COP26 all financial decisions in the world have the climate behind them and, in general, green and sustainable investments are promoted capable of bringing an increase in global GDP of 2% per year.*" (UN, 2021b)

Green Bond are at the centre of companies' and governments' climate change plans, representig a strong sustainable alternative for fixed income investors, allowing them to make a positive environmental impact without sacrificing liquidity or returns. This growing importance of Green Bond – and of the other Sustainable Bond, or "*Green, Social and Sustainability (GSS) Bond*", known also as "*Sustainable Development Bond*" for their attitude in pursuing the UN SDGs – is testified by the recent Green Bond market trend, that is showing, as seen before in the present work, an exponential growth just in these last years. Since 2015 this market has expanded by an average of 60% per year and in 2021, in particular, yearly issuances of green bonds increased 94% respect to 2020, reaching US$ 490 billion. In this way, by 2021 Green Bond are become a mainstream fixed income market, larger than European high-yield bonds and global convertible bonds. And this rapid growth is expected to continue (NN Investment Partners, 2022, p. 6).

The premise of Green Bond is that money invested in this financial instrument will be used exclusively for green projects. This *Use-of-Proceeds* concept is a particular character of Green Bond. Considering the preferred *Use of Proceeds* (UoP) by sector, Energy, Buildings and Transport can be considered the three largest UoP categories according to the 2021 issuances, collectively contributing about 81% to the 2021 total (37% Energy, 26% Buildings and 16% Transport, with a growth in case of Trasport of 31% compared to 2020) (Harrison *et al.*, 2022).

---

[6] For the first time, the *Glasgow Climate Pact* made explicit mention of the importance of transitioning away from coal. However, reaching the 1.5° target remains unlikely (UNEP, 2021; UN, 2021a).

These numbers reflect the corresponding picture drawned in the *Green Bond European Investor Survey* carried out by Climate Bonds Initiative (Climate Bonds Initiative, 2019, p. 7), where the majority of respondents showed interest to the following UoP categories: Energy 96%; Transport 87%; Buildings 85%; Water 77%; Waste 68%; Land Use 64%; Industry 53%; ICT 43%; Adaptation[7] 38%.

Some categories, such as Transport or Adaptation, appear particularly suitable for sovereign funding. On the other side, respondents of the cited survey highlighted their preference for more Sovereign Green Bond, that can be used by governments to direct resources towards the under-funded sector categories. In fact, it is possible to point out that there are differences between how public and private issuers use the funds raised with Green Bond. The law-carbon transportation segment is a good example of this. Governments and government-related entities are investing heavily in infrastructure to electrify and modernize public transportation systems. Considering NN Investment Partners' funds, it is possible to notice that, as a result, low-carbon transportation accounted for 34% of their Sovereign Green Bond fund portfolio at the end of 2021, while the allocation to this segment in their Corporate Green Bond fund was just over 7%, reflecting the fact that private-sector car manufacturers are still in the early stages of developing and mass producing low-carbon-emission vehicles (NN Investment Partners, 2022, p. 12). Yet, the examples of corporate green bond issuances seen in the present work (Mercedes-Benz and Scania) can show clearly the growing interest of car manufacturers in this way of funding resources.

Surely, an important driver of green bond issuance is, and it will be also in future, the same European Union, that in 2021 implemented a 5-year € 240 billion green bond programme to finance the block'economic recovery. The inaugural € 12 billion Green Bond, specifically applied to the *Next Generation EU Program*, represents the largest ever Green Bond issued, with the largest order book for a green bond to date (Mainstreet Partners, 2022, p. 5).

The same EU Taxonomy and the rising EU Green Bond Standard are driving such growth and are likely able to drive further growth too. In fact, these initiatives can permit a more clarity in the assessment and certification of greeness of the issuers, reducing the existing risk of Greenwashing, that

[7] *The Adaptation category (…) is a catch-all preference category for investors willingness to fund investment in adaptation and resileince (A&R) measures. (…) The Nederland sovereign green bond is a recent example*." Climate Bonds Initiative (2019), p. 7. There is currently more demand for bonds financing mitigation in preference to adaptation, although there is a clearly interest in buying green bonds with UoP financing all categories. *Ibidem*, p. 7.

is the risk that their proceeds are not used to finance the eligible Green Projects indicated in the relative Green Bond Framework. In this way, common standards contribute for reducing investors' transaction costs for verifying Green Bond greenness and assessing the environmental impact of their use of proceeds. Investors' interest for Green Bond is more and more increasing, together with the interest of issuers to offer this kind of financial instruments thanks to different elements (Maltais and Nykvist, 2020).

In fact, the recent global and EU regulations are strenghten and broaden the Green Bond market by requiring a more and more great disclosure and trasparency. In Europe asset managers and other financial market participants are steppin up reporting to comply with the *Sustainable Finance Disclosure Regulation* (SFDR) (came into force in March 2021). Also corporates are facing more stringent reporting rules: in Europe just on 21 June 2022 we have the agreed of the European Concil and Parliament in relation to the proposal of the *Corporate Sustainability Reporting Directive* (CSRD) that will amplify the range of application of the actually existing *Non-Financial Reporting Directive* (NFRD), expanding the requirements in terms of reporting disclosure to about 50.000 companies. At the same time, in the USA the Securities and Exchange Commission (SEC) is also considering mandating climate-risk disclosure by public companies. These regulatory initiatives should encourage companies to adopt more sustainable business models, expanding the investable universe for Green Bond investors (Poursoleyman *et al.*, 2022).

These new regulations are providing greater trasparency and comparability of ESG data, boosting the credibility of the sustainable investing market, including the green bond one, leading to a scaling up of investments.

Yet it is necessary to underline that there are some problems that still need to be solved. The success of a Green Bond investment strategy is measured in terms of positive environmental impact and strong financial returns of the relative *Use of Proceeds*, but there is still a lack of harmonized standards in the measurment of their impacts, with a lack of common indicators to measure, also in a quantitative way, for example the increasing energy efficiency or the reducing energy comsumption obtained thanks to sustainable investments (Sustainable Banking and Finance Network, 2021a).

It is also possible to point out the existing lack of harmonized standards in relation to the assessment and verification by rating-agencies or other verifiers of the greenness of the eligible projects indicated in the GBF and about the correct use of the relative proceeds too (Quirici, 2021, pp. 193-196). Credit-rating agencies (CRA) assume a crucial role in promoting Green Bond standard, because they monitor and verify Green Bond continuously and this is important for investors with a medium-term investment horizon. But rating agencies use different methodologies and

criteria to evaluate Green Bond and surely it would be helpful for issuers and investors if rating agencies could aligne their methodologies and criteria more closely (Berensmann, 2017; Sustainable Banking and Finance Network, 2021b).

Then there are also some further elements that could be considered as "good things to do" to achieve better conditions for the development of the Green Bond market, such as, among others: the introduction of some fiscal or financial incentives for this kind of investment; the invitation to the European System of Central Banks to prefere in their investments Green Bond aligned with the *EU Green Bond Standard*, encouraging also the institutional investors to use the EU GBS requirements in their investment strategies; the opportunity/necessity to identify what can be considered right/better to do in case of Greenwashing, introducing clear sanctions against this bad behaviour, or in case of Audit violations (as discussed by Dharmasiri *et al.*, 2022) and so on. But all these considerations represent elements that can be object of a deeper analysis into following researches, in the awareness that also thanks to these further actions Green Bond will be able to represent really a "brigde" for the more and more urgent achievement of the UN SDGs.

5. *References*

Alleanza Italiana per lo Sviluppo Sostenibile (ASVIS) (2020). *Obiettivi di sviluppo sostenibile e politiche europee. Dal Green Deal al Next Generation EU*, Quaderni dell'ASVIS, n. 1, 18 agosto 2020.

Baker, S. (2018). Green bonds need definition and standards first. *Pensions & Investments*, 46 (5).

Berensmann, K. (2017). *Upscaling Green Bond Markets: The Need for Harmonized Green Bond Standard*, German Development Institute (D.I.E.) , Briefing Paper 12/2017, in www.die-gdi.de

Boffo, R., Patalano, R. (2020). *ESG Investing: Practices, Progress and Challenges*, OECD Paris, *www.oecd.org/finance*.

Bongini, P., Lippi, A., Nieri, L. (2020). *Il mercato dei Green Bonds*, "Osservatorio Monetario", n. 1-2020, 23-42.

Brest, P. & Born, K. (2013). When can Impact Investing create real impact?, *Stanford Social Innovation Review.*

Bush, T., Bruce-Clark, P., Derwall, J., Eccles, R., Hebb, T., Hoepner A., Klein C., Krueger P., Paetzold F., Scholtens B., Weber O. (2021). Impact Investments: a call for (re)orientation, *SN Business & Economics*, 1:33, *https://doi.org/10.1007/s43546-020-00033-6*

Chesné, L. and Azoulay, O. (2020). *TEG 101–The EU Green Bond Standard*, Natixis Green & Sustainable Hub (GSH), *https://gsh.cib.natixis.com*

Cicero. (2016). *Framework for CICERO's 'Second Opinions' on Green Bond Investment*. Retrevied from: *http://cicero.oslo.no/en/climate-financemain/second-opinion*

Clapp, C., Alfsen, K.H., Lund, H.L., & Pillay, K. (2016). *Green Bonds and Environmentally Integrity: Insight from CICERO Second Opinions* , Cicero Center for International Climate and Environmental Research, May 2016.

Climate Bonds Initiative (2015). *Introduction to the Climate Bonds Standards & Certification Scheme,* December, *https://www.climatebonds.net/*

Climate Bonds Initiative (2017). *Climate Bonds Standard. Version 2.1,* January, *https://www.climatebonds.net/*

Climate Bonds Initiative (2018). *Green Bond as a bridge to the SDGs*, June, *https://www.climatebonds.net/*

Climate Bonds Initiative (2019). *Green Bond European Investor Survey*, November, *https://www.climatebonds.net/*

Climate Bonds Initiative (2021). *Explaining Green Bonds*, *https://www.climatebonds.net/*

Climate Bonds Initiative (2022). *Global Green Taxonomy development, aligment, and implementation*, February, *https://www.climatebonds.net/*

Cox, J. (2018). HLEG pushes stricter EU green bond label, *Global Capital*, 2/19/2018.

Creed, A. and Horsfield, M. (2021). *Transition finance for transforming companies. Avoiding greenwashing when financing company decarbonisation*, Climate Bonds Initiative, Discussion Paper, 10 September 2021.

Daimler (2020), *Green Finance Framework*, 18 June 2020, in *https://www.daimler.com*

Daimler (2021). *Daimler Green Finance Investor Report*, in *https://www.daimler.com*

Dharmasiri P., Phang S.-Y., Prasad a., Webster J. (2022). Consequences of Ethical and Audit Violations: Evidence from the PCAOB Settled Disciplinary Orders, *Journal of Business Ethics*, 179:179-203, *https://doi.org/10.1007/s10551-021-04786-4*

Doronzo R., Siracusa V., Antonelli S. (2021), *Green Bonds: the Sovereign Issuers' Perspective*, Banca d'Italia, "Markets, Infrastructures, Payment Systems", N. 3, March.

Drexler, M. and Noble, A. (2013). *From the margin to the mainstream. Assessment of the Impact Investment sector and opportunities to engage mainstream investors*, Cologny: World Economic Forum.

Ehlers, T. and Packer, F. (2016). *Green Bonds – certification, shades of green and environmental risks*, Bank For International Settlements, June 24, 2016. Retrieved from: *htpp://www.unepinquiry.org*

Ehlers, T. and Packer, F. (2017). Green bond finance and certification, *BIS Quarterly Review*, September 2017.

EU High-Level Expert Group on Sustainable Finance. (2018). *Financing a Sustainable European Economy: Final Report*, January 31, 2018, *https://ec.europa-eu/*

EU Technical Expert Group (2019a). *Report on EU Green Bond Standard*, June 18, 2019, *https://ec.europa-eu/*

EU Technical Expert Group (2019b). *Taxonomy Technical Report*, June 18, 2019, *https://ec.europa-eu/*

EU Technical Expert Group (2020a). *Taxonomy: Final report of the Technical Expert Group on Sustainable Finance*, 9 March 2020, *https://ec.europa-eu/*

EU Technical Expert Group (2020b). *Usability Guide – TEG Proposal for an EU Green Bond Standard*, 9 March 2020, *https://ec.europa-eu/*

European Commission Press Release. (2018c). *Sustainable finance: Making the financial sector a powerful actor in fighting climate change*, May 2018.

European Commission. (2018a). *Action Plan: Financing Sustainable Growth*, March 8, 2018, *https://ec.europa-eu/*

European Commission. (2018b). *Impact Assessment*, May 2018.

European Commission. (2019). *The European Green Deal*, December 11, 2019, *https://ec.europa-eu/*

European Commission. (2021a). *Next Generation EU. Unprecedented Economic Policy in Unprecedented Times*, May 31, 2021, *https://ec.europa-eu/*

European Commission. (2021b). *Recovery Plan for Europe*, 21 July 2021, *https://ec.europa-eu/*

European Commission. (2021c). EU Proposal for a Regulation of the European Parliament and of the Council on European Green Bonds *(COM (2021) 391 final)*, *https://ec.europa-eu/*

European Securities and Market Authority (ESMA) (2022). Sustainable Finance Roadmap 2022-2024, 10 February 2022 (ESMA30-379-1051).

Eurosif (2014). *European SRI Study*, November 2014.

Eurosif (2016). *European SRI Study*, November 2016.

Eurosif (2018). *European SRI Study*, November 2018.

Eurostat. (2017). *Sustainable development in the European Union. Monitoring Report on progress towards the SDGs in an EU context*, November 2017 in *http: //ec.europa.eu/Eurostat*.

Freireich, J. & Fulton, K. (2009). *Investing for Social and Environmental Impact*. Cambridge, MA.

GBP Impact Reporting Working Group (2018), *Green Bonds. Working towards a Harmonized Framework for Impact Reporting formClean Transportation*, ICMA, June 2018, *http://www.icmagroup.org*

Global Financial Alliance for Net Zero (GFANZ) (2021). *Glasgow Financial Alliance for Net Zero*, *https://www.gfanzero.com/*

Global Impact Investing Network (GIIN). (2021). *What is Impact Investing?* Cham: GIIN, *http://thegiin.org/impact-investing/need-to-know/what-is-impact-investing*

Global Sustainable Investment Alliance (GSIA) (2021). *Global Sustainable Investment Review 2020*, July 2021, *https://gsia-alliance.org*

Harrison, C., MacGeoch M., Michetti C. (2022). *Sustainable Debt Global State of the Market 2021*, Climate Bonds Initiative, April 2022.

Hockerts, K., Hehenberger, L., Schaltegger, S., Farber,V. (2022). Defining and

Conceptualizing Impact investing: Attractive Nuisance or Catalyst?, *Journal of Business Ethics*, 26 July 2022, *https://doi.org/10.1007/s10551-022-05157-3*

Horsch, A., Richter, S. (2017). Climate Change driving Financial Innovation: the case of Green Bonds, *The Journal of Structured Finance*, Spring 2017, 23 (1) 79-90.

ICMA. (2017/a). *The Sustainability Bond Guidelines,* 2 June 2017, in *www.icmagroup.org.*

ICMA. (2017/b). *The Green Bond Principles*, 2 June 2017, in *www.icmagroup.org*.

ICMA. (2018). *The Social Bond Principles*, June 2018.

ICMA. (2020), *Green, Social and Sustainability Bonds: A High-Level Mapping to the Sustainable Development Goals*, June 2020.

International Financial Institutions (IFIs). (2015). *Green Bonds. Working towards a Harmonized Framework for Impact Investing*. November 2015.

Kidney, S., & Boulle, B. (2015). *The Opportunity for Bonds to Address the Climate Finance Challenge.* In: K. Wendt (Ed.), *Responsible Investment Banking. Risk Management Framework, Sustainable Financial Innovation and Softlaw Standards* , Springer Publishing Switzerland, 575-599.

Labbé, A. (2017). PRIMER: green bonds, *International Financial Law Review*, (21)8, 6-6.

Liberati, D., Marinelli G. (2021), *Everything you always wanted to know about green bonds (but were afraid to ask)*, Banca d'Italia, "Quaderni di Economia e Finanza", n. 654, November.

Lyon, T.P., and Marxwell, J.W. (2011). Greenwash: Corporate environmental disclosure under threat of audit*, Journal of Economics & Management Strategy*, 20(1), 3-41.

Mainstreet Partners (2022), *GSS Bonds Market Trends. Financing the Energy transition with GSS Bonds*, March 2022, https://

Maltais, A. and Nykvist, B. (2020). Understanding the role of green bonds in advancing sustainability, *Journal of Sustainable Finance & Investment,* in *https://doi.org/10.1080/20430795.2020.1724864*

Ministero dell'Economia e della Finanza (MEF) (2021), *Framework for the Issuance of Sovereign Green Bonds*, BTP Green, February.

Moody's Investors Service (2016), *Green Bonds Assessment*.

MSCI (2017), *The SDGs and Sustainable Impact: a practical guide for investors,* MSCI Esg Research, December 2017.

NN Investment Partners. (2021). *Green Bond Funds Impact Report 2020. Financing the transition to a more sustainable world*, June 2021.

NN Investment Partners. (2022). *Green Bond Funds Impact Report 2021. Financing the transition to a more sustainable world*, April 2022.

O'Donohoe, N., Leijonjufvud, C., Saltuk, Y., Bugg-Levine, A., Brandenburg, M. (2010). *Impact Investment: an emerging asset-class.* New York: J.P. Morgan.

Official Journal of the European Union (O.J.E.U.) (2020), *Regulation (EU) 2020/852*

of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, 22/06/2020.

Panda Pradiptarathi. (2017). Green Bond: a Socially Responsible Investment (SRI) Instrument, *Research Bulletin*, 43(1), April 2017, 97-113.

Poursoleyman, E., Mansourfar, G., Nazari, J., Homayoun, S. (2022). Corporate Social Responsability and COVID-19: Prior reporting experience and assurance, *Business Ethics. Environment & Responsability*, 00:1-31, DOI:101111/beer.12461.

Quirici, M.C. (2020). *The increasing importance of Green Bonds as instruments of Impact Investing: towards a new European Standardization,* in M. La Torre - H. Chiappini (Eds), *"Contemporary Issues in Sustainable Finance. Creating an Efficient Market through Innovative Policies and instruments",* Palgrave Macmillan, "Palgrave Studies in Impact Finance", 177-203.

Quirici, M.C. (2021*). Investimenti SRI e Corporate Reputation nell'approccio dei diversi soggetti coinvolti: a literature review,* in P. Ferretti (a cura di)*, La Corporate Reputation. Alcuni driver di sviluppo*, Giappichelli, Torino, 161-206.

Reichelt, H. and Keenan, C. (2017), *The Green Bond Market: 10 years later and looking ahead*, World Bank.

Revelli, C., Paranque, B. (2017). *Ethico-Economic Analysis of Impact Finance: the case of Green Bonds*. Available at SSRN: *http://dx.doi.org/10.2139/ssrn.2983178*

Scania (2020). *Green Bond Framework Presentation*, in *https://www.scania.com*

Scania (2021). *Green Bond Impact Report*, in *https://www.scania.com*

Scania Press Info (2020), *Scania's sets Green Bond Framework in support of sustainable transport*, 18 September 2020, in *www. scania.com*

Scania Press Info (2021), *Great interest in Scania's first Green Bond*, 15 January 2021, in *https://www. scania.com*

Sean, K., Beate, S., Padraig, O. (2015) *Growing a green bond market in China. Key recommendations for policymakers in the context of China's changing financial landscape*, Climate Bond Initiative and International Institute for Sustainable Development (IISD), Spring, *https://www.climatebonds.net/*

Sean, K., Pagraig, O. (2014). *Greening China's Financial Markets*, International Institute for Sustainable Development (IISD) Report, in *https://www.iisd.org*

SEB. (2018). *The Green Bond*, May 2018.

Schnabel, I. (2020). *Never waste a crisis: Covid-19, climate change and monetary policy*, Speech by Isabel Schnabel, Member of the Executive Board of the ECB, at a virtual roundtable on "Sustainable Crisis Responses in Europe", INSPIRE Research Network, Frankfurt am Main.

Schumacher, K. (2020). The shape of green fixed income investing to come, *The Journal of Environmental Investing*, 10(1):5-29.

Simon, J., Barmeier, J. (2010), *More than Money: Impact Investing for Development*, Washington, DC: Center for Global development.

Standard & Poor's Global Rating. (2017). *Green Evaluation Analytical Approach*, 2017.

Sustainable Banking and Finance Network (SBFN) (2021a). *Measurement Framework and Methodology*, October, *https://www.sbfnetwork.org*

Sustainable Banking and Finance Network (SBFN) (2021b). *Accelerating Sustainable Finance together. Global Progress Report of the Sustainable Banking and Finance Network*, October, *https://www.sbfnetwork.org*

Sustainable Banking Network (SBN). (2018). *Creating Green Bond Markets. Insights, Innovations and Tools from Emerging Markets*, October.

Tolliver C., Keeley R.A., Managi, S. (2019). Green Bonds for the Paris Agreement and Sustainable Development Goals, *Environmental Research Letters*, *https://doi.org/10.1088/1748-9326/ab1118*

UN-Environment (2018). *Making Waves. Aligning the Financial System with Sustainable Development*, April 2018.

UN-Environment (2019). *Sustainable Finance Progress Report*, March 2019.

UNFCC (2021). *COP26 reaches consensus on key actions to address Climate Change*, UN Climate Press Release, 13 November 2021, *https://unfcc.int/news/*

UN-Intergovernmental Panel on Climate Change (IPCC) (2018), *Global Warming of 1.5°C*, Special Report, October 2018, *https://www.ipcc.ch*

United Nations (2015a), *Transforming our world: The 2030 Agenda for Sustainable Development*, September 2015.

United Nations (2020). *COVID-19 Recovery, Planetary Repair "Two sides of Same Coin"*, 2 December 2020, *https://www.un.org/*

United Nations (2021a). Climate Change Conference UK 2021 Cop 26. The Glasgow Climate Pact, November, *https://ukcop26.org/*

United Nations (2021b). *United Nations News*, 3 November 2021, *https://news.un.org/*

United Nations (2022). *Report on the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its third session, held in Glasgow from 31 October to 13 november 2021*, Advance Version, 8 March 2022, *https://www.un.org/*

United Nations Environment Programme (UNEP) (2021). *Emission Gap Report 2021*, *https://wedocs.unep.org/*

Vigeo-Eiris (2021). Second Party Opinion on the sustainability of the Republic of Italy' Green Bond Framework, *https://vigeo-eiris.com/*

World Economic Forum (2021), *The Global Risks Report 2021.*

World Economic Forum (2022), *The Global Risks Report 2022.*

Marco Antonelli-Stefano Maggi-Francesco Alberti

REMOTE AREAS SUSTAINABLE RECONNECTION: THE VOLTERRA RACK RAILWAY CASE

Table of contents: 1. Hystorical and actual context – 2. Why a new rack railway and not other transport means? – 3. The role of the railway infrastructure within a territory – 4. Touristic user base assessment. – 5. Rolling stock for the new rack railway. – 6. Construction cost of the new infrastructure. – 7. Sustainability of the operation. – 8. Travel time assessment. – 9. Dioxide carbon emissions reduction. – 10. Historical steam trains on the rack: a dream? – 11. From Cecina to Saline and beyond: a wider project for the whole Tuscany. – 12. Conclusions.

1. *Hystorical and actual context*

The history of the Cecina-Volterra line was thoroughly reported in the book "Ferrovia Cecina-Volterra. Il trasporto pubblico in un territorio isolato", by Stefano Maggi (Nerbini editore, 2011), from which the following lines were extracted and summarized. The construction of the 30 km line "Dal Fitto di Cecina alle Moie volterrane" was approved in March 1860, with a decree of the provisional government of Tuscany, chaired by Bettino Ricasoli, and inaugurated, together with the Livorno-Collesalvetti-Cecina-Follonica, on October 20, 1863. The railway transported goods to serve the salt pans and other companies in the area, such as Larderello and Montecatini. In addition, in 1876 a horse-drawn railway was built which, starting from the Casino di Terra station, through the valley of the Sterza stream, reached the Monterufoli mine. This line, on which steam traction was later used, was used to transport the lignite and magnesite of the local mines but was destroyed during the Second World War and never rebuilt.

The final project for the connection with Volterra, served until then by stagecoaches, was developed in the early twentieth century, together with other summary studies, concerning the connection with the Siena-Empoli railway in Poggibonsi and the junction towards Pontedera, never realized. The train arrived in Volterra in 1912, thanks to the tenacious work of the local administrators and the deputy of the college, the honorable Piero

Ginori Conti. The line profitably carried out its service, also for the transport of goods, such as raw and processed alabaster, coal, groupage.

After the Second World War, however, the lack of modernization and the fierce competition of buses and trucks made the train lose its function. The Volterra train made its last run on November 21, 1958, replaced by a bus service, then entrusted to SITA. At the time, not only they did not predict the inevitable repercussions on pollution, traffic, and road safety, but another important aspect was not considered either: the growth of tourism, which could have found in the train an excellent carrier for the transport of Italians and foreigners. To keep the Saline-Volterra in step with the times, it would have been sufficient to introduce the ALn 56 and ALn 64, used on the Paola-Cosenza, which would have reduced travel times from 40 to about 17 minutes, thus being competitive with buses. In addition, today Volterra would have the rack as an additional tourist attraction.

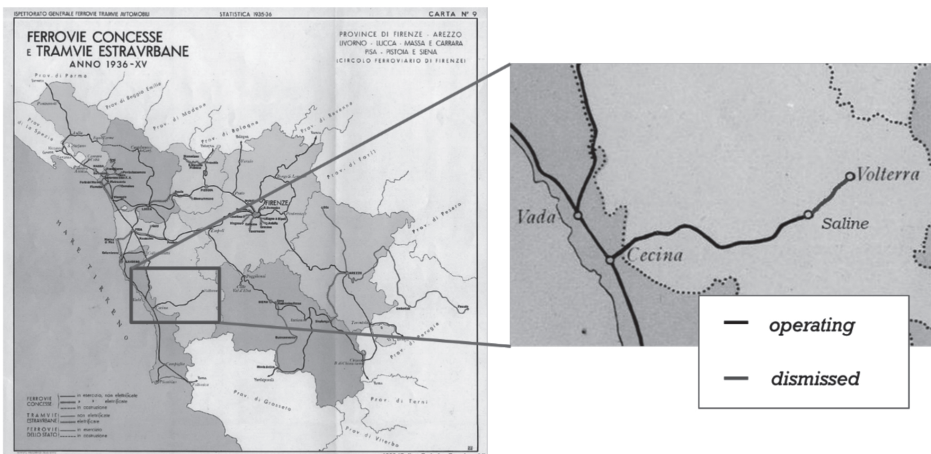


Fig. 3. *Geographical allocation of the line.*

It is not difficult to remember the train of the past. It is more difficult to communicate the value of the train for the future. In Italy, in fact, while the High Speed contends the service to the plane, the secondary railways are seen only as a legacy of the past, where the train has lost contact with the territory crossed. Many secondary railways have been closed since the 50s, and many cities, left isolated without the train, have regretted the old railway. Once the tracks were abandoned, in fact, a perception of isolation remained increasingly felt as global society developed.

The experiences of recovery of secondary railways have mostly developed abroad, but there are also examples in Italy, where the most relevant example is represented by the railway in Val Venosta from Merano to Malles. On this line, closed to traffic in 1991 because it was considered

a "dry branch", an effective public mobility network was created using trains and buses, which doubled the number of public transport users, far exceeding expectations.

Even the Cecina-Volterra could find new life, both in tourist use and in the integration of schedules and tickets with public transport by road, in order to create efficient connections between Volterra and neighboring countries on the one hand and Livorno-Pisa on the other. An innovative type of operation is needed, based on the reorganization of the overall transport service in the area, to continue with rolling stock adapted to the line, more attentive to ecology and sustainability, with particular attention to electricity storage systems or alternative fuels. It would benefit not only the railway, but the entire territory, which would see the impact of private cars decrease and would be perceived by residents and visitors as less isolated and more accessible. The train has in fact among its positive characteristics that of giving the perception of a continuous, stable connection, almost a close link between the territories. As detailed in the following section, the restablishment of a rack railway in the abandoned branch between Saline and Volterra can really bring a new life to the entire transport system, due to its intrinsical actractivity and contribute to the economic of the whole Valdicecina territory.

2. *Why a new rack railway and not other transport means?*

The rack railway is not the only technique that allows you to overcome high gradients. In fact, there are also other technologies, each of which has strengths and weaknesses. These include:

- Funicular: mainly used on relatively straight sections and of not high length, it presents the need for a crossing station halfway to allow the two cars to cross, since one acts as a counterweight to the other.
- People mover (evolution of the funicular): it is the evolution of the funicular; it is an interesting system but allows high volumes of traffic if applied to a closed and non-linear route like the one in question. It also has very significant installation costs. An example is the Pisa Mover, installed between Pisa Centrale station and the airport.
- Electric trolleybuses: it is a smart solution but on the route in question it has low load capacity (speed, capacity, no possibility of interchange unless you build a half station). It is also necessary to study an appropriate safety system (automatic driving for example) with appropriate redundancy, given the narrow roadway that can be achieved.

– Cable car: it is a different transport system, very common in the high mountains, need to study another route and install important fixed systems.

In all these cases, the question of “load breakage” is not resolved, that is, the need to transfer passengers to the Saline di Volterra station, which can be soothed depending on the frequency of the trips, but still remains.

The rack, on the other hand, has a relatively high cost of realization but:

It is an “ancient” technique but, at the same time, extremely tested and safe.

The rolling stock can also be used on the other lines, because it is still a train that, with modern technologies, can travel at speeds compatible with other trains on the natural adhesion routes.

Precisely for this reason, it allows to realize the direct connection with the coast (and even beyond).

It therefore solves the problem of “load breaking”.

It can reuse the existing path, if available.

It also offers other opportunities, which will be described below.

The criticism that can easily be levelled at this proposal is that it amounts to re-proposing a means of transport that had already proved obsolete over sixty years ago. This report serves precisely to show that it is intended to propose a new transport system which, although it uses the same technique as the pre-existing one, solves the critical issues that led, many years ago, to the disappearance of the old “little train”, and which, in the wake of tradition, instead looks to the future with new criteria and design objectives capable of overcoming existing means in terms of safety, speed, possibility of connection with the rest of the regional and national territory and, last but not least, eco-sustainability.

3. *The role of the railway infrastructure within a territory*

As mentioned, the Railway constitutes a kind of “backbone” of the Territory, connecting the various locations to each other in a stable, tangible, permanent way and with the most important centers of the district. We can no longer think of the territory and its transport systems as separate identities, but as two indissoluble elements. The decline of the railway is the signal that the territory is also declining from an economic and social point of view and relaunching a railway means first of all laying the foundations for a recovery of the entire territory.

The relaunch of the Cecina-Volterra railway is aimed at making accessi-

ble some places of relevant landscape interest. The line would become the aggregating element of the villages of the Val di Cecina, through a cadenced railway service to locate new functions and equipment useful to the territory. The relaunch project in fact provides for the placement, in the areas adjacent to the stops, of integrative functions, such as small camper areas inserted in the landscape, sports fields, public equipment, etc. To bring users closer to the means of transport, it has been hypothesized the construction of new stops: at San Piero in Palazzi, a populous expanding district on the outskirts of Cecina, at the Cecina Nord exit of the Aurelia highway, where it is planned to build a park ride and lot, as well, a third additional stop to serve the numerous agritourism facilities in the medieval castle of Montegemoli (located about 2 km from the railway). The picture is completed by targeted interventions on the road network, aimed at improving accessibility to stops, the settlement system and environmental resources (rest areas, elimination of level crossings, redesign of some intersections, safety interventions, landscape arrangements, etc.).

Regarding the restoration of the railway connection to Volterra, using suitable rolling stock, the problem arose of how to build the new terminal of the line in Volterra, since due to recent urban transformations, the reuse of the old station is no longer practicable. The intervention consists in the construction of a simple stop a little further downstream, on the ground, suitably remodeled, of the old rack, connected to the station square (and from here, to the city center), with a system of escalators similar to those already in use in other Italian historic centers (Siena, Perugia, etc.).

4. *Touristic user base assessment*

The user base was evaluated through the IRPET 2018 report "REPORT ON TOURISM IN TUSCANY – The 2018 conjuncture", which reports the pre-pandemic situation, and which can be taken as a reference to understand the situation that will arise, once the emergency situation still in progress has been exhausted. It is even foreseeable that rail transport will be a determining factor for the greater space on board and for the lower environmental and energy impact that it entails in relation to road transport, particularly individual transport.

As mentioned, we have not only considered the tourists who stay overnight in Volterra or in the immediate vicinity, but, to a greater or lesser extent, also those who stay overnight in the geographical areas, in which Tuscany is divided, adjacent to that of Volterra. The report (page 51) shows the annual attendance, divided by territorial areas (figure 2). It should be

noted that the report speaks of presences and not of arrivals, therefore the estimate of the actual number of tourists was conducted assuming an average stay, differentiated by area. In addition, the degree of interest of tourists for the attendance of the site of Volterra has been considered by introducing a weight, unitary for tourists who visit the area of Volterra and less than one for those who visit the other areas, with decreasing trend with the distance from Volterra. The areas of interest chosen are therefore summarised in Table 3, shown below. Based on the available data and the hypotheses set out above, it is estimated that the number of tourists interested in visiting Volterra, and its surroundings is around 1.5 million.

The number obtained is in line, at least as an order of magnitude, with the number of arrivals estimated by Dr. Roberto De Marco and presented at the conference "A train for a territory", held in Volterra on September 4, 2021. In dr. De Marco's study, the number of tourist arrivals in the "enlarged Val di Cecina" area, also including the municipalities of the southern part of the province of Livorno and the northern part of the province of Grosseto (up to Follonica and Monterotondo Marittimo) was estimated at 1.3 million in the year 2019. This figure concerns tourists who stay overnight in a structure and, of course, does not include those tourists who, instead, visit Volterra within a single day and therefore do not appear in the accommodation facilities.

The user base was calculated by means of a comparison with a reference case, of which the number of tourists and passengers are known. The case taken as a reference is the Cogwheel Railway of Monserrat, Spain, in the vicinity of Barcelona (figure 3).

The monastery of Monserrat is accessible, as well as by bus and car (like Volterra), also via the cogwheel railway in question, the Cable Car of Sant Juan, and the funicular of Santa Cova. The latter is currently out of service and therefore will not be considered in the calculation. The line was inaugurated in 1892 and operates until closure with steam traction. In this case, to overcome the considerable difference in height, the Abt type rack was adopted. The section has a length of about 5 km, overcomes a difference in height of 550 m, with a maximum slope of 156 mm / m and is armed with narrow-gauge track (1000 mm). The line was closed in 1957, due to excessive operating costs and the obsolescence of the plants, but in 2001 the restoration project was undertaken, which was completed in 2003, with a completely rebuilt infrastructure and state-of-the-art rolling stock (figures 3 and 4).

Fig. 4. *Subdivision of Tuscany region into tourist districts.*

Fig. 5. *Monserrat transport system.*

Fig. 6. *Monserrat infrastructure.*

Fig. 7. *Monserrat typical rolling stock.*

The situation, from the orographic and transport point of view, has similarities: as visible in figure 3, the Monastery is located about 40 km from the sea, and is connected to the city of Barcelona by a wide ordinary gauge line (1676 mm), which, following the valley floor, reaches the slopes of the mountain. From there, the monastery can be reached, as well as by means of the rack line, also through the road and a funicular. For com-

parison, the Volterra rack railway, closed in 1958 (one year after that of Montserrat), exceeded a difference in height of about 430 m, with a route of 8 km, almost equally divided between a stretch with natural adhesion, with a maximum slope of 25 mm / m, and a section with artificial adhesion, with a maximum slope of 100 mm / m. The gauge, in this case, is ordinary (1435 mm) like that of the main mesh with natural adhesion.

The tourists who visit the monastery, every year, are about two million, so a number comparable with the tourists who visit Volterra, according to the calculation presented on the previous page. This tourist flow generates a demand for transport that is covered by the various means of transport. In particular, the railway in 2019 carried about 700,000 passengers and the funicular about 395,000.

The potential basin of the rack for Volterra has been estimated according to a criterion of proportionality between tourists visiting the place and flow of passengers on public services. Indicating with T_v and P_v the number of tourists and passengers of the Volterra site, and with T_m and P_m the number of tourists and passengers of the Monserrat site, the link between these quantities is expressed by:

$$P_v = P_m \cdot \frac{T_v}{T_m}$$

To consider the fact that in Monserrat there are two similar and competing services (railway and funicular), two limit hypotheses can be made regarding the number of Pm passengers to be taken as a reference:

The number of passengers carried by rail alone (P_m = 700000);

The sum of the passengers carried by the railway and funicular (P_m = 1095000).

As for the number of tourists present at Volterra T_v, reference was made both to the estimate made by Dr. De Marco, indicated as "estimate A", and to that made in this document, indicated with "estimate B". Table 2 shows the results of the calculation with all possible combinations of the number of passengers of Monserrat taken as a reference P_m and the estimated number of tourists to Volterra T_v.

Table 5

P_m	T_v estimate "A"	T_v estimate "B"
	1300	1520
1095	712	832
700	455	532
AVERAGE		644

The number of potential passengers ranges from 455000 (pessimistic estimate) to 832000 (optimistic estimate), with an average of about 644000. It should also be noted that the estimate is by default because it does not consider the possible increase in tourists due to the presence of the rack itself, especially if the use with historical material (steam locomotive) and initiatives aimed at promoting the territory related to the presence of the train were also to materialize.

In any case, the estimate shows unequivocally that the number of potential passengers is of the order of a few hundred thousand, thus demonstrating the strong potential attractor towards tourist users. To these, must also be added residents and all other potential users who do not fall into the category of tourists, but who would still benefit from the new transport system: such as students, commuters for work, users of the NHS who must go to the Volterra Hospital (whose entrance is in the immediate vicinity of the current former station) and others, not falling into the aforementioned categories.

5. *Rolling stock for the new rack railway*

Assuming to establish 20 train rides in the direction of Volterra, it is to be expected a maximum attendance of about 80-100 people per convoy. The service can therefore be conveniently carried out by self-propelled rolling stock (i.e. composed of cars equipped with their own propulsion, called "railcars", consisting of two carriages, equipped with satin bodywork, seats for the disabled and spaces for bicycles, with a capacity of about 100 seats, schematized as in figure 5.

The propulsion system identified is a "bimodal" system, that is, it includes multiple propulsion modes. In this case, the most suitable scheme consisted of a conventional electric drive, powered by an overhead line by means of a pantograph, supplemented by batteries on board. The reason for this choice is that such a designed system is well suited to operation on steeply sloping lines since it allows sufficient power to be installed on board and is also able to recover the energy of the downhill convoy and reduce energy consumption (conceptual diagram of figure 6).

The other interesting feature is that the convoy can continue its run on the coastal line (in the direction of Pisa or Piombino, for example) like any other electric traction convoy, developing speeds comparable to those of the other trains. To do this, of course, it is necessary that the train meets the Technical Specifications for Interoperability (TSI) for circulation on the main lines. Stadler manufacturer, which is world leader in rack railway roll-

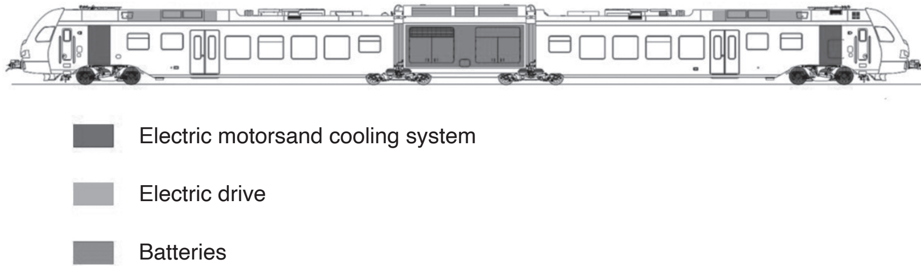


Fig. 8. *Conceptual scheme of a modern rolling stock for the Volterra rack railway.*

ing stock production, confirmed the possibility of building such a train and provided an update previsional design model for this purpose (Figure 7).

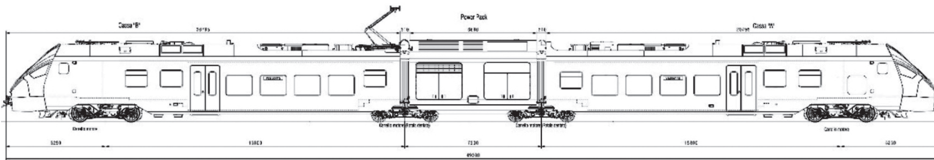


Fig. 9. *Previsional design for the new rolling stock.*

Of course, the newly built branch needs to be electrified (figura 8). A new electrical substation has to fitted in the nearbies of the Saline di Volterra station, without any particular criticality since a high-voltage electrical line is already on site for feeding two industries.

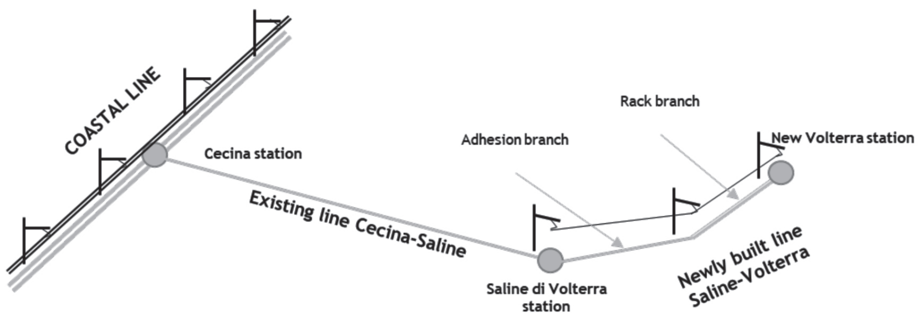


Fig. 10. *Feeding system of the new line.*

6. *Construction cost of the new infrastructure*

The sustainability of the project was assessed by analysing the cost of rebuilding the infrastructure, the operating costs and the revenues for the year. As will then be described more extensively in the following paragraph, it has been hypothesized to terminate the line before the regression, placing the new station below the old one, and connecting it to the street level by a succession of escalators.

The cost of building the infrastructure was determined taking into account data reported in the literature, and precisely in the book "Lineamenti di Infrastrutture Ferroviarie" (F. Policicchio, Firenze University Press, 2005) and updated to the current year, taking into account an annual inflation rate of 3%. The costs were divided into costs distributed per unit of linear length of the line (e.g. laying of the track, reconstruction of the seat, etc.) and costs for body works (e.g. overpasses, reinforcing walls, etc.).

The costs distributed include the cost of construction of the track itself, detailed in its various components and compared to the line meter, the cost of signaling and reconstruction of the road, also the latter two compared to the line meter. The cost of the track equipped with a rack has been calculated in an approximate way, assimilating it to a track equipped with three rails, of which the central has a cost increased by 25% to consider the fact that it is toothed. Obviously, the number of clasps, rubber plates and insulators has been increased accordingly.

It was decided to integrate the cost per unit of length by including the construction of a 1 m height survey, accompanied by the drafting of an asphalt surface to create a type C road, probably not necessary, considering the type of line, but still considered to obtain a precautionary cost estimate. The cost required for signalling was determined considering the installation of the Pipeline Support System (SSC) with Centralized Traf-

Table 6

WORK	Adhesion	With rack
Rail with ballast (M€/km)	0,98	1,35
Road work (M€/km)	1,55	
Signalling (M€/km)	0,28	
Electric line	0,15	
Cost per kilometre(M€/km)	2,95	3,33
Extension (km)	3,92	3,12
TOTALE (M€)	11,56	10,39

fic Control (CTC), as well as the ground-train signalling system. Adding up all the contributions, we obtain that the cost of a kilometer of line in natural adhesion amounts to € 2.95 million, while the cost of a kilometer with artificial adhesion (with rack) amounts to € 3.33 million. The cost of the two sections is obtained by multiplying the cost per kilometre by its extension and amounts to 11.56 and 10.39 M€, respectively.

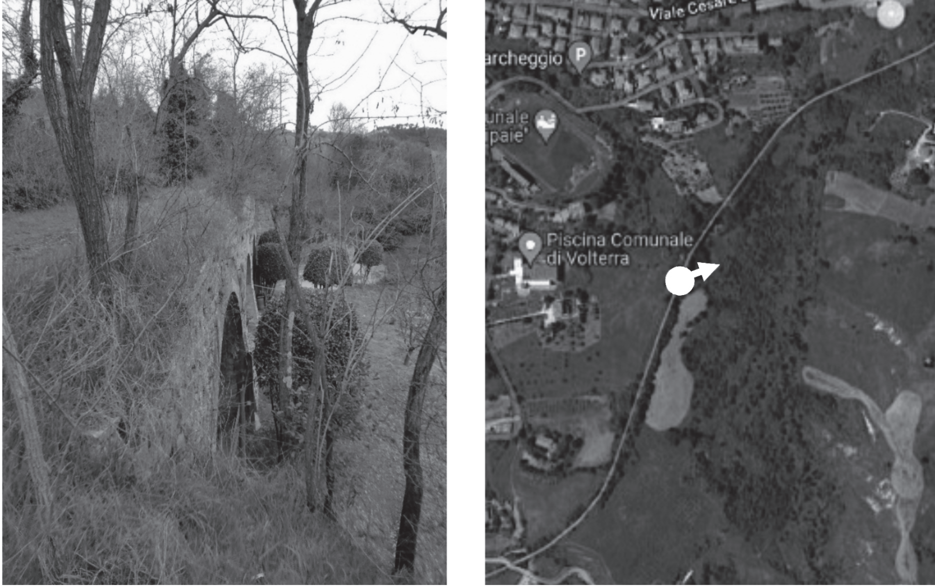


Fig. 11. *Fonte Pippoli wall.*

Fig. 12. *Collapsed portion of line.*

During an inspection of the final portion, it was found that consolidation works are necessary in the last 400-500 m, due to landslides due to the clayey nature of the soil. The track is instead well straight and aligned even in the sections prior to the collapsed one. The presence of the original containment works, such as the wall of Fonte Pippoli (Figure 9) still allows the track to maintain its shape without presenting obvious signs of depression. The section of the line to be consolidated (figure 34) appears to be limited to a few hundred meters and coincides with the place dedicated to the construction of the new station. The consolidation works of the section would therefore consist of the civil works of construction of the support embankment for the new station, for which an extension in length of around 200m is to be expected, given the brevity of the compositions of the convoys that would be used.

The construction of a retaining wall, with a height of 5 metres and an extension in length of 300 m before the station, a retaining wall with a height of 8 metres for the consolidation of the station itself, with a length of 300 metres, and a counter-slope wall on the upstream side of the station, were therefore considered in the list of costs, with a height of 5 meters and an extension of 250 meters. The cost of the containment works (Table 10) is c 2.48 million.

Table 7. *Reinforcement works cost*

	Year 2005 (M€/km)	Year 2022 (M€/km)	Length (km)	Cost (M€)
Counter-slope wall h=5m	1,27	2,10	0,25	0,52
Retaining wall h=8m	2,57	4,25	0,3	1,27
Retaining wall h=5m	1,38	2,28	0,3	0,68
TOTALE				2,48

The station will be of limited extension due to the reduced composition of the trains that will travel the line, and will be limited to a pair of trunk tracks (one of correct layout and one of doubling), surrounded by a station platform, by appropriate canopies (perhaps with photovoltaic cover) and the escalator to get to the upper street level. While the track of correct track is already included in the line costs, the doubling track and its diverter must instead be considered. Assuming a doubling track length of 200 m, the relative cost, including the diverter, is about 0.3 M€. For the escalator and the station building, and all the works that follow, a flat-rate cost of € 1.2 million was considered. The total cost for the construction of the station was therefore calculated at 1.5 M€.

The work must be completed by including the artifacts to be built or restored along the line. Among these, there are those necessary to bypass the nearby streets, to allow access to the houses, which can now be reached by crossing the railway headquarters. The cost of each overpass was estimated at about 0.18 M€. Along the line, 4 overpasses were noticed to be built or reinforced, resulting in a total cost of about € 0.73 million (table 11). In addition, it was considered to renovate the three toll booths next to the railway, for an amount of 600000 € in total (200000 € each). The total amounts to 1.33 M€.

Finally, the cost for the construction of the works necessary for electric traction was calculated. It should be considered that in the vicinity of the station there are the plants of the Salina di Stato and Altair Chimica, powered by a 132 kV power line. There are therefore no problems with the power supply of a possible substation for the supply of the 3 kV direct current necessary for railway uses. The total cost of electric traction systems is 2.8 M€.

The total cost of construction, as the sum of all the items listed so far, can be calculated at 30.1 M€(Table 14).

Table 8.

COSTS (M€)	
Stretch in natural adhesion	11,6
Rack and pinion stretch	10,4
Consolidation works	2,5
Station	1,50
Other works	1,3
Electric traction system	2,8
TOTAL	30,1

For comparison, the reconstruction of the Vinschgau railway cost, considering only the railway infrastructure and excluding, therefore, the cost of renovating the station buildings, about 127 million euros, taking into account the annual inflation rate from the year 2000 to today. Since the Vinschgau line is 60 km long, you get a reconstruction cost of about 2.1 M€/km. In the case of the Saline-Volterra railway, which is about 7.1 km long, the cost per kilometre amounts to 4.23 M€/km, or 102% more. The difference is clearly due to the worst state of conservation of the structure, with the fact that it is a partially armed line with rack and that electrification is planned.

7. *Sustainability of the operation*

The operating costs have been calculated considering the following items:

- Personnel costs
- Rolling stock costs
- Infrastructure costs.

The calculation of the operating cost presupposes to make assumptions about the operating model of the line. It was hypothesized to manage the Saline-Volterra line together with the Cecina-Saline section, so as to look at the entire Cecina-Volterra section as a single line, thus realizing that mobility model hypothesized from the beginning. It has been hypothesized that a rather frequent service is carried out on the Saline-Volterra trunk, to make the use of the service attractive and encourage the use of exchanger parking lots, to be built in Saline, and decongest the city of Volterra, and a less frequent service but still distributed over the whole day in the direction of Cecina. In more detail, it has been hypothesized to establish 20 races between Saline and Volterra and 8 between Cecina and Saline.

Given the extension of the service over the whole day, from morning to evening, it is expected to ensure the presence of two crews (Driver + Train Conductor) in simultaneous service on two daily shifts. The theoretically necessary people are 4 per shift, for a total of 8 employees, but in order to ensure rotation for illness and holidays, a total of 12 people is needed. At the same time, there are two trains in operation but, always to ensure the reserve and, possibly, the reinforcement in periods of high affluence, at least 3 convoys are needed.

The cost of personnel has been quantified considering an average annual salary cost of € 50,000 per person, without distinction between driving personnel and personnel on board the train. Multiplying the average cost by the number of salaried people, which is 12, we get the annual cost of personnel, which therefore amounts to € 0.60 M€.

The cost of rolling stock consists of various items, which can be divided into depreciation and maintenance. The depreciation cost derives from the distribution of the purchase cost over several annual years. The depreciation cost is calculated by dividing the cost of purchasing the trains by the expected useful life of the trains. In this case, it was considered to buy 3 trains, at a price of € 10 millions each, with a foreseeable useful life in 25 years. The annual depreciation cost therefore amounts to €1.2 Mv per year. The maintenance cost includes repairs and replacements of worn components, costs arising from unexpected failures, cleaning and current maintenance operations (level control and top-ups, etc.). As a forecast, the

maintenance cost was calculated as a fixed rate of the depreciation cost, and it was considered that the maintenance cost amounts to 25% of the depreciation cost and therefore equal to € 0.3 million per year.

Every journey made by a train on a railway network entails, for the operating company, a cost per kilometre, or a toll. For the kilometers traveled on the Cecina-Saline section, the toll ordinarily paid by Trenitalia to RFI (calculated by the 2023 Network Prospectus) was considered (1.94 €/km), while for the Saline-Volterra section, on the other hand, which is newly built, it was assumed precautionarily that the Region alone supports the total cost of the infrastructure. The fee for the Cecina-Saline route, taking into account that the kilometers traveled annually on the Cecina-Saline section are about 170000, amounts to about € 0.3 M€. Regarding the cost of the Saline-Volterra section, it has instead been assumed that the Region pays the maintenance costs in full, without any contribution from the State. A cost of € 64500 per year per kilometer of line was taken as a reference, derived from the 2020 monitoring of Emilia Romagna. To consider the presence of the rack, the annual cost has been increased, considering a number of "equivalent kilometers" of the rack section 50% higher than the actual ones. The added line kilometers (Saline-Volterra section), for the purpose of calculating costs, are considered equal to 3.99 km (natural adhesion 3.59 km plus another 200 m of doubling, plus another 200 m as equivalent length to consider the presence of the diverter) plus another 4.68 (3.12 km with artificial adhesion increased by 50%), for a total of 8.67 km. The total annual cost of the Saline-Volterra section is therefore equal to € 0.6 M€.

The total cost of management is given by the sum of the individual items, for a total of € 3.0 million per year.

The forecast of operating revenues was conducted assuming an average attendance of the trains, differentiated according to the stretch. More specifically, the attendance assumed for each race consists of 30 tourists and 10 residents for the Saline-Volterra section and 15 tourists and 10 residents for the Cecina-Saline section. To verify the congruence of this hypothesis with the forecast of the catchment area exposed above, the number of tourists transported on the Saline-Volterra section was calculated, which was 219000, that is to say about half of the minimum value provided for in paragraph 4.

The pricing of the trips has been provided for differentiated according to the sections:

- For the Saline-Volterra section, a return ticket price of € 10 has been assumed, in consideration of the fact that the price for the Cremallera de Monserrat, shorter, is 11. 5€. For residents, students, commuters and users of the NHS, a reduced ticket of € 5 has been assumed.

– For the Cecina-Saline section, the ticket price is the one provided by Trenitalia, or 7. 2 € for the round trip.

Total pricing income amounted to € 3.1 million. The proceeds from tourist attendance allow to manage the operation of the line with very low costs for the Region, thus allowing to distribute the benefits of the work directly on the territory. It can therefore be said that the proceeds from the tourist use of the line repay the territory allowing to offer a comfortable, safe, and eco-sustainable service to residents and to all the people of the territory who will use the service, from students, to workers, to users of the National Health Service.

8. *Travel time assessment*

The travel time of the section is an aspect of considerable importance, just think that uphill, at the time of suppression, it amounted to 40 minutes, resulting from the low speed achievable by the steam locomotives of the time and their weak acceleration, due to the poor ratio between the mass of the train and the available power. Already in the 50s a study by the Tecnomasio Italiano Brown Boveri (TIBB) indicated that, with the use of railcars equipped with an internal combustion engine (with a more favorable power/mass ratio) it would be possible to more than halve the travel times (information taken from the aforementioned book by S. Maggi).

The operation of the line included the following phases: the train, which departed from Saline, faced a first stretch of 3590 m in natural adhesion, with a maximum slope of 25 mm / m (figure 11). In that section, the type 980 steam locomotives allowed a maximum speed of 40 km/h. At the end of this section, near the second toll booth, the train had to decelerate at about 5 km/h to allow the rack to be grafted. The artificial adhesion section, with a length of 3791 m, had a maximum gradient of 100 mm/m and the power of the 980 allowed a maximum speed of 15 km/h. At this point, the train abandoned the rack and entered a 120 m long regression trunk by means of an exchange, stopped, and left backwards to enter the station. The overall length of this section, practically flat, was 991 m.

The calculation of the travel time of the newly built line considers the displacement of the station beneath the hystorical one (figure 12), as hypothesized in the thesis by F. Baroncini «Una pista d'argento nella Valle del Sale» (School of Architecture, University of Florence, 2017). Therefore, the line becomes shorter than the older of about 1 km, thus reducing the cost for its construction and arguably the travel time. In addition, the

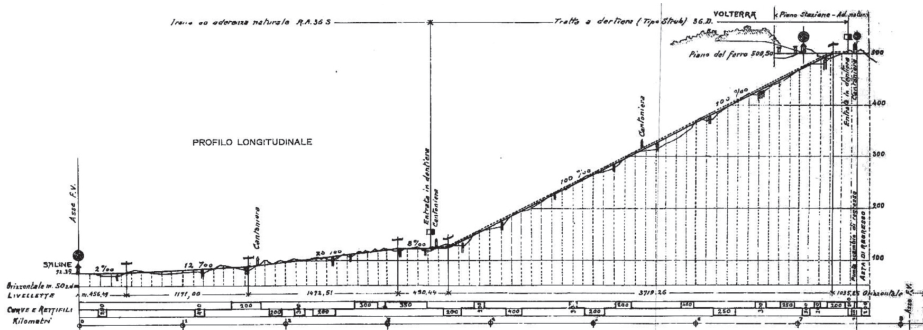


Fig. 13. *Plano-altimetric map of the Saline-Volterra branch.*

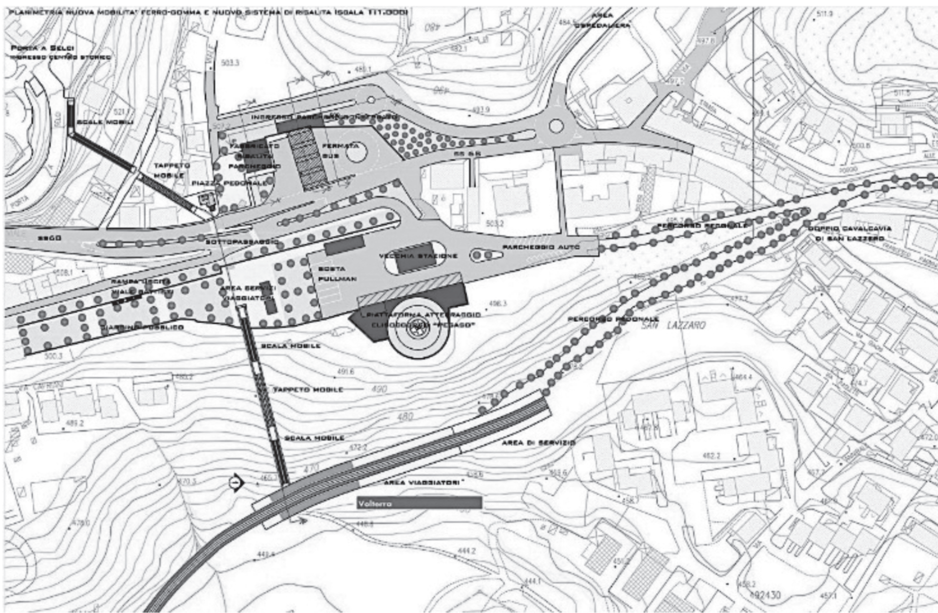


Fig. 14. *Construction plan for the new terminus below the former station.*

new train obviously allows higher velocities and accelerations than the old steam locomotives (table 4).

The outcome of the calculation must not surprise the reader: the combination of track length reduction and much higher velocities leads to the expected result that the travel time is reduced to about one third. The old steam locomotive allowed to climb from Saline to Volterra in about 40 minutes, while the travel time of a modern railway is about 13 minutes. The train travel time is shorter than bus (20 minutes) and competitive with private car, not forgetting the much larger safety and comfort.

9. *Dioxide carbon emissions reduction*

Train is intrinsically a low-carbon dioxide emission transport mean. Here, the reduction in carbon dioxide emission was calculated by comparing the emissions due to the trains with the emissions generated if the same passengers were transported with private cars over the same travelling routes.

The carbon emissions of the trains were calculated by means of the following assumptions:

- The train draws electric energy from the national net, for which an average emission of 400 g/kWh can be a realistic or even conservative guess.
- The energy consumption of train was calculated by considering the energy needed to overcome the gravity force, the inertia during acceleration and the rolling and aerodynamic friction.
- During deceleration and downhill the energy was partly (80%) recovered and only part of it was used for propulsion (85%) due to the battery charging/discharging cycle losses.
- The line between Saline and Cecina was assumed to be practically in plain

On the other hand, the carbon emissions generated by the private cars were calculated upon the following assumptions:

- Each car transported 1.5 passengers (EU average car occupancy).
- Car economy was assumed equal to 15 and 20 km/L of diesel fuel over the Saline-Volterra and Saline-Cecina travels, respectively.
- Specific carbon dioxide emission was 2.6 kg/L of diesel fuel.

The specific emission per passenger-km (pkm) was cutted by 79%, from 168 to 35 g/pkm (figure 13), while total emissions were reduced by 83%, from 1787 to 296 t/y (figure 14).

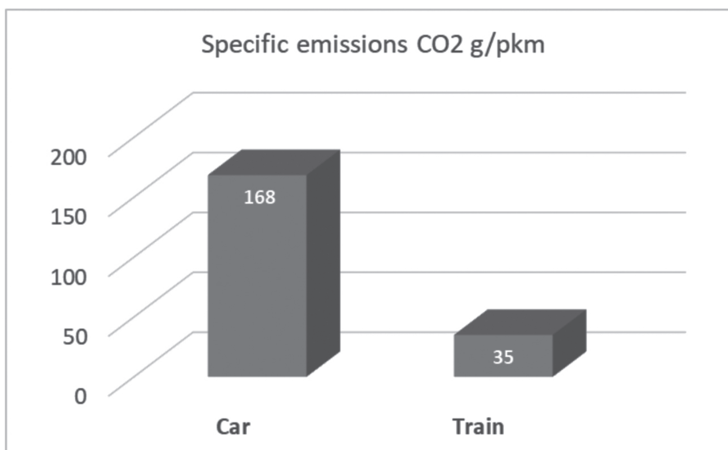


Fig. 15. *Specific carbon dioxide emission reduction.*

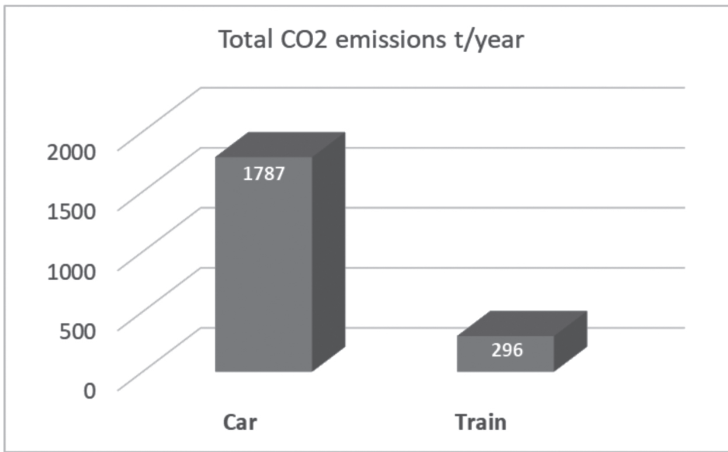


Fig. 16. *Total carbon dioxide emission reduction per year.*

10. *Historical steam trains on the rack: a dream?*

As above mentioned, we must not forget the tourist opportunity that this line would represent per se and that would constitute a further reason for attraction, not only for the city of Volterra, but for the whole territory. Elsewhere in the world, cogwheel railways, where they exist and are preserved functioning (Switzerland, Austria, Greece, but also in Italy), generate very intense tourist flows, even in places much less rich in historical, cultural, and gastronomic attractions than Volterra.

The ordinary operation should be conducted with material suitable for traveling on rack and pinion routes, of a modern type, as seen in the previous pages, in order to achieve commercial speeds, and therefore travel times, not only appropriate but even competitive with the self-service. However, this does not mean that historic trains can be made, for tourist purposes, by

Fig. 17. *Strub system rack.*

steam, provided that the same type of rack used in the past is reused (Strub system, figure 15), even with all the technological adaptations of the case.

In this regard, although the locomotives of the 980 class have all been demolished, with the exception of the 002, preserved static in Pietrarsa (figure 16, left), there are at least two machines of the group 981, which served on the "twin" line of the Saline-Volterra, namely the Paola-Cosenza, which are being restored, one in Foligno (number 005, figure 16, right) and one in Pistoia (number 008). Restablishin a touristic service during the weekends with the steam locomotive would be a wonderful attraction for many tourist, no matter if railway enthusiasts or not.

Fig. 18. *Locomotive class 980 at the Pietrarsa Museum (left) and class 981, in Foligno workshop.*

11. *From Cecina to Saline and beyond: a wider project for the whole Tuscany*

The eventual restoration of the stretch would not hinder, but rather would favor the development of a project to connect Valdicecina with the Valdelsa, as already hypothesized at the beginning of the last century, a project that would constitute a real milestone in the mobility of people and goods from inland Tuscany to the ports of Piombino and Livorno, in full agreement with the intentions of the National Recovery and Resilience Plan.

The detachment from the Saline-Volterra would take place at the second toll booth (figure 17), where the cogwheel section began, at the end of the natural adhesion section, which has a maximum slope of 25 mm / m, fully compatible with regular passenger and freight traffic. Especially for the industries of the Valdelsa, this link would be an undoubted factor of economic competitiveness. Not to forget the possibility of connection

with the Interporto of Guasticce through the Vada-Collesalvetti line and the Collesalvetti-Guasticce-Livorno reconstruction. The Cecina-Volterra line would in fact be at the center of an intra-regional mobility project of primary importance.

12. *Conclusions*

In the last century many regional railways were closed, especially in the decade 1955-1965. At that time, the train was considered as the transport mean of the past, which should leave the pace to private car, which was retained faster, more flexible in use and more suited to the new way of living. In the last twenty years, however, a different environmental sensitivity led people to reconsider different mode of transport, included the train, which, due to its intrinsical low energy need, is the best candidate to drive the expected energy transition amongst the transport sectors.

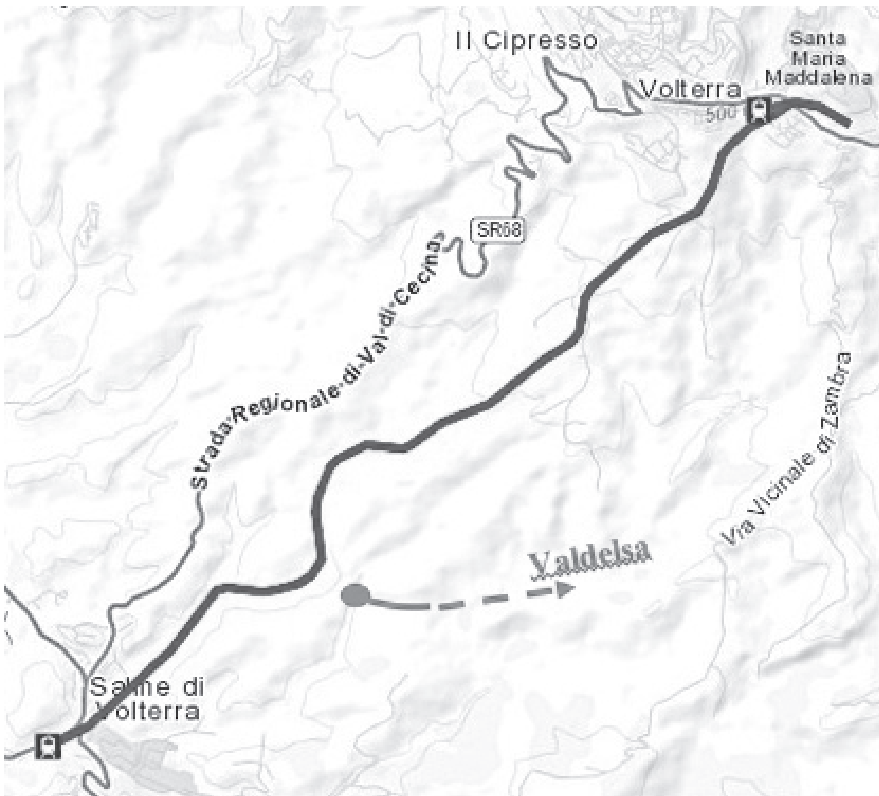


Fig. 19. *Starting point of a possible branch in direction of Siena*

Reconnection of remote areas with the coast, reduction of carbon dioxide emissions, modal shift in tourism are the keywords of this project. A significant reduction in travel time is allowed by using a modernly conceived train, able to provide a state-of-the-art comfort and performance. At the same time, it is very efficient in the use of primary energy, thereby resulting in a dramatical reduction (nearly 80%) in carbon dioxide emissions if compared to the use of private car.

Based on a similar case, the user base can be relatively wide, because it is not limited to the inhabitants, but also involves a large part of the tourists which every year visit Volterra and the potential is expected to be in the range 450000 – 830000 passengers per year. Besides this prediction, the new railway proved to be economically sustainable even with an amount of passengers far below the lower threshold.

This study proves that the hypothesys of reconnecting Volterra with the coastal line through the construction of a new rack railway on the same track of the older one is not only possible, but also recommended, because it is sustainable not only from the environmental but also from the economical point of view. It also puts a definitive stop to the idea of dismantling the remaining branch to Cecina and replacing it with a bike path.

This project has encountered the favour of the main regional authorities, namely the President of the Region and the President of the Regional Council, which endorsed the idea. They also recommended the local communal administrations to support it with an official letter to ask for the inclusion of the line in the Regional Develop Plan, to incorporate the cost of the feasibility study in the annual regional budget.

Gabriella Iermano

AFTERWORD

This volume brings together works of very different nature presented at the conference "Enhancing sustainable transport. Interdisciplinary issues" held at the University of Pisa on May 10th, 2022. It seems therefore appropriate to sum up the main results of the various approaches used in this study and compare them in order to highlight the common thread that holds these insights and perspectives together, despite their apparent disparity.

The impetus that prompted scholars and practitioners of different backgrounds to come together in this volume, as in previous occasions at the conference, is the growing attention devoted to sustainability together with the awareness of the need for a combined reflection from many different fields in order to grasp the challenges of such an urgent, fascinating, and vaguely defined topic.

But why this particular focus on sustainable transport? What justifies this interest in transportation, an apparently sectoral field outside the typical interests of, for example, experts in financial market law or corporate law? And why a multidisciplinary approach and an international perspective?

The answer is multifaceted.

First of all, the transportation sector is crucial to achieving the sustainable development goals that many voice as essential for the very survival of the planet. This sector, being operative for economic growth while at the same time among the most heavily polluting, must be heavily impacted in order to implement a transition to higher sustainability standards.

The complexity and ambitiousness of ecological transition in this sector and, more generally, of achieving an appropriate level of sustainability in this area have highlighted the reductive nature of a sectoral approach and demonstrated the need for a multidisciplinary approach. Effective change that would lead to giving the transport sector a more sustainability-conscious dimension requires interventions from various fields (legal, technical, economic, financial, etc.). Even the legal field alone would require the contribution of multiple specialties, such as transport law, international and EU law, commercial law, taxation, finance and insurance. It was therefore

necessary to bring together the insights and reflections of experts with different backgrounds and of both a theoretical and practical slant.

In developing this joint reflection, it also become clear that an international perspective is desirable, given the global dimension of both the reference market (that of transport) and the issues involved (pollution, inclusion policies, reduction of social inequalities, and all other aspects connected to sustainability). The two core matters of the theme dealt with here - sustainability and transport – by their very nature are not suitable to be addressed by local action alone.

The purpose of this volume, therefore, is to focus on some of the many facets that such a complex problem implicates, approached from various perspectives. Naturally, given said complexity, this volume cannot make any claim to completeness either in terms of addressing the issues involved or in the solutions proposed.

Already the delimitation of the field of investigation is necessarily the result of a (discretionary) selection. The transportation sector is very broad, as are the issues involved in the process of transition to more sustainable standards. Freight transport, for example, presents different problems and calls for different solutions from the problems associated with passenger transport. To wit, mobility within cities and the replacement of motor transport with electric public transport is an issue that presents different profiles from the shipping of goods. Maritime shipping in turn has its own challenges. Different challenges often require different solutions, even when sharing a common goal.

Moreover, the very definition of this common goal - sustainability - is kaleidoscopic in relation to the transport sector. Sustainable transport is not only transport which reduces CO2 emissions, but one which presents itself as more inclusive (both from the perspective of workers and of passengers) without affecting environmental sustainability but perhaps indeed working in parallel to this objective. An example of this would be promoting the gender equality of workers while concomitantly reducing obstacles to mobility due to disability. Sustainable transportation provides for greater involvement of workers and, in general, stakeholders in the governance of transportation companies, while reducing the isolation of unserved areas thereby facilitating their economic development. The "fifty gradations" of transportation sustainability require differentiated thinking, conducted from different perspectives.

Again, the question has been raised as to what the parameters should be for assessing the sustainability of a specific transportation activity, as well as whether the characteristics of the company carrying out such activity (its legal form, for example) also affect this assessment. Other considerations are whether assessment of a company's sustainability should also extend to the

totality of the activities the company engages in (or even the group to which it belongs) or whether it should be confined to the individual business project. A final consideration would be whether such an assessment should be conducted solely on the basis of the non-financial statements the company itself publishes (and how reliable these self-declared statements may be).

One of the most common legal forms for transportation enterprises, for example, is the corporate form, which has traditionally been oriented toward maximizing shareholder profit. Can this be considered an appropriate legal form to ensure the pursuit of transportation sustainability goals? Or are business forms that are by definition nonprofit-oriented (public enterprises, nonprofits, social enterprises) more appropriate? And, in this case, can the low profitability and competitiveness of the latter be an obstacle to the concrete actualisation of ecological transition goals? Or does it make sense to create new business legal structures, which better implement the principles of sustainability than the currently existing ones while still managing to maintain their competitiveness in the market? Is there need for new business forms altogether such as benefit corporations (in the case of for-profit companies) or new forms of social enterprises (in the case of non-profits)? Perhaps – to paraphrase the founder of one of the largest benefit corporations, Patagonia - there is currently no appropriate business legal form for the effective realization of sustainability (in particular, environmental) goals.

Even once the characteristics of the more "sustainable" transport enterprises have been identified, how do we ensure their establishment and competitiveness in the market and the supply of the financial resources they need? Tax incentives undoubtedly play an important role, as the reality of social enterprises demonstrates, but aside from the challenge of sometimes reconciling with the principles of free competition and the prohibition of State Aid, tax incentives on their own risk being insufficient, given the amount of financial resources needed to implement ecological transition.

In fact, it is clear now that, especially in a sector as highly polluting and "unsustainable" as transportation, ecological transition requires the investment of very large amounts of capital, which the public sector does not have. Without the massive intervention of private capital, ecological transition is not feasible, especially not in the tight timeframe that scientists believe is necessary to avoid reaching a threshold of irreversibility. In light of this, are there innovative investment tools to channel private investment into sustainable transportation? What role do the financial sector and the insurance industry play in accelerating the process of "sustainable" transportation both at a domestic and an international level? How can the financial system work to direct private investment toward sustainable transportation activities and away from traditional ones? In addressing these questions, we have attempted to retrace the innovation of the financial and insurance

sector in this area from both theoretical and practical angles by focusing, for example, on green bonds and dedicated insurance products. Further upstream an additional question was whether - and to what extent - these instruments can be competitive in terms of return on investment compared to traditional ones. This is a crucial question if private investment is indeed to be relied on to make the transition possible. This leads us to consider whether conventional investment-decision methods can discourage sustainable investments and whether a more precise risk assessments can possibly provide a better basis for sustainable investment-decisions.

We have sought to strike a balance between developing theoretical reflections on the issue without losing sight of its concreteness. We have tried to maintain this balance by investigating, for instance, the impact that the new German Supply Chain rules (the *Lieferkettensorgfaltspflichtengesetz*) have had on the transport sector.

Additionally, in order for such theoretical reflections not to be reduced to a mere exercise in style, it seemed appropriate to conclude with a practical description and technical analysis of a sustainable transport project with some likelihood of coming to being (the *Volterra Rack Railway*). The latter served as well to counter a frequent critique levelled at the subject of sustainability, that of its impracticality and tenuousness.

Here, we have tried to give it a more concrete form.

AUTHORS AND EDITORS

Francesco Alberti
Associate Professor of Urban Planning, Department of Architecture, University of Florence

Marco Antonelli
Full Professor of Fluid Machines, Department of Energy, Systems, Territory and Constructions, University of Pisa

Marilena Bacci
Avvocato and Rechtsanwalt *in Frankfurt am Main D - Bolzano (I)*

Andrea Bartalena
Full Professor of Corporate and Business Law, Department of Law, University of Pisa

Giulia Boletto
Associate Professor of Tax Law, Department of Law, University of Pisa

Daniele Buoncristiani
PhD-Attendant, Department of Law, Università degli Studi Roma Tre

Matteo Del Chicca
Research Fellow in EU Law, Department of Law, University of Pisa

Luca Della Tommasina
Associate Professor of Corporate and Business Law, Department of Law, University of Pisa

Giammaria Famiglietti
Principal at Oliver Wyman. Actuarial

María Gómez-Santos
Assistant Professor in Commercial Law, University of Salamanca

Gabriella Iermano
Associate Professor of Corporate and Business Law and of European Economic Law, Department of Law, University of Pisa

Stefano Maggi
Full Professor of Contemporary History, Department of Political Science, University of Siena

Anna Montesano
Research Fellow in Maritime and Transport Law, Department of Law, University of Pisa

Elena Orrù
Associate Professor of Maritime and Air Navigation and Transport Law, Department of Legal Studies, University of Bologna

Maria Cristina Quirici
Associate Professor of Financial Intermediaries and Markets, Department of Economics and Management, University of Pisa

Frank Andreas Schittenhelm
Professor für Finanzmanagement, *HfWU* Nürtingen-Geislingen

Luca Spataro
Full Professor of Public Economics, Department of Economics and Management, University of Pisa

COLLANA DEL DIPARTIMENTO DI GIURISPRUDENZA
DELL'UNIVERSITÀ DI PISA

Volumi pubblicati

1. V. Casamassima, *L'opposizione in Parlamento. Le esperienze britannica e italiana a confronto*, 2013, pp. XXII-546.
2. F. Biondi Dal Monte, *Dai diritti sociali alla cittadinanza. La condizione giuridica dello straniero tra ordinamento italiano e prospettive sovranazionali*, 2013, pp. XVI-320.
3. AA.VV., *Libertà dal carcere, libertà nel carcere*, 2013, pp. XXVIII-452.
4. AA.VV., Internet *e Costituzione*, 2014, pp. X-374.
5. F. Azzarri, Res perit domino *e diritto europeo. La frantumazione del dogma*, 2014, pp. XVIII-446.
6. C. Murgo, *Il tempo e i diritti. Criticità dell'istituto della prescrizione tra norme interne e fonti europee*, 2014, pp. XII-292.
7. E. Navarretta (a cura di), *La metafora delle fonti e il diritto privato europeo. Giornate di studio per Umberto Breccia*, Pisa, 17-18 ottobre 2013, 2015, pp. XVI-224.
8. M. Nisticò, *L'interpretazione giudiziale nella tensione tra i poteri dello Stato. Contributo al dibattito sui confini della giurisdizione*, 2015, pp. XIV-326.
9. AA.VV., *Stupefacenti e diritto penale: un rapporto di non lieve entità*, a cura di G. Morgante, 2015, pp. XII-276.
10. M. Passalacqua (a cura di), *Il «disordine» dei servizi pubblici locali. Dalla promozione del mercato ai vincoli di finanza pubblica*, 2015, pp. XVIII-398.
11. C. Favilli, *La responsabilità adeguata alla famiglia*, 2015, pp. XVI-528.
12. L. Pasquali, *Multilinguismo negli atti normativi internazionali e necessità di soluzioni interpretative differenziate*, 2016, pp. X-198.
13. M. Del Chicca, *La pirateria marittima. Evoluzione di un crimine antico*, 2016, pp. X-294.
14. G. De Francesco-E. Marzaduri (a cura di), *Il reato lungo gli impervi sentieri del processo*, Atti dell'Incontro di studi svoltosi a Pisa il 26 febbraio 2016, 2016, pp. X-222.
15. A. Landi-A. Petrucci (a cura di), *Pluralismo delle fonti e metamorfosi del diritto soggettivo nella storia della cultura giuridica*, vol. I, *La prospettiva storica*, 2016, pp. X-242.
16. I. Belloni-T. Greco-L. Milazzo (a cura di), *Pluralismo delle fonti e metamorfosi del diritto soggettivo nella storia della cultura giuridica*, vol. II, *La prospettiva filosofica: teorie dei diritti e questioni di fine vita*, 2016, pp. XII-164.

17. A. Fioritto (a cura di), *Nuove forme e nuove discipline del partenariato pubblico privato*, 2016, pp. XIV-490.
18. A. Landi, *Dalla gratuità necessaria alla presunzione di onerosità*, I, *Il mutuo ad interesse dal tardo Diritto comune alla codificazione civile italiana del 1865*, 2017, pp. VIII-160.
19. A.M. Calamia (a cura di), *L'abuso del diritto. Casi scelti tra principi, regole e giurisprudenza*, 2017, pp. XII-276.
20. C. Napoli, *Spoyls system e Costituzione. Contributo allo studio dei rapporti tra politica ed amministrazione*, 2017, pp. X-218.
21. C.J. Piernas-L. Pasquali-F.P. Vives (edited by), *Solidarity and Protection of Individuals in E.U. Law. Addressing new challenges of the Union*, 2017, pp. XVIII-326.

Nuova Serie

Monografie

22. G. Donadio, *Modelli e questioni di diritto contrattuale antidiscriminatorio*, 2017, pp. X-214.
23. A. Cassarino, *Il* vocare in tributum *nelle fonti classiche e bizantine*, 2018, pp. X-214.
24. E. Bacciardi, *Il recesso del consumatore nell'orizzonte delle scienze comportamentali*, 2019, pp. VIII-256.
25. A. Grillone, *La gestione immobiliare urbana tra la tarda Repubblica e l'età dei Severi. Profili giuridici*, con prefazione di Luigi Capogrossi Colognesi, 2019, pp. XVIII-246.
26. M. Pedone, Per argentarium solvere. *Ricerche sul* receptum argentarii, 2020, pp. X-198.
27. F. Procchi, *Profili giuridici delle* insulae *a Roma antica. I. Contesto urbano, esigenze abitative ed investimenti immobiliari tra tarda Repubblica ed Alto impero*, 2020, pp. XXIV-248.
28. C. Angiolini, *Lo statuto dei dati personali. Uno studio a partire dalla nozione di bene*, 2020, pp. XII-252.
29. G. Donadio, *Gli accordi per la crisi di coppia tra autonomia e giustizia*, 2020, pp. X-206.
30. G. Famiglietti, *Il richiedente protezione internazionale davanti ai suoi "giudici"*, 2021, pp. X-294.
31. S. Campanella, *Malattia psichiatrica e pericolosità sociale: tra sistema penale e servizi sanitari*, 2021, pp. X-390.

32. A. Petrucci, *Organizzazione ed esercizio delle attività economiche nell'esperienza giuridica romana. I dati delle fonti e le più recenti vedute dei moderni*, 2021, pp. VIII-312.
33. M. Monti, *Federalismo disintegrativo? Secessione e asimmetria in Italia e Spagna*, 2021, pp. VIII-456.
34. D. Perrone, *La prognosi postuma tra distorsioni cognitive e* software *predittivi. Limiti e possibilità del ricorso alla "giustizia digitale integrata" in sede di accertamento della colpa*, 2021, pp. X-142.

Saggi e ricerche

1. E. Navarretta, *Costituzione, Europa e diritto privato. Effettività e* Drittwirkung *ripensando la complessità giuridica*, 2017, pp. XVI-228.
2. E. Navarretta (a cura di), *Effettività e* Drittwirkung *nelle discipline di settore. Diritti civili, diritti sociali, diritto al cibo e alla sicurezza alimentare*, 2017, pp. VI-298.
3. M. Passalacqua-B. Pozzo (a cura di), *Diritto e rigenerazione dei* Brownfields. *Amministrazione, obblighi civilistici, tutele*, 2019, pp. XXXII-744.
4. A. Petrucci (a cura di), *I rapporti fiduciari: temi e problemi*, 2020, pp. XVIII-382.
5. A. Montesano (a cura di), *Sicurezza della navigazione e tutela dell'ambiente marino nelle Bocche di Bonifacio*, 2021, pp. XIV-322.

Atti di Convegno

1. E. Navarretta (a cura di), *Effettività e* Drittwirkung*: idee a confronto. Atti del convegno di Pisa, 24-25 febbraio 2017*, 2017, pp. X-254.
2. A. Pertici-M. Trapani (a cura di), *La prevenzione della corruzione. Quadro normativo e strumenti di un sistema in evoluzione*. Atti del convegno di Pisa, 5 ottobre 2018, 2019, pp. XIV-266.
3. G. De Francesco-A. Gargani-D. Notaro-A. Vallini (a cura di), *La tutela della persona umana. Dignità, salute, scelte di libertà (per Francesco Palazzo)*, Atti del Convegno di Pisa, 12 ottobre 2018, 2019, pp. XXII-282.
4. G. De Francesco-A. Gargani-E. Marzaduri-D. Notaro (a cura di), *Istanze di deflazione tra coerenza dogmatica, funzionalità applicativa e principi di garanzia*, Atti dell'incontro di studi di Pisa, 22 marzo 2019, 2020, pp. X-246.
5. V. Pinto (a cura di), *Crisi di impresa e continuità aziendale: problemi e prospettive*, Atti dell'incontro di studi, Pisa, 7 febbraio 2020, 2020, pp. X-190.

6. E. Navarretta (a cura di), *La funzione delle norme generali sui contratti e sugli atti di autonomia privata. Prospettive di riforma del Codice civile*, Atti del Convegno, Pisa, 29, 30 novembre e 1° dicembre 2018, 2021, pp. XII-428.
7. M. Bevilacqua-L. Notaro-G. Profeta-L. Ricci-A. Savarino (a cura di), *Malattia psichiatrica e pericolosità sociale. Tra sistema penale e servizi sanitari*, Atti del Convegno di Pisa, 16-17 ottobre 2020, 2021, pp. XXVIII-324.

8/I. E. Navarretta-L. Ricci-A. Vallini (a cura di), *Il potere della tecnica e la funzione del diritto: un'analisi interdisciplinare di* blockchain, vol. I, Blockchain*, democrazia e tutela dei diritti fondamentali*, Atti del ciclo di seminari, Pisa, 18 dicembre 2020-30 aprile 2021, 2021, pp. XIV-226.

8/II. E. Navarretta-L. Ricci-A. Vallini (a cura di), *Il potere della tecnica e la funzione del diritto: un'analisi interdisciplinare di* blockchain, vol. II, Blockchain*, mercato e circolazione della ricchezza*, Atti del ciclo di seminari, Pisa, 18 dicembre 2020-30 aprile 2021, 2021, pp. X-262.

9. F. Dal Canto-A. Sperti (a cura di), *Gli strumenti di analisi e di valutazione delle politiche pubbliche*, Atti della giornata di studio svoltasi a Pisa l'11 giugno 2021, 2022, pp. XII-164.
10. A. Bartalena-L. Della Tommasina-G. Iermano-L. Spataro (a cura di), *Enhancing Sustainable Transport. Interdisciplinary Issues*, 2022, pp. X-294.