

UNIVERSITY OF CATANIA LAW REVIEW

www.lex.unict.it/lawreview

SPECIAL MONOGRAPHIC EDITION 2024

Public regulation and market incentives for the green transition

Renewable energy, green investments and finance

Environmental taxation and green budgeting

Greenwashing

Green procurement

Department of Law
Siciliae Studium Generale - University of Catania

University of Catania Law Review - Special monographic edition 2024

Publisher

© Università di Catania - Dipartimento di Giurisprudenza
Catania, giugno 2024
ISBN: 9791298514300

Contacts

University of Catania Law Review
Dipartimento di Giurisprudenza
Via Gallo n. 24
95124 - Catania
lawreview@lex.unict.it
www.lex.unict.it/lawreview

Editors: Marisa Meli, Antonio Las Casas

Graphics and editing: Antonio Guidara, Francesca Leotta

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Public regulation and market incentives for the green transition

Salvatore Zappalà <i>Presentation</i>	I
Marisa Meli, Antonio Las Casas <i>Introduction</i>	V

ARTICLES

Francesca Bernini, Fabio La Rosa <i>A conceptual framework for the Greenwashing strategy research</i>	5
Paolo Di Caro, Carlo Orecchia <i>Green budgeting and the evaluation of mitigation policies in Italy</i>	41
Antonio Guidara <i>On the nature of the current tax on waste</i>	71
Francesca D'Angelo <i>Incentives for eco-sustainability: proposals for a landscape-integrated approach</i>	101
Francesca Leotta <i>Sustainability "in action", from rhetoric to public politics</i>	121
Ida Angela Nicotra, Chiara Sagone <i>Green Public Procurement: a look into the past to meet future challenges</i>	139

Marisa Meli	
<i>Incentives for renewable sources and protection of investors' legitimate expectations</i>	165
Antonio Las Casas	
<i>Green finance as a driver for ecological transition</i>	181
Authors	195

Presentation

Salvatore Zappalà (University of Catania)

This “special monographic issue” of the University of Catania Law Review (UCLR) is a first attempt to start an online periodical publication that, at least initially, is mainly intended as a forum for the presentation of the results of research carried out at the Department of Law of the University of Catania (UNICT). In so doing it tries to combine elements of the tradition with new approaches.

The link with the tradition is embedded in the roots of the Law Department of UNICT. The University of Catania was founded in 1434 and the Law Department is the oldest of the University. The Department comprises around 80 scholars (40 full professors, 30 associate professors, as well as a number of senior researchers, most of whom holding tenure track positions), and several post-doc junior scholars, as well as a number of PhD candidates. The areas of interest of the Department are very broad and include virtually all sectors of the law, as well as some disciplinary sectors of the area of economics.¹

At the Catania Law Department, in line with the dominant and widespread approach in the legal community, the research activities of scholars have been usually devoted to the objective of the publication of monographs as their main research product, while the variety of shorter contributions (Articles or Notes and Comments) has been normally seen as a completion of the academic profile of legal scholars.² At the same time, and in conjunction with the approach described above, the work of scholars in the legal arena has been predominantly carried out individually or, at best,

¹ The whole list can be read on line in our Three-Years Strategic Plan at page 5 (see https://www.lex.unict.it/sites/default/files/files/Piano_triennale_dipartimentale_2023-2025.pdf).

² The publications of the faculty members of the Department are systematically shown at <https://www.lex.unict.it/it/content/produzione-scientifica>, where they are posted as they become available.

within small research groups with homogenous cultural and scientific interests. More recently, however, there has been a move towards increased interdisciplinary research, on the one hand, and, on the other, there has been a pressing demand for Law Departments to become more active in orientating, at least in part, the research areas of their faculty members, developing departmental research projects. As part of this process individual scholars have been asked to concentrate efforts on some topical research aspects.

Against this background, some broad research axes have been selected. In particular, in 2018 and again in 2023 the Department of Law of the University of Catania Law was selected among the best 15 Law Departments in Italy within the framework of a Ministerial project called “Dipartimenti di Eccellenza”, which intends to support structural, teaching and research activities in those departments that were selected on the basis of their outstanding results in the ranking of the quality of their academic publications, as well as a specific departmental project to be implemented in the relevant quinquennium. Hence, in this regard, the first departmental project (2018-2022) of the Catania Law Department revolved around the topic “Industry 4.0”, dealing with the numerous challenges of the fourth industrial revolution, while the second departmental project (2023-2027), currently ongoing, hinges on “Law and Sustainability 360°” focusing on the multifaceted legal aspects of pursuing the 17 UN Sustainable Development Goals and more specifically both the technological and green transitions.

This special monographic issue of the University of Catania Law Review – edited by Marisa Meli (professor of private law) and Antonio Las Casas (professor of private comparative law) to whom we are grateful for their work – brings together a series of papers focusing on financial incentives for the “green transition”.³ This volume was developed by a diversified interdisciplinary group mostly composed of faculty members who reflected on a specific research topic linked to the broader theme of our departmental research. The publication of these papers as “special

³ For more details on the content of this set of papers see *infra* the foreword by Meli and Las Casas.

monographic issue” is particularly appropriate as it combines interdisciplinary dialogue with the creation of a forum for dissemination, in English, of the result of departmental research, contributing by the same token to its increased internationalization.

Finally, let me conclude by thanking Antonio Guidara and Francesca Leotta respectively for the design and final copyediting of this inaugural issue.

Introduction

Marisa Meli (University of Catania)

Antonio Las Casas (University of Catania)

Several legal sources and documents, in particular within the European Union, point to the transition towards environmental sustainability as a fundamental goal and strategy in the short term. Such move towards environmental sustainability is expected to orient in the near future public policies and finance and, in the meantime, it calls for an active and renewed role of legal models and tools for environmental regulation. In particular, as regards legal models for the protection and promotion of environment, a well-established taxonomy distinguishes between “command and control” models and “economic” or “market” models. Command and control models pursue the protection and improvement of environmental resources through mandatory standards decided by public institutions that set out prohibitions and positive obligations for economic actors and provide legal sanctions and fines for their infringement. On the other hand, economic models apply market incentives to induce private actors to adopt environmentally responsible behaviors, and mainly rely on private law tools, such as property and contract, to generate socially beneficial effects on environmental resources.

Therefore, ecological transition as a strategic goal of the European Union requires a specific interplay between “public” strategies and regulations, including financial policies, and “private” economic incentives, equally created by legal regulation.

The essays presented here critically analyze those policies and strategies for environmental sustainability, trying to assess their reciprocal connections and implications. Applying both legal and economic analytical tools, those essays focus on public finance and regulation (such as taxation and public procurement) and on market strategies and private law models (such as protection of green investments and the problem of greenwashing), to sketch a picture of some of the challenges ecological transition is raising.

A conceptual framework for the Greenwashing strategy research

Francesca Bernini (University of Pisa)

Fabio La Rosa (University of Catania)

Abstract: *Greenwashing arises from the companies' need to address the trade-off between the increasing importance of environmental compliance and their real and supportable efforts toward this objective. This paper aims to contribute with a theoretical analysis of greenwashing strategy, starting from a design of its conceptual vision. Our contribution is the development of a conceptual framework, able to represent a solid background for future empirical testing of the research question arising from the analysis of greenwashing in a business economic perspective. In doing so, we adapted the most important theories belonging to socio-political perspectives (i.e., legitimacy and stakeholder theories) and those related to voluntary disclosure (signaling theory) to the greenwashing strategies. We aim to illustrate how corporate theories can support the role of corporate disclosure in greenwashing strategies and how these strategies may be applied through a (mis)use of disclosure. Furthermore, our path of analysis aims to seize the link between greenwashing strategies and the creation of economic and social value, enlightening possible future research areas.*

Contents: 1. Introduction - 2. The greenwashing strategy: a literature review – 3. Theoretical background - 3.1. Theoretical reasons behind greenwashing strategies - 3.2. In search for an explanation of greenwashing: main theories - 3.2.1. The legitimacy theory - 3.2.2. The stakeholder theory - 3.2.3. The signaling theory and a quick look at the competitive altruism theory – 3.3 Predictable consequences of greenwashing behaviours - 4. Corporate disclosure as the main tool for greenwashing strategies - 5. Greenwashing between shareholder value and social value - 5.1 The role of reputational and relational capital - 6. Conclusions - References.

1. Introduction

In the last several years, there has been an increasing perception of the role played by ecological issues for companies, due to their performances and global financial stability (Webster, 2020). Today's companies accept that environmental risks are a threat for their survival and competitiveness, so they are defining the role they play in order to build their accountability. This has contributed to assigning an essential role to corporate voluntary disclosure, in order to engage and legitimise company behaviours, and to emphasise the

need for introducing and developing a mandatory body of requested information, thus highlighting the institutional setting as a crucial determinant of the effectiveness of company environmental responsibility.

Greenwashing is a phenomenon arising from the companies' need to "resolve" the trade-off between the increasing importance of environmental compliance and their real and supportable efforts toward this objective. By examining/analysing the lexicon, the word «greenwashing» comes from the combination of «green» and «brainwashing» (Mitchell and Ramey, 2011): a brainwashing relating to the environment.

The role of environmental sustainability, actually, is not uniquely defined. Scholars (e.g. Bini et al., 2018) question if this is the most important challenge in the current socio-economic context or a "matter" to be managed in order to maintain a competitive advantage, by making limited efforts throughout the use of misleading communication, since stakeholders cannot identify real company behaviour and pay for asymmetric information (Zharfpeykan, 2021).

In this current scenario, this work aims to present a theoretical analysis on greenwashing, starting from a design of its conceptual vision. We aim to contribute with a conceptual framework that can represent a solid background for a future empirical testing of the research question arising from the analysis of greenwashing in a business economic perspective. In doing so, we adapted the most important theories belonging to a socio-political perspective and those related to voluntary disclosure (Uyar, 2020; Mahoney et al., 2013) to greenwashing strategies.

Theories help in understanding or predicting how companies commit to green issues and their strategic motivations in order to create value. The legitimacy theory states that companies seek legitimacy by demonstrating compliance with a system of social values, to which environmental efforts belong. Stakeholder theory views environmental communication as an answer to stakeholder pressure (Gray et al., 1995) and as a form of stakeholder engagement (Rabaya and Saleh, 2021). In fact, environmental responsibility belongs to the set of stakeholders' demands. Consistently, the signaling theory suggests that disclosure helps to create a good image and reputation of the company, with a positive effect on the corporate and social value (Michelon and Parbonetti, 2012).

Starting from these highlights, this work aims to discuss some emerging and relevant issues in a qualitative perspective. We aim to illustrate how corporate theories can support the role of corporate disclosure in

greenwashing strategies and how these strategies may be realised through a (mis)use of disclosure. Furthermore, our path of analysis intends to seize the link between greenwashing strategies and the creation of economic and social value, enlightening possible future research issues.

In section 2, we review the greenwashing concept theoretically. In section 3, the theories involved within the academic greenwashing analysis are illustrated together with a definition of some theoretical reasons behind the greenwashing strategies. Finally, we show some of the consequences of greenwashing behaviours. Section 4 is devoted to the description of corporate disclosure as the main tool for greenwashing strategies, while section 5 analyses greenwashing from an economic and social value-based perspective. Finally, section 6 presents our complete framework of analysis, suggesting an agenda for future research.

2. The greenwashing strategy: a literature review

The concept of greenwashing can be framed into the field of corporate sustainability (Schaltegger et al., 2013) that involves environmental, social and economic issues. The European Commission (2001, p. 6) defined CSR (Corporate Social Responsibility) as «a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis».

According to a narrower view, greenwashing refers specifically to the environmental responsibility of a company (Pearson, 2010), emerging from its interaction with the natural environment and fostered by the difficulties encountered by stakeholders in a direct evaluation of the company's environmental performance. Therefore, firms can afford to communicate non-transparent information about their environmental performance.

Research on greenwashing is growing, thus several greenwashing-related issues will be developed. However, the meaning of greenwashing is variously portrayed by scholars (Walker and Wan, 2012; Seele and Gatti, 2017; Zharfpeykan, 2021) and a generally accepted definition does not currently exist (Torelli et al., 2020). There are several definitions of greenwashing and they are grounded on different perspectives. This is due also to its multifaceted character (Lyon and Montgomery, 2015) that fosters its interdisciplinary perspective (Seele and Gatti, 2017; Torelli et al., 2020; Zharfpeykan, 2021).

The origins of greenwashing may be established in a study of the environmentalist and biologist Jay Westervelt published in 1986 (De Freitas

Netto, 2020), when the first environmental controversies began to arise. In his essay, Westervelt accused some companies operating in the hospitality sector of encouraging the recycling of towels in order to promote green policies, while at the same time failing to promote serious environmental policies (Pearson, 2010; Seele and Gatti, 2017).

Before starting the analysis on the framework of the widely accepted definitions proposed by scholars, we will try to offer an outlook of the greenwashing interpretations in non-academic contexts. Greenwashing, in fact, can also be found in the linguistic field. Not only is the definition found in dictionaries but also in the literature of NGOs. The Oxford English Dictionary describes greenwashing as «disinformation disseminated by an organisation so as to present an environmentally responsible public image; a public image of environmental responsibility promulgated by or for an organisation, etc., but perceived as being unfounded or intentionally misleading», while Webster's New Millennium Dictionary of English views greenwashing as the «practice of promoting environmentally friendly programs to deflect attention from an organisation's environmentally unfriendly or less savoury activities».

Two of the most important environmental NGOs, *Greenpeace* and *TerraChoice*, in their definition of greenwashing, emphasise the relational aspect of greenwashing that involves the customers and the products. In fact, *Greenpeace* defines greenwashing as «a public relation tactic that's used to make a company or product appear environmentally friendly without meaningfully reducing its environmental impact» (Greenpeace, 2021), while *TerraChoice* defines greenwashing as «the act of misleading consumers regarding the environmental practices of a company or the environmental performance and positive communication about environmental performance» (TerraChoice, 2007).

Academic scholars have proposed several greenwashing perspectives (Torelli et al., 2020; Yu et al., 2020) as well as different ways of measuring it. Despite the differences in the interpretation, literature considers the definition that scholars formulated as consistent with each other (Zharfpeykan, 2021). Notwithstanding the foregoing dispute, scholars underline that a review of the greenwashing concept is needed (Lyon and Montgomery, 2015). In order to foster a broader vision of the concept of greenwashing, framed in an academic perspective, we propose a vision organised according to the most acknowledged features of the above concept.

A first perspective looks at *omissions* in reporting the facts. Literature

recognizes this as «selective» disclosure. Selective disclosure is represented by two possible kinds of behaviour in reporting the company's activity: to preserve information about negative environmental performances and/or to enhance disproportionately the positive environmental performances (Lyon and Maxwell, 2001; Guo et al., 2017, Torelli et al., 2020; Delmas and Burbano, 2011; Du, 2015). One of the most widely recognized definitions is by Lyon and Maxwell (2011), who describe greenwashing as «the selective disclosure of positive information about a company's environmental or social performance, without fully disclosing the negative information on these dimensions, so as to create an overly positive corporate image» (p. 9). In other words, this perspective interprets greenwashing as asymmetric communication, which aims to divulgate the environmental successes of a company while hiding poor commitments or negative behaviours (Ferrón-Vílchez et al., 2021).

Not so far from the aforementioned concept of selective disclosure is the one of *misleading* disclosure. CSR disclosure, to which environmental performance and initiatives disclosure belong, is described by Laufer (2003) as devious and not sincere. This suggests that greenwashing does not spring only from «omissions» but also from «lies», consisting in the falsity of the green reporting (Seele and Gatti, 2017), showing a false image of the green behaviour of a company (Mitchell and Ramey, 2011).

Referring to both selected and false disclosure, literature emphasises that greenwashing can be assessed if this kind of environmental reporting is intentional (Torelli et al., 2020; Ferrón-Vílchez et al., 2021). Moreover, some scholars (e.g. Seele and Gatti, 2017) pointed out that greenwashing should be linked to an explicit accusation made by the media, society and stakeholders. Therefore, accusations are crucial. In that sense, greenwashing depends on both a company-related factor, identified by the level of misleading information given by the company itself, and on a relational factor, represented by the accusation made by the stakeholders due to their perception of some misleading intention.

Another perspective focuses on the gap between what companies report and what they do. This approach sees greenwashing as a lack of substance with respect to what has been accomplished (Siano et al., 2017). Consistently with this view, Walker and Wan (2012, p. 231) define greenwashing as «symbolic information emanating from within an organization without substantive actions. Or, in other words, discrepancy between the green talk and green walk». Following Walker and Wan (2012),

the concept of greenwashing diverges from «green highlighting», because, while the former stems from the gap between actions and reporting (Lyon and Montgomery, 2015), the latter is backed with substantive acts, even if only good performances are selected for reporting. However, both of them may produce several stakeholder reactions, potentially resulting in reputational damage or an increase in reputational risk (Gatzert, 2015).

Considering the selective and misleading disclosure, on one hand, and the symbolic green disclosure, on the other, an important issue emerges: can the green communication also involve unethical or illegal behaviours? (Siano et al., 2017). Indeed, the fact of considering greenwashing as a result of a selective or deceptive form of communication, opens this concept also to the possibility of including criminal or irresponsible environmental behaviours. At the same time, by adopting an interpretation of greenwashing as a merely symbolic disclosure, the matter of the inconsistency of companies' reporting is pointed out.

These considerations give room to a further interpretation of greenwashing that places it between «decoupling» and «attention deflection» (Siano et al., 2017).

Consistently with the previous concept of symbolic environmental disclosure, «decoupling» (Siano et al., 2017; Walker and Wan, 2012; Guo et al., 2017) occurs when companies communicate good environmental actions, in order to satisfy stakeholders' needs and expectations, without having adequate, structured and organised activities, or in order to get their own objectives (Meyer and Rowan, 1977; Bromley and Powell, 2012). Instead, «attention deflection» aims to conceal irregular or unethical environmental behaviours (Marquis and Toffel, 2012) while reporting about symbolic «green behaviours». Decoupling and deflection are both strategies that make communication play a predominant role over action.

To frame the concept of greenwashing, scholars have identified some cornerstones of its definition (e.g. Bowen, 2014; Seele and Gatti, 2017; Ferrón-Vílchez et al., 2021). Following Delmas and Burbano (2011), greenwashing occurs when a company engages in both poor environmental performance and positive environmental disclosure. However, later on, some scholars identified the following three determinants (Bowen and Aragon-Correa, 2014): (1) corporate disclosure is selective; (2) greenwashing is a deliberate behaviour (Mitchell and Ramey, 2011), therefore, determining an intentional deceit for stakeholders (Nyilasy et al., 2012); (3) greenwashing starts from the willingness of the company that manages this strategy.

Afterwards, another crucial determinant of greenwashing was identified with the stakeholders' perception of it (Seele and Gatti, 2017). This aspect allows us to see beyond the company's behaviour, enlightening the active role of the external environment to identify the extent of greenwashing effect and, at the same time, allows identifying its motivations. According to Seele and Gatti (2017), in fact, greenwashing occurs if disclosure is misleading and if stakeholders accuse the company of being deceptive. The above pillars of greenwashing enlighten some crucial aspects to be investigated so as to manage the environment-focused research.

First, disclosure is considered the main tool to activate greenwashing strategies, which are deliberated and managed by companies. Moreover, as Seele and Gatti (2017) pointed out, greenwashing implies two perspectives for observing the phenomenon. The first is related to the information that a company desires to disclose and to the extent of its potential misleading effect. The second perspective is related to the external perception of this information that may result in an accusation of falsity or omission.

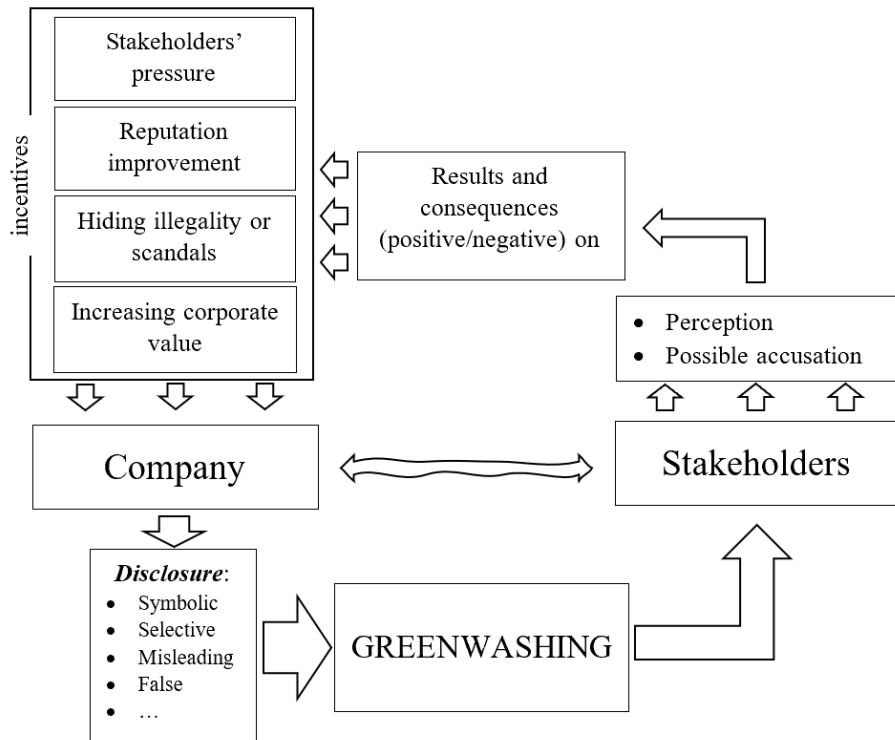
The above considerations deserve further clarification. As highlighted, greenwashing is a strategy based on the company's relationship with its stakeholders. However, Ferrón-Vílchez et al. (2021) pointed out that greenwashing always stems from a company initiative and enlighten the role of the large set of stakeholders interested in companies' environmental responsibility (i.e., the compliance with legal obligations or the need to achieve environmental certifications). In that perspective, greenwashing may be interpreted, not only as a company-pushed strategy, but also as a stakeholders'-pulled effect. Consistently with this second view, Ferrón-Vílchez et al. (2021, p. 862) define greenwashing as «a group of symbolic environmental practices started in response to the stakeholders' pressure».

Different levels of greenwashing actions stem from the above definition. In a first step, scholars (e.g. Delmas and Burbano, 2011) defined two greenwashing levels (Yu et al., 2020; Zharfpeykan, 2021) and in a further development of the analysis, Torelli et al. (2020) added another two levels. The company-level greenwashing is grounded on symbolic (Wong et al., 2014), selective or misleading (Torelli et al., 2020) environmental disclosure, regarding the company's mission, the certifications and other corporate-related issues capable of influencing its reputation. When the misleading «green communication» regards the intentions of the companies for future strategies, the level of greenwashing is defined as strategic and may consist in the disclosure of the long-medium term objectives regarding the

environmental aspects of the company's activities. Some scholars (Torelli et al., 2020) also identified a dark level of greenwashing, which occurs when misleading or selective environmental disclosure aims to conceal illegal behaviours. In our opinion, this form of communication can be referred to all levels of greenwashing, when the company aims to hide illegal actions by investing in several strategic or operational activities. Finally, the product-level greenwashing relates to the information that a company discloses to promote its products and their environmental peculiarities. Product-level greenwashing occurs when this information is not fully truthful or complete (Delmas and Burbano, 2011).

The above considerations suggest that greenwashing can be viewed as a deliberate strategy, involving different aspects of the companies' activity, obtained by using different kinds of corporate disclosure (selective, misleading, false) and, among other things, aiming at improving or repairing the company's reputation and image, as perceived by stakeholders (Bowen and Aragon-Correa, 2014; Delmas and Burbano, 2011; Ferron-Vilchez et al., 2021). The aim is to hide illegal actions or corporate scandals (Torelli et al., 2020) or to foster financial and market performances and companies' evaluations (Yu et al., 2020) (see Picture 1). However, scholars enlighten that greenwashing strategies may be perceived by external stakeholders, thus generating scepticism and undermining the company's reputation (Bowen and Correa, 2014).

Figure 1 – Greenwashing: a conceptual vision



3. Theoretical background

3.1. Theoretical reasons behind greenwashing strategies

The reasons leading to greenwashing strategies are not yet as fully explored as the procedures emerging from their implementation (Seele and Gatti, 2017). Guo et al. (2017) recognize external and internal motivations for greenwashing. External determinants refer to the regulatory setting and may be identified, for example, with the uncertainty of the regulations, the role of the media, and the pressure of NGOs. External determinants may also be referred to the actors of the market (i.e. competitors, customers or investors). The reasons behind greenwashing can be found both as companies' reactions and as companies' actions. In the first case, misleading information is produced because of the pressure of external stakeholders. In the second case,

greenwashing aims to advance to competitive positions by improving companies' financial value and their reputational capital (Siano et al., 2017; Aras and Crowther, 2009; 2011). Institutional characteristics, such as weak financial markets, could help greenwashers to raise market financing as these companies could be classified as “green”, without having fully and reliably assessed their environmental responsibility (Lashitew, 2021).

3.2. In search for an explanation of greenwashing: main theories

The observation of greenwashing drivers is not fully possible without considering both the theories supporting and explaining these companies' behaviours and the role of disclosure as the main tool that companies use to actualize the above strategies.

In business economics studies, theories arise from several disciplines belonging to the social sciences and help us to understand particular human and corporate behaviours as well as define the framework for studying such behaviours.

The reasons behind the companies' motivations to promote greenwashing strategies can be related to some theories belonging to business economics research. Several scholars (Walker and Wan, 2012; Laufer, 2003; Zharfpeykan, 2021; Seele and Gatti, 2017; Uyar et al., 2020; Ferrón-Vílchez et al., 2021; Dye et al., 2021; Mitchel and Ramey, 2011) defined a theoretical framework including, among other things, legitimacy theory (Oliver, 1991), signaling theory, stakeholder theory and competitive altruism theory (Barclay, 2004; Hardy and Van Vugt, 2006) in the context of greenwashing strategies.

3.2.1. The legitimacy theory

Legitimacy theory (Deegan et al., 2002) is based on the concept of legitimacy (Cuganesan et al., 2007), which, according to a broad definition, may be viewed as «a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions» (Suchman, 1995, p. 574). Walker and Wan (2012) enlighten that legitimacy stems from the assumption that the socially accepted rules or values represent the setting in which corporate behaviours should be considered appropriate (Suchman 1995) in the perceiving or judging the actors of this social setting (Bitektine, 2011). In other words, legitimacy theory defines a contract between the company and its stakeholders (Deegan, 2002; Deegan and Unerman, 2011).

On one hand, the above contract requires a proper response by the companies and, on the other hand, it gives legitimation to those companies that appear to be compliant with social rules (Zharfpeykan, 2021). To this regard, some scholars (Roberts, 1992) consider legitimacy not only as a tool to improve financial or social performances (Deephouse, 1999) and a company's value but also as a condition of survival. In fact, stakeholders' legitimation gives companies greater opportunities to acquire resources and financing, and facilitates the relationships within the competitive system (Walker and Wan, 2012; Seele and Gatti, 2017).

Since corporate social responsibility initiatives, including the environmental efforts, should be considered as new determinants of legitimacy (Seele and Gatti, 2017), greenwashing strategies can be defined within the legitimacy theory as a form of legitimation search grounded on misleading disclosure.

Legitimacy studies (Scherer et al., 2013; Bitektine, 2011; Suchman, 1995) identify several types of legitimacy. Among the different interpretations, we briefly recall some possible classifications and aspects that can help interpret the phenomenon of greenwashing (Bowen, 2019; Seele and Gatti, 2017). Suchman (1995) made a classification of legitimacy as: cognitive, pragmatic and moral. Cognitive legitimacy occurs when environmental culture is taken for granted. Moral legitimacy stems from normative approval (Zyglidopoulos, 2003) and is related to the evaluation of the company's behaviour by society (Bitektine, 2011). Pragmatic legitimacy is based on self-interest evaluations of the company's stakeholders and on their perceptions of the advantages they could obtain from the activities of the companies (Seele and Gatti, 2017; Shuman, 1995).

Moreover, legitimacy has been classified as internal, when it regards company insiders, or external, when it regards an external audience (Bitektine, 2011; Kostova and Roth, 2002). In a greenwashing analysis, an external perspective of legitimacy could be more useful.

Adopting the lens of the legitimacy theory in order to analyse greenwashing, as previously defined, implies a focus on pragmatic legitimacy. This is consistent with Seele and Gatti's (2007) framework of analysis, which links the research of pragmatic legitimacy with the intentional misleading scope of green disclosure and adopts a strategic approach (Scherer et al., 2013) to legitimacy (Pfeffer, 1981). Following the above framework, Seele and Gatti (2007) recognise that disclosure regarding green and environmental issues is a strategy aimed at gaining legitimacy, improving

legitimacy or recovering compromised legitimacy (Laufer, 2003; Deegan et al., 2002). The strategic approach sees legitimacy as an operational resource that companies may achieve from the cultural setting where they operate (Suchman, 1991).

Legitimacy is also interpreted by institutional studies (Suchman, 1991), which consider it as a set of «constitutive beliefs» (Suchman, 1988). In this perspective, legitimacy is not seen as a resource extracted from the social environment but as something that arises from an «external institutions construct» (Suchman, 1991, p. 576). As Bowen (2019) states, an institutional approach suggests that the company's behaviour aims to reach social approval. Moreover, the change observed in the stakeholders' expectation pushes companies to adapt their strategy and their disclosure in order to comply with the current societal expectations (Cuganesan et al., 2009). In that sense, the increased consciousness of environmental issues and the related disclosure may be considered as a form of adaptation of the company's behaviour so as to comply with the perceptions and the expectations of the actors of the social system. In the theoretical setting we are describing, greenwashing consists in a legitimation strategy, adopting environmental disclosure in order to «legitimate social and environmental values which may or may not be substantiated» (Mahoney et al., 2013, p. 352).

3.2.2. The stakeholder theory

As with legitimacy theory, another socio-political theory (Gray et al., 1995; Uyar et al., 2020) adopted by scholars to explain the greenwashing practices is the stakeholder theory (Freeman, 1994). Stakeholder theory recalls the concept of stakeholder engagement, which is defined by Sharma and Vrendenburg (1998) as «the ability to establish trust-based collaborative relationships with a wide variety of stakeholders» (p. 735). Stakeholder theory indicates that the stakeholders' involvement in the companies' decisions has a dual purpose. The first is a fulfillment of the ethical requirements to the societal norms and the second is to strategically manage the relational capital (Edvinson and Malone, 1997; Stewart, 1997). Both of the above purposes are instrumental in achieving a competitive advantage (Cennamo et al., 2009).

The stakeholders' engagement fosters the overcoming of the boundaries of the financial performance to also include the achievement of social performance. In that sense, accountability includes both of them (Guthrie et al., 2004), extending the concept of financial value towards that

of social value (Dumay, 2016).

Corporate environmental performance fits in the perspective of both legitimacy and stakeholder theories because the societal expectations about the “green behaviours” of a company are increasing over time, which encourages companies to reach legitimacy and satisfy the stakeholders’ requirements. Thus, the environmental efforts may be seen also as an adaptive behaviour of the company towards the above-mentioned requirements and to the stakeholder pressure (Ferrón-Vílchez et al., 2021; Murillo-Luna et al., 2008). Disseminating information regarding green activities is considered a way to enhance corporate reputation (Seele and Gatti, 2017; Baum, 2012) in addition to revenues and other financial performances (Deephouse, 1999). However, the search for external legitimacy within a pragmatic approach and the stakeholders’ pressure for compliance with environmental issues (Ferrón-Vílchez et al., 2021) could lead companies to use disclosure in order to gain both legitimacy and stakeholders’ engagement.

The perspective of the legitimacy theory (Deegan, 2002) considers disclosure as a tool for improving the stakeholders’ accountability and reputation (Macias and Farfan-Lievano, 2017). Consistently, voluntary «green disclosure» is considered an instrument to engage relevant stakeholders by divulging contents that are congruent with their values and expectations (Dye et al., 2021; Mahoney et al., 2013). As Seele and Gatti (2017) state, the role of disclosure becomes crucial especially when environmental scandals occur and companies have to repair their reputation and rebuild trust in corporate behaviours.

The search for pragmatic legitimacy, as well as stakeholder pressure (Gray et al., 1995), can generate strategic use of disclosure, which impacts on stakeholders’ perception, generating information asymmetries. This is the case of greenwashing, which is a phenomenon that may be interpreted in a socio-political theoretical perspective, to which legitimacy and stakeholder theories belong (Deegan, 2002). In fact, legitimacy theory justifies such communication habits, considering that symbolic, selective, misleading or false disclosure is useful to conceal events that could threaten corporate legitimacy or cover them with misleading or symbolic information (Zharfpeykan, 2021). Stakeholder theorists (e.g., Ferrón-Vílchez et al., 2021) explain the use of misleading disclosure about green actions as the answer to the stakeholders’ need of being involved in and informed about the companies’ activities and, at the same time, as a tool to manage said stakeholders as strategic resources (Cennamo et al., 2009).

The motivation towards the implementation of greenwashing policies also depends on the features of the institutional context where companies operate, such as pollution sensitivity, the field of work (De Vries et al., 2015), legislative measures and the legal enforcement of the context of a given country. More stringent regulations regarding environmental behaviours result in stronger pressure (Kim and Lyon (2015)) on companies. The institutional context, seen both as a set of regulations and as the result of activist groups, is considered a variable capable of impacting on greenwashing practices (Delmas and Montes-Sancho, 2010; Marquis et al., 2016).

Within the above conceptual framework, Ferrón-Vílchez et al. (2021) identify both a proactive and a reactive motivation of greenwashing behaviours, arising from a search for legitimation or from a response to the stakeholder's external pressure. The aim is to generate an external representation of the company that is better than the real one, improving the company's reputation and ultimately its competitive advantage (Lyon and Montgomery, 2015).

What we said confirms the pivotal role of disclosure. In fact, disclosure represents an answer to the stakeholders' need to be informed about corporate activities (Ullmann, 1985), with the intent of reducing information asymmetries and, at the same time, disclosure represents therefore a strategy of legitimation (Deegan, 2002). In fact, misleading disclosure deliberately generates information asymmetries in order to induce a positive perception from the shareholders and to preserve legitimacy (Uyar et al., 2020).

3.2.3. The signaling theory and a quick look at the competitive altruism theory

The crucial role of disclosure is also underlined by the signaling theory, which is widely used to explain greenwashing strategies. Moving from the voluntary disclosure theory, signaling theory (Mahoney et al., 2013) underlines that, since corporate disclosure reduces information asymmetries, it can contribute to increasing corporate evaluations, considered both from a financial and a social aspect (Michelon and Parbonetti 2012; Dumay, 2016). In fact, disclosure regarding environmental responsibility is a sign of commitment of the companies to these issues, which makes stakeholders aware that the company's behaviour is congruent with their expectations. However, in a greenwashing declination of the signaling theory, the signaling

power of the voluntary disclosure stems from information asymmetries.

Seele and Gatti (2017) give particular importance to signaling theory in order to explain greenwashing because it is capable of observing how the message is sent and how it is received and interpreted, containing information asymmetries. In that perspective, the above said scholars explain why misleading «green disclosure», finalised to show a commitment to environmental issues, can «signal» positive corporate social values (Connelly et al., 2011). They assume that disclosing positive information regarding green behaviours is convenient both for good and bad environmental performers. According to the perspective of signaling theory, every company can choose whether to disclose truthful information about its «green» performance (Connelly et al., 2011; Yekini and Jallow, 2012). In light of the above, the willingness to gain legitimacy represents a strong incentive for bad environmental performers that can use information asymmetries to signal a misleading message in terms of good environmental behaviours, thus acting as greenwashers. According to the signaling theory, companies with superior environmental performance show a higher propensity to voluntarily divulgate that environmental behaviour, in comparison with bad performers (Mahoney et al., 2013). In this way, the signaling theory differs from legitimacy and stakeholder theories because the latter assume that disclosure may be used as a tool to actualize greenwashing strategies (Hahn and Lülfs, 2014).

Nevertheless, the signaling theory, consistently with a voluntary disclosure perspective (Mahoney et al., 2013), is grounded on the reduction of information asymmetries, scholars claim that external stakeholders do not have the tools to distinguish true or false information regarding environmental issues (Carlson et al., 1993). In that frame, information asymmetries between companies and stakeholders allow greenwashers to signal a positive company's perception, thus improving its reputation. Moreover, legitimacy and stakeholder theories suggest that external stakeholder pressure induces bad environmental performers to produce voluntary disclosure regarding «green behaviours» (Patten, 2002; Uyar et al., 2020).

Greenwashing has also been explained with the competitive altruism theory (Barclay, 2004; Hardy and Van Vugt, 2006; Mitchel and Ramey, 2011), according to which companies (as well as individuals) compete to be considered altruistic- because conveying the value of altruism to the public elevates their perception of trustworthiness.

The above theories expect stakeholders to punish companies that show negative environmental behaviour and, at the same time, aim to state that

divulging information is costly (Mahoney et al., 2013; Uyar et al., 2020). For these reasons, observing the consequences of greenwashing behaviours is crucial.

3.3. Predictable consequences of greenwashing behaviours

Starting from the assumption that greenwashing strategies originate from a company's response to stakeholder pressure about environmental actions and aim to achieve legitimacy and a good corporate reputation (Lyon and Montgomery, 2015), it is useful contemplating the possible effects it may produce for the companies. Several scholars state that greenwashing is a short-term strategy, which can be useful until stakeholders perceive the gap between what companies do and what companies say (Ferron-Vilchez, 2021; Torelli et al., 2020). Stakeholders may doubt the truthfulness of companies' environmental claims and may investigate the companies' real intent. In fact, as Torelli et al. (2020) state, greenwashing can tarnish companies' reputation or generate scandals in some cases.

As stated previously, Seele and Gatti (2017) conceive the existence of greenwashing only when an accusation in the eyes of the beholder is made. In our opinion, external accusations should not be considered necessary to define greenwashing, but it is crucial to identify the possible consequences of greenwashing. The Seele and Gatti's (2017) conceptual framework shows the possible output of companies' environmental claims, observed through theories belonging to a socio-political perspective, such as the legitimacy and stakeholder theories, and also through a disclosure-grounded theory, such as the signaling theory. Companies are really senders of green information. Green information is a signal for the stakeholders, who are the receivers. When companies send their disclosure, they decide whether to be «fair green communicators» or not. The latter behaviour is the origin of greenwashing strategies.

To evaluate the possible effects of disclosure strategies, it is necessary to analyse a key-moment that is to say, the “receiving process”, which generates the stakeholders' perception of the green message. If the message is not consistent with their true actions, the effects on the company's legitimacy will depend on whether this strategic manipulation is perceived or not by the receivers. In the first case, as mentioned previously, greenwashing generates reputational damage. When greenwashing is not perceived by the receivers, companies benefit from a reputational advantage without investing in green/environmental actions because greenwashing is not visible. This is

the case of green disclosure as a tool to achieve pragmatic legitimacy. In this regard, Cho et al. (2009) showed that engaging in «green talk» without being consistent with a «green behaviour», especially when companies act only in a symbolic, misleading green way, may counterbalance the risk of stakeholders accusations that may lead to a legitimacy crisis. In this case, the achievement of legitimacy goals is due to the information asymmetries arising between the sender and the receiver and can be interpreted in the signaling theory perspective (Torelli et al., 2020). Indeed, Walker and Wan (2012) state that symbolic environmental actions, in the managers' opinion, may be considered more convenient than effective behaviours because they exert a signaling power without forcing companies to the internal rigidity that is necessary when substantial actions are taken (Suchman, 1995). However, companies should evaluate for how long this strategy will be effective. When stakeholders become aware of the greenwashing intent of the company, the signaling strategy fails and legitimacy is undermined.

Moreover, legitimacy crises and reputational losses may also arise when companies do not divulgate misleading messages and stakeholders generate a distorted perception of the signal, formulating a false accusation (Seele and Gatti, 2017).

The above considerations enlighten that the conceptualization emerging from the theories analysed in this section systematically converges toward a consideration of disclosure offered throughout several tools as a key-resource for the greenwashing strategy.

4. Corporate disclosure as the main tool for greenwashing strategies

As we said in the previous section, greenwashing can be explained in a socio-political perspective according to which environmental disclosure (and sustainability reporting in general) is capable of influencing stakeholders' opinions regarding companies' adequacy to social beliefs and norms (Mahoney et al., 2013; Lyon and Maxwell, 2011).

Literature suggests that greenwashing belongs to the category of the environmental management practices that consists in communication (González Benito and González Benito; 2006; Ferrón-Vílchez et al., 2021). Despite the fact that requirements regarding mandatory disclosure have been increased in recent years, literature claims that mandatory environmental disclosure is still scant (Mahoney et al., 2013). Among the few cases of mandatory requirements, we can highlight the Task Force on Climate-related

Financial Disclosures (TCFD), established by the Financial Stability Board in 2015, which aims to create a set of voluntary disclosure indications regarding climate-related risks in absence of conventional international climate-related reporting standards (Brooks and Schopohl, 2020). TCFD drives companies to give answers regarding risks and opportunities related to climate change (Dye et al., 2021). Although originally issued as a voluntary information set, TCFD became mandatory in the UK in 2020 (starting from 2021) for the financial services sector (Reilly, 2021). Moreover, in the European context, a new Sustainability-related Financial Disclosure Regulation came into force in the second quarter of 2021, requiring fund managers (AIFM) to mandatory disclose how they integrate sustainability into investment processes and potential adverse impacts of investments on sustainability. The Regulation also introduced the distinction between «products» that simply promote environmental or social characteristics (Article 8) and «products» that target sustainable investments (Article 9).

Starting from March 2021, fund managers have to observe the new Regulation (EU) 2019/2088 of the European Parliament and of the Council on sustainability-related disclosures in the financial services sector. This is an effort by the EU to mitigate climate change by financing sustainable development, as indicated by the European Commission’s Action Plan of 8 March 2018.

In addition, since 2017, mandatory reporting is in force for some categories of Italian companies within the non-financial disclosure. This document is required to present finalised contents so as to promote understanding of the business, its performance and impacts produced on non-financial issues, such as environmental, social, personnel issues, the respect for human rights and corruption contrasting.

The standard-setters are promoting the development of a sustainability disclosure (Bini et al., 2018; Laufer, 2003). For example, the Sustainability Accounting Standards Board (SASB) and the Global Reporting Initiative (GRI)¹ create and divulgate a set sustainability accounting standard. However, at a country-level, with some limited exceptions, specific mandatory requirements and enforcement are still needed. For this reason,

¹ The mission of GRI is to «[e]levate sustainability reporting practises worldwide to a level equivalent to financial reporting; design, disseminate, and promote standardised reporting practises, core measurements, and customised, sector specific measurements; [and] ensure a permanent and effective institutional host to support such reporting practises worldwide» (Global Reporting Initiative, 2002).

stakeholders are not fully able to assess the quality and the truthfulness of companies' environmental claims (Yu et al., 2020). The SASB framework emanates specific guidelines for climate risk and also for materiality disclosure (Dye et al., 2021; Lashitew, 2021).

Despite these recent improvements, scholars assert that environmental disclosure is widely unaudited (Yu et al., 2020). At the same time, voluntary disclosure can be strategically managed in order to communicate misleading environmental claims (Zharfpeykan, 2021). This facilitates the onset of information asymmetries and, consequently, fosters greenwashing strategies (Gugerty, 2009).

Voluntary disclosures regarding environmental commitment is disseminated throughout several sources, such as annual reports, corporate social responsibility reports (i.e., sustainability reports, environmental reports and so on), mass-media or websites (Dye et al. 2021; Mahoney et al., 2013). In fact, as Mahoney et al. (2013) found, in absence of mandatory environmental disclosure, the amount of information voluntarily disclosed depends also on the pressure exerted by stakeholders on the companies. However, when mandatory requirements are scant or weak, stakeholders are not able to understand if a company is really committed to environmental issues.

Moreover, the absence of mandatory requirements allows companies to report only useful information that is considered good. As a result, environmental disclosure shows a high quality variance between one company and another, and stakeholders are not fostered in understanding if some information is trustworthy or not. This creates a favourable context for applying greenwashing legitimization strategies since stakeholders rely on the signaling power of disclosure (Yu et al., 2020). As Khan et al. (2021) affirm, disclosure regarding sustainability has been recently criticised because it is considered «opportunistic, “green washing”, implausible, cosmetic, lacking in stakeholder inclusivity, lacking in “authentic effort” and failing to meet users’ expectations» (p. 339) and not reliable. Since environmental voluntary disclosure is a strategic tool for companies to answer to stakeholder pressure and to achieve legitimation, it may be lacking in reliability (Lashitew, 2021).

Both scholars (e.g. Dye et al., 2021; Kinderman, 2019; Jamali and Karam, 2018) and practitioners recognize the strong need for a mandatory environmental disclosure improvement. On one hand, a regulation is supposed indirectly involve companies into a self-regulation process

regarding environmental behaviours (Webster, 2020). On the other hand, a regulated level of reporting quality, harmonisation and transparency is considered as the «end of the “self-regulation” era» (Khan et al., 2021).

Furthermore, considering the increasing importance of the environmental issues within the investment decisions, a wider regulation may also be seen as a fundamental tool to protect investors since sustainability disclosure is a resource for communicating the company’s commitment to green issues to potential stockholders or lenders (Dye et al., 2021).

5. Greenwashing between shareholder value and social value

The relevance of environmental issues is increasing and companies redefine their behaviour in order to comply with this crucial matter and to fulfill the value of accountability (Yu et al., 2020; Lashitew, 2021). However, green behaviours do not follow companies’ ethical values but they are also subordinate to strategic decisions aiming to improve companies’ perception and reputation by manipulating corporate disclosure.

In that sense, companies may rebuild their business models in order to comply with environmental objectives. This effort would require the implementation of adequate investments regarding the organisational, structural and human perspective due to the transverse nature of greenization, which requires an overall rethinking of the business model. However, as we said, companies may communicate about their environmental involvement without really investing in underlying environmental strategies.

Company commitment to environmental issues is widely recognized as a shareholder value driver and it is also identified as a social value driver (Michelon and Parbonetti, 2012). As we explained in the previous sections, reporting regarding companies’ environmental commitment reduces the information asymmetry between companies and stakeholders and contributes to legitimate companies’ behaviour, positively affecting both financial and social dimensions of a company’s value (e.g. Michelon and Parbonetti, 2012) (Dumay, 2016). Greenwashing aims to unethically pursue this objective by disseminating misleading disclosure.

The absence of an effective mandatory framework, regarding the companies’ commitment to environmental issues, gives room to manipulate the information voluntarily disclosed, generating information asymmetries in order to mislead the actors of the social and competitive system and to achieve the above goals, without acting as a «good citizen» (Mahoney et al., 2013). The potential benefits in terms of improvements in relational and reputational

capital, in fund-raising and in financial performance induce companies to show an environmental responsibility without being environmentally committed (Siano et al., 2017).

Misleading disclosure allows companies to legitimate corporate actions that do not correspond to reality. Thus, disclosure assumes the two-fold role of seeking transparency to involve stakeholders in the company's activities and the role of a communication strategy aimed at the establishment of intangible resources, useful for the creation of economic value.

5.1 The role of reputational and relational capital

Recent literature (e.g. Rabaya and Saleh, 2021) enlightens that reputational and relational capital are crucial economic drivers of a company's value, especially in the current era, where invisible assets become distinctive resources. In that sense, environmental disclosure is viewed as a useful instrument to improve reputational and relational capital and, therefore, financial performance and competitive advantage (Cantele and Zardini, 2018). The link between disclosure, competitive advantage and value gets manifested as soon as the former is able to feed the invisible assets which, as mentioned above, are often an effective driver of economic value. Companies' legitimation and stakeholders' engagement facilitate the generation of the reputational capital². Dollinger et al. (1997) are consistent with this view, identifying community and green responsibility as key-dimensions of reputation.

Environmental disclosure, by strengthening the relational capital, is instrumental in gaining legitimation. Nowadays, reporting of environmentally responsible behaviours is considered a crucial determinant for improving the relations with stakeholders, improving corporate reputation and gaining a competitive advantage (Uyan et al., 2020; Rabaya and Saleh, 2021).

As Rabaya and Saleh (2021) enlighten, environmental commitment entails an improvement in financial performance, a reduction in cost of equity and a credit rating increase (La Rosa et al., 2018). All of them positively contribute to improving economic value, which is based on future expected income and risk (Rappaport, 1986; Stewart, 1991) by determining a reduction

² Bitektine (2011, p. 160), proposing a theoretical correlation between legitimacy and reputation, underlines that the two concepts are distinct: «This theorized correlation, however, should not be regarded as a lack of discriminant validity between the measures of the two concepts but, rather, as the effect of an overlap in criteria that evaluators use to make two fundamentally different forms of judgment».

of the discount rates, which are one of the main valuation parameters. However, the above effects on corporate value may become concrete if stakeholders are aware of the environmental commitment. In that sense, environmental disclosure contributes to the creation of the relational capital strictly linked to the reputation of the company (De Castro et al., 2006) and, therefore, with a sustainable competitive advantage. Some scholars (Cantele and Zardini, 2018) considered reputation as a first intermediate objective and view competitive advantage as a second intermediate goal of companies wanting to increase financial performance through the enhancement of environmental responsibility. In other words, the linkage between sustainability accomplishment and financial performances is mediated firstly by reputation, among other determinants, and secondly by the achievement of cost or revenue advantages.

Fombrun (1996, p. 11) defines reputational capital as «a form of intangible wealth that is closely related to what accountants call “goodwill” and marketers term “brand equity”». Reputation derives from the stakeholders’ perception of the company and it is shown by their reactions (Deephouse, 2000). There are several drivers of reputation, and social responsibility is considered not only one of them but also a prerequisite of reputation (Rettab et al., 2009; Cantele and Zardini, 2018). Since, as we previously reported, reputation assumes the strategic role of gaining a competitive advantage (De Castro et al., 2006), it represents one of the greatest opportunities for creating economic value. However, reputation is a fragile and scarce resource and it is strictly dependent on the relationship between the company and its external environment: without credibility there is no reputational capital (Worden, 2003). This normative dimension of reputation, which relies on credibility, enlightens its link with the relational capital and claims the role of greenwashing as a value creation strategy.

Reputational capital is also important in improving company competitiveness in the financial markets, boosting its capacity in order to have access to financing resources, which bears lower costs than competing companies have. As Mazzola et al. (2006) state, a good reputation allows the companies to be considered an «investment choice». In recent years, this impact of environmental responsibility on the companies’ capacity of attracting financing is demonstrated by the issuing of “green bonds”. As London Stock Exchange (2021, p. 2) states, green bonds are «any type of bond instrument where the proceeds will be exclusively applied to financing or refinancing in part or in full new and/or existing eligible “green” projects».

As Dye et al. (2021) argue the fact that, while nowadays environmental issues are variables able of influencing financing decisions, financial institutions divulgate information regarding their environmental impact. However, when disclosure is not clear, the arising information asymmetries can prejudice the decision process of potential investors (Rabaya and Saleh, 2021), and when investors are aware of a company's misleading disclosure, the market replies to greenwashing by producing negative abnormal returns (CAR). In fact, the market can detect if a company is an «environmental wrongdoer» because environmental performance scores can reveal the gap between what is said and what has been done, and, therefore, such companies are punished (Du, 2015).

Moreover, a good reputation helps to reduce market volatility and to foster the management of potential corporate or environmental crises (Mazzola et al., 2006). For the above reasons, reputational capital, among other things, should be considered an important value driver.

Reputational capital is related to some essential elements, such as relationships with stakeholders and communication, which influences people's perceptions. Relational capital is a component of intellectual capital (Stewart, 1997). The concept of relational capital, theoretically supported by the resource-based view (Barney, 1991; Wernerfelt, 1984), stems from the value assumed by the relations existing between the company and the actors of the environment. Communication is a fundamental asset of relational capital within a company, where it is used to manage and strengthen relationships with all stakeholders.

Value is a broad concept that goes beyond the boundaries of its financial dimension, involving also a social perspective (Dumay, 2016).

In November 2020, the International Valuation Standard Council (IVSC, p. 4) stated that «“Social Value” includes the social benefits that flow to asset users (social investment) and the wider financial and non-financial impacts including the wellbeing of individuals and communities, social capital and the environment, that flow to non-asset users». In the perspective of IVSC, value is a wide concept, which includes three dimensions: the monetary benefit to the asset owner, the social benefit to asset users and the social benefit to non-asset users. The first component may be understood as the shareholder financial value, the second and the third components are included in the concept of social value.

The social benefit to asset users are defined as «Social Investments», while the social benefit to non-asset users are defined as «the benefits derived

from the asset that flow to the non-asset users including the wellbeing of individuals and communities, social capital and the environment» (IVSC, 2020, p. 4).

The conceptual framework proposed by the IVSC can include the companies' environmental responsibility. Furthermore, green strategies may foster an increase in shareholder value, and also an improvement of the social value. Green strategies, in fact, may also generate benefits for asset users (e.g., health benefits deriving from the use of natural products) or may generate advantages for non-asset users (e.g., a reduction of pollution or creation of green urban spaces). In addition, IVSC increases the possibility of generating social value by introducing the concept of «social asset», i.e., an asset held «with the primary objective of providing social benefits to asset users and non-asset users» (p. 9), which can generate value not only for the owners, but also for other stakeholders.

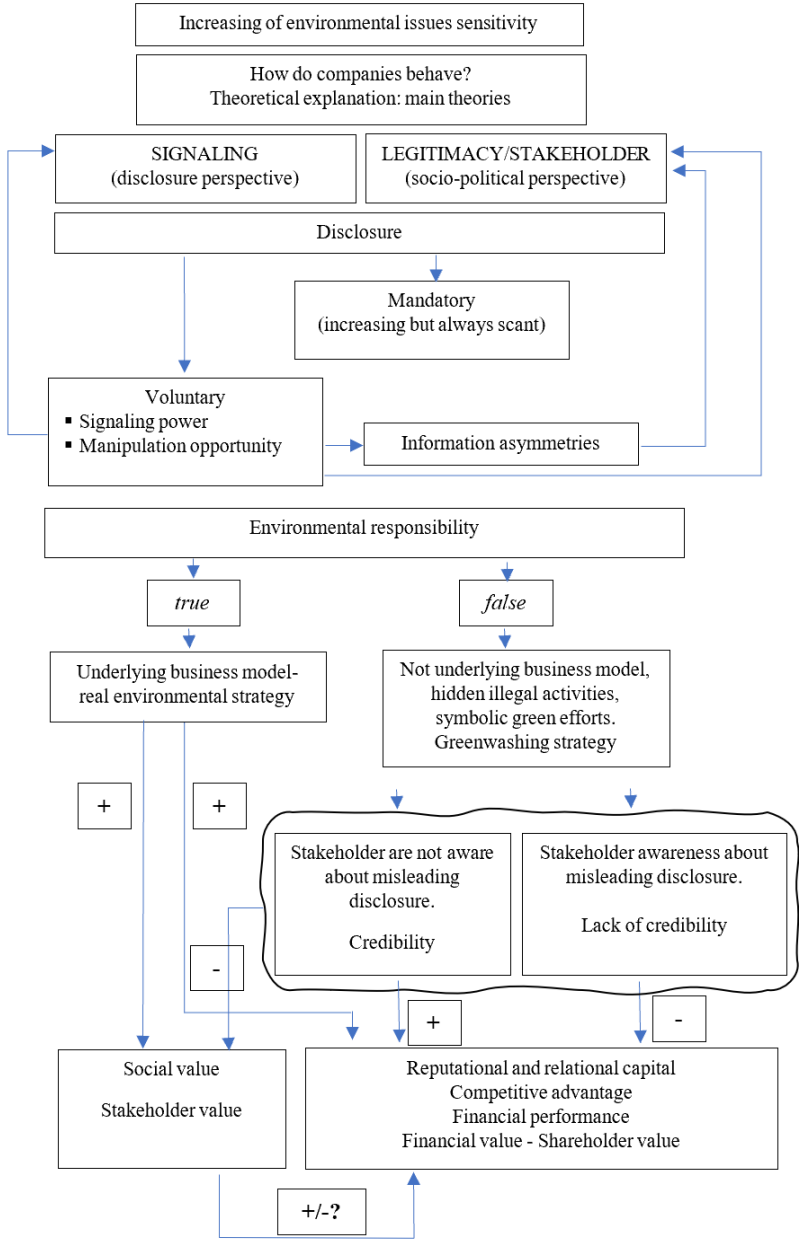
Following the above conceptualization, companies' greenization or environmental efforts, in general, should be considered as positive value drivers, including in the concept of value, shareholder value and social value. In fact, both of them may be improved throughout green strategies.

However, when the value creation process is not based on a redefinition of the business model but only on a misleading communication strategy, different considerations arise. We propose in Picture 2 the conceptual framework representing the background for future empirical testing of the research questions arising from the analysis of greenwashing in a business economic perspective.

Greenwashing aims to increase the shareholders' value by improving reputational capital without taking real actions. The lack of real actions underlying disclosed information, as well as the willingness to hide illegal behaviours that can generate the onset of environmental problems, although potentially capable of increasing the financial value, cannot be considered a positive value driver in a social capital perspective. When external stakeholders are not aware of the misleading intent of the company's disclosure, the company's credibility is not harmed. Despite this, the social capital cannot be improved - although it can be decreased or threatened - by implementing greenwashing strategies. In this situation, managers should not adopt a shortsighted strategy without evaluating the possible long-term negative impacts of social value destroying processes on the shareholder's financial and strategic value.

As we said above, since credibility is a fundamental prerequisite to achieve reputational results (Worden, 2003), the value creation process cannot be virtuous if stakeholders become aware of the lack of clarity on the disclosure of the environmental practices. This consideration is corroborated by other scholars (Zharfpeykan, 2021; Karaman et al. 2020), stating that reputational capital may generate a competitive advantage if companies provide honest disclosure regarding challenging issues. Therefore, greenwashing produces a value-destroying process both in the financial and in the social perspective. When a company is accused of being a greenwasher, investors and other stakeholders reinforce their opinion that the company is not environmentally compliant or that it is dishonest, thus formulating a negative evaluation (Du, 2015). Also, the strategy consisting in providing disclosure regarding only symbolic involvement in environmental responsibility will not be effective in achieving financial and social benefits, in the long term, because symbolic actions are not able to improve critical environmental situations, such as pollution, waste reduction and so on (Walker and Wan, 2012).

Figure 2 – Greenwashing conceptual framework



6. Conclusions

Our study aimed to investigate the issue of greenwashing from a theoretical point of view. Greenwashing is a multifaceted concept that engages the attention of scholars belonging to different disciplines. In fact, greenwashing may have an impact in several fields of study, such as, among others, the role of corporate disclosure, the possible impacts on financial performances, strategy and marketing, sociology, psychology, and law (i.e., legality, rulings, corruption and so on).

In this wide context, after providing an inclusive outlook of the different interpretations of the concept, this paper enlightens the main business economic theories that may be used or adapted to explain greenwashing behaviours, involving them in delineating the role of disclosure as a key-tool of greenwashing strategies and aiming to highlight the potential link between greenwashing and a broad concept of value, which also includes its social dimension.

Our main contribution consists in the elaboration of a conceptual framework (Picture 2) that mainly helps scholars aiming to investigate the concept of greenwashing and some of its possible implications in business economics studies. We consider our framework useful in defining a possible path of analysis for business scholars who aim to explore one of the possible issues involved in the greenwashing strategies or emerging from them.

Our study is also particularly contextualised in the current period due to the increase in attention from global and domestic institutions towards improving mandatory environmental disclosure and also the increase in attention from governments towards companies' environmental responsibility and greenization.

Our analysis also offers a suggestion for future research. Our conceptual framework enlightens the importance of studies devoted to analysing the impacts that a social value destruction - due to wrong greenwashing strategies - may have on the economic value. Moreover, it may be interesting to overcome one of the limits of our paper by empirically testing the theories we have recalled in order to motivate greenwashing strategies and their potential impacts on companies' value.

We identify a relevant practical implication of this study that consists in the need for stronger regulation and effective legal enforcement in order to improve mandatory environmental disclosure as well as a process for auditing that reporting. As Du (2015) states, in fact, self-regulation is not effective in order to reduce the gap between substantive and symbolic behaviours,

considering also the relevant impact that the environmental disclosure may have on the products of financial markets (e.g., green bonds).

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Green budgeting and the evaluation of mitigation policies in Italy¹

Paolo Di Caro (University of Catania; Department of Finance, Ministry of Economy and Finance, Italy)

Carlo Orecchia (University of Essex, United Kingdom)

Abstract: *Environmental goals play an increasingly important role in the European and Italian policy agenda. This is timely and relevant to recalibrate the recovery from the COVID-19 pandemic crisis towards a green transition. To achieve climate objectives, however, there is a need for internal support (from citizens and firms) and external cooperation (among countries/continents). In this contribution, we participate in the current discussion on the appropriateness of climate change policies in the EU and Italy in two main directions. First, we provide a review of the main contents of the Union-wide and national climate change strategies in order to shed new light on the most recent measures, such as the European Green Deal and the Fit for 55 package at the EU level and the Italian recovery and resilience plan. Second, we present and discuss some results related to the application of the Fit for 55 package in terms of economic effects. Our impact assessment, based on a CGE-environmental model, shows heterogeneous effects of EU climate change policies on production, competitiveness, consumption and carbon leakage. The main policy message deriving from our empirical application, therefore, is that the support of climate change policies, both at national and Union-wide level, necessarily implies the understanding of the overall consequences of climate change policies.*

Contents: 1. Introduction - 2. Green budgeting in the EU and Italy - 2.1. Environmental fiscal reforms in the EU - 2.2. The Italian green budgeting process - 3. An evaluation of mitigation policies in Italy - 3.1. Policy framework - 3.2 Methodology and data - 4. Empirical results - 4.1 Calibration and Scenarios - 4.2 Main findings - 5. Concluding remarks – References.

1. Introduction

There is now growing consensus among policymakers, practitioners and citizens about the need of considering climate change issues as priorities of intervention in current days, when the make-or-break decade has already

¹ The views expressed in the paper do not reflect those of the institutions of affiliation. The usual disclaimer applies.

started. The opportunities to prioritise green policy reforms that help promote environmental objectives and speed up structural change towards a low-carbon transition are particularly relevant at the time of the COVID-19 pandemic, when concerted policy actions are required to sustain social and economic recovery (OECD, 2021). At the time of writing this contribution, world leaders are meeting for the United Nations Climate Change Conference of the Parties (COP26) in Glasgow, where the goal of limiting global warming to 1.5°C until 2100 is expected to be formally defined in an international agreement². In July 2021, the G20 Environment Ministers met in Naples under the Italian presidency and committed to continue and increase efforts to address, among others, the interconnected challenges of climate change, biodiversity loss, and pollution in order to work for a healthy planet, improve human well-being, and achieve inclusive and sustainable production and consumption (G20, 2021). In this context, the European Union (EU) aims at leading the international climate change agenda with the recalibration of Union-wide policies for achieving environmental goals, the most important of which is becoming the first climate-neutral continent by 2050, by the adoption of important actions like the European Green Deal and the recent Fit for 55 package (EU Commission, 2021). Similarly, Italy is expected to achieve ambitious targets on climate change in the coming years: in the national Recovery and Resilience Plan (RRP), about €191.5 billion (37% of total) has been allocated to green transition (Presidenza del Consiglio dei Ministri, 2021)³.

Despite the surge of information and ideas regarding environmental issues, the economics of climate change, that is, the application of economic analysis tools in this area of policymaking, is complicated and requires attention, given the presence of very long-run forecasts and the difficulty to separate the signal from the noise (Weder di Mauro, 2021). Moreover, climate change policies like carbon pricing and/or emission trading schemes (ETS) rarely produce effects on individual countries/continents alone, but they have cross-border consequences and impact competitiveness among trading partners (Eunomia, 2016). Therefore, the understanding of the overall impact of environmentally-related policies is crucial to mobilising a broad policy consensus both within and across countries for sustaining particular reforms (World Bank, 2005; Furceri et al., 2021) and, most importantly, to sustaining

² For more information, see <https://ukcop26.org/it/gli-obiettivi-della-cop26/>.

³ For more information, see

<https://www.governo.it/sites/governo.it/files/PNRR.pdf>

the relevance of specific policy actions with grounded evidence (Parry et al., 2012). Knowing the effects of climate change policies more in depth is also important from a redistributive perspective, given the climate-inequality nexus that can be observed when looking at the consequences of environmental policies on individual/household social and economic conditions (Chancel and Piketty, 2015). Cruz and Rossi-Hansberg (2021), for instance, show that the geography of global warming is quite unequal across continents, with major welfare losses registered in countries located in Africa and Latin America.

The main objective of this contribution is twofold. First, we provide an updated review of the main policy actions in the area of climate change that have been undertaken in the EU and Italy in recent years, by adopting a public economics perspective. In detail, we organise recent, selected EU and Italian environmental reforms that can be considered part of the green budgeting process in line with recent evidence for selected EU Member States (MS) (Bova, 2021)⁴. We analyse EU and Italian regulations and laws on climate change in order to provide an economic rationale for such reforms, disentangle the specific policy tool under investigation, and try to understand the potential impact of the different European and national policies on public revenues⁵. This is timely and relevant, at least from our point of view, given the plethora of official documents on climate change policies that can be observed at the EU and Italian level (Weder di Mauro, 2021). Selecting the nature and effects of environmental fiscal reforms can be also useful to promote their implementation: for instance, the recent International Monetary Fund (IMF) proposal on setting an International Carbon Price Floor received support after the gains of such policy had been carefully evaluated in a comprehensive report (PwC and the World Economic Forum, 2021).

⁴ The Green Budgeting Process can be defined as «using the tools of budgetary policy-making to help achieve environmental goals. This includes evaluating environmental impact of budgetary or fiscal policies and assessing their coherence towards the delivery of national and international commitments. Green budgeting can also contribute to informed, evidence-based debate and discussion on sustainable growth» (OECD, 2017).

⁵ In this contribution, we do not explicitly look at green finance for climate-related investment, for which there is mixed evidence at present date, mostly because we are directly interested in analysing environmentally-related tax policies (CEPR, 2021). According to the IMF's Global Financial Stability Report, the world's \$50 trillion investment fund industry, especially funds with a sustainability focus, can play an important role financing the transition to a greener economy and helping to avoid some of the most perilous effects of climate change (IMF, 2021).

Specifically, according to this report, the cost of implementation of the proposal would be less than 1% of global GDP, and that cost could be offset by avoiding economic losses associated with global warming and potential productive uses of carbon revenues.

Second, we investigate the economic consequences of Greenhouse Gas (GHG) emission reduction policies (i.e. mitigation policies) for all EU countries in order to assess the possible impacts on the competitiveness of the Italian economic system and on the security of energy supply. In particular, we use the dynamic multi-regional (140 regions) and multi-sector (67 economic sectors) general economic equilibrium model (CGE) ERMES - Economic Recursive-dynamic Model for Environmental Sustainability - to evaluate the overall effects of mitigation policies. We briefly discuss the methodology and, then, we focus on the main empirical results obtained for Italy⁶. We contribute to the literature focusing on the empirical evaluations of the impacts of environmental policies on different economic indicators (Arlinghaus, 2016). Our preliminary results show that the overall change in Gross Domestic Product (GDP) generated by the continuation of mitigation policies is marginal and equal to a contraction of 0.35% in 2030. This figure is consistent with the findings of the assessment of the European Commission (2014), which used its own ERMES model. We also find that, when adopting a sector-specific breakdown, production contracted more in the most emissive sectors (e.g., production of electricity from fossil fuels and steel), while the production of electricity from renewable sources (e.g., solar, wind, hydroelectric), some agricultural sectors, light industry and real estate and insurance services increased.

The rest of the work is organised as follows. In Section 2, we discuss green budgeting in the EU and Italy, by reviewing the main laws and regulations on climate change from a public economics perspective. In Section 3, we present the methodology that we adopt for evaluating the effects of the GHG emission mitigation policies on the Italian economy. In Section 4, we discuss the main empirical findings of our work. The final section concludes with some policy relevant implications.

2. Green budgeting in the EU and Italy

2.1. Environmental fiscal reforms in the EU

Environmental fiscal reforms and the recalibration of European

⁶ It is outside the boundaries of the present contribution to provide a complete treatment of the methodology applied in the empirical analysis.

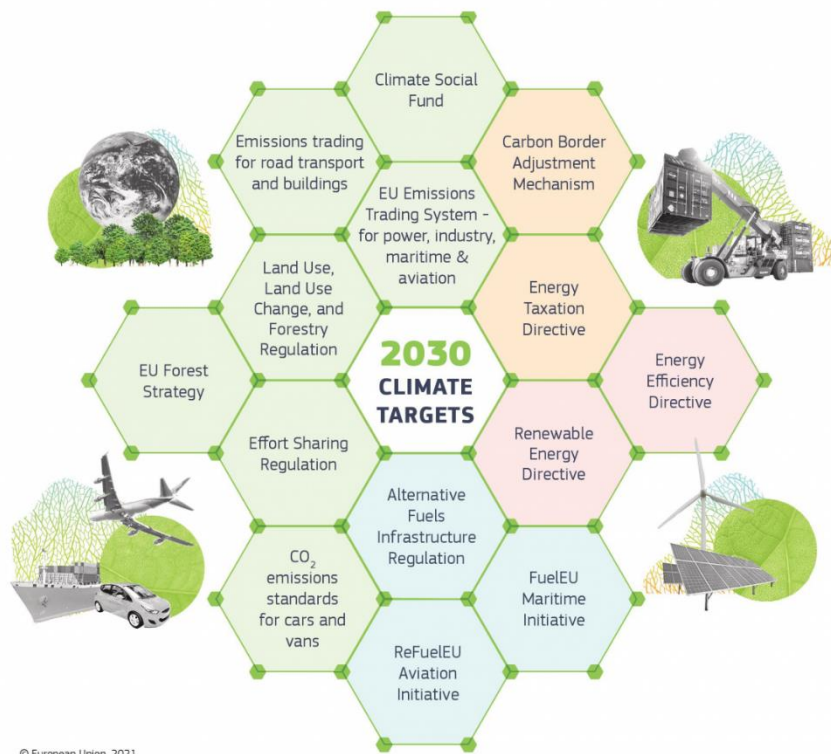
policies towards the ecological transition necessarily imply the usage of green budgeting tools, where public investment, consumption and taxation are redefined to achieve green priorities (EU Commission, 2019)⁷. In December 2019, the EU adopted the European Green Deal with the objective of transforming the EU into a modern, efficient, sustainable and competitive social and economic space: in 2050, the EU is expected to become the first climate neutral economic area⁸. In 2020, the EU Commission presented the proposal of regulation regarding the first European Climate Law to implement the 2050 climate neutrality target; in the same year, the EU Communication *Stepping up Europe's 2030 climate ambition - Investing in a climate-neutral future for the benefit of our people* provided impact assessments on the policy actions required to achieve the EU target of climate neutrality. In particular, the first operational objective has been identified as the reduction of net carbon emissions by 55% by the end of 2030: in July 2021, the Commission proposed the Fit for 55 package that defined the regulations to achieve the 2030 and 2050 targets⁹.

⁷ We follow the definition of environmental fiscal reform (EFR) provided by the World Bank (2005), where EFR refers to a range of taxation or pricing instruments that can raise revenue, while simultaneously furthering environmental goals.

⁸ For more information on the European Green Deal, see https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_it.

⁹ Specific targets set at the EU level can be listed as follows: no net emissions of GHG by 2050, economic growth decoupled from resource use, no person and no place left behind, 55% reduction of emissions from cars, 50% reduction of emissions from vans by 2030, zero emissions from new cars by 2035 (EU Commission, 2021).

Figure 1. The EU Fit for 55 package – synthesis



Source. The European Union (2021).

From the graph illustrated in Figure 1, it can be observed that the achievement of the 2030 climate target in the EU requires the modification/adoption of different budgetary policy tools, including amendments of existing directives and regulations, and the setup of new policy instruments like the Carbon Border Adjustment Mechanism (CBAM). In detail, the CBAM is finalised to impose a tax price on imports of a limited number of high-polluting goods (e.g., aluminium, iron, electricity) based on their carbon content in order to level price competitiveness between the EU MS, where environmental standards must be respected, and the non-EU countries. As for the cleaning of the energy system, the EU Commission proposes to increase the binding target of renewable sources in the EU’s energy mix to 40%. Moreover, the Commission proposes to increase energy

efficiency targets at EU level and make them binding, to achieve by 2030 an overall reduction of 36-39% for final and primary energy consumption. From the revenue side, the new Social Climate Fund will support EU citizens most affected or at risk of energy or mobility poverty, with an expected provision of EUR 72.2 billion euro over 7 years, which will fund the renovation of buildings, access to zero and low emission mobility, or even income support. This new Union-wide fund will be additional with respect to the financial resources for green investments allocated in the Next Generation EU Recovery Plan, which accounts for one third of the total EUR 1.8 trillion invested. Interestingly, the new proposals to achieve the 2030 climate target are expected to generate additional, sustainable, local and well-paid jobs: about 160,000 new green jobs are expected to be created in the building sector by 2030. In Table 1, we report selected policy actions that are part of the EU Fit for 55 Package (EU Commission, 2021).

Table 1. The EU Fit for 55 Package – selected policies

Regulation/Directive	Policy action	Expected objectives
Energy Tax Directive	Revisions	Reduction of primary energy of 39% with respect to 1990 levels
Regulation setting CO ₂ emissions	Amendment for cars and vans	Target of zero emissions for cars and vans by 2035
EU Emission Trading System for Aviation	Revisions	Introduction of a new mechanism of ETS for aviation
Renewable Energy Directive	Amendment to implement the ambition of the new 2030 climate target	Rise of renewable energy up to 40% by 2030
Effort Sharing Regulation	Proposal	Reduction of emissions in sectors not included in the ETS

Source. Our elaboration from the European Union (2021)

The European green budgeting toolkit includes different market and non-market-based policy instruments that can be used to achieve

environmental goals¹⁰. It has to be noted, however, that in this particular policy area the EU dimension needs to take into account the autonomy of each State Members given that fiscal policy is an area of intervention where State Members maintain large competencies. In particular, the revenue side of environmental fiscal reforms is made up of two main policies (OECD, 2017). Environmental taxes, that is, taxes where the tax base is a physical unit (or a proxy of it) that has a proven specific negative impact on the environment, such as energy taxes, transport taxes, pollution taxes and resource taxes (OECD, 2005). Environmentally related taxes that can be defined as payments levied by the government on tax-bases deemed to be of particular environmental relevance (OECD, 2004). The main differences between environmental taxes and environmental related taxes is that the latter do not necessarily imply a link between payments and external costs due to climate issues, while the former do.

Finally, yet importantly, the adoption of environmental fiscal reforms in the EU needs to consider all the building blocks of every green budgeting process (OECD, 2021):

- i. Green budget tagging: classifying budget measures according to their environmental and/or climate impact;
- ii. Environmental impact assessments: requiring environmental impact assessments to accompany new budget measures;
- iii. Ecosystem services: putting a price on environmental externalities (ex. taxes and emissions trading systems) to facilitate achievement of national environmental and climate goals;
- iv. Green perspective to spending review: incorporating consideration of the impact of measures on national environmental and climate goals alongside considerations of efficiency;
- v. Green perspective in performance setting: integrating performance objectives related to national environmental and climate goals.

Moreover, the OECD identifies eight principles that every green budgeting process has to respect: 1) comprehensive assessment of the budgetary impact on environmental commitments; 2) gathering and collecting evidence; 3) coherence of approaches and policies; 4) credibility of

¹⁰ «Market-based policies can be considered as actions that address the market failure of “environmental externalities” either by incorporating the external cost of production or consumption activities through taxes or charges on processes or products, or by creating property rights and facilitating the establishment of a proxy market for the use of environmental services» (OECD, 2007).

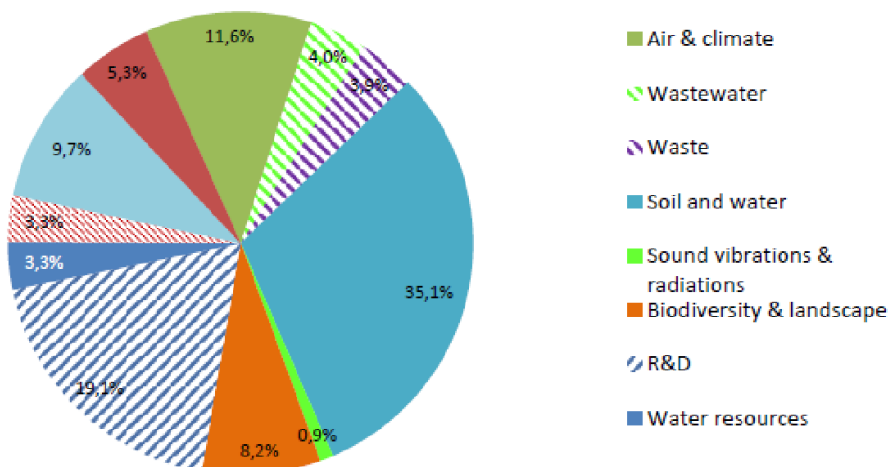
commitments; 5) transparency; 6) fully integrating the environmental perspective into existing budget processes; 7) ensuring fiscal sustainability, and; 8) a whole-of-government (or comprehensive) approach (OECD, 2021)

2.2. *The Italian green budgeting process*

Italy is one of the EU MS with more experience in green budgeting dating back to early 2000, since the Italian eco-budget is set by the Ministry of Economy and Finance; then, the Law 196/2009 provided a detailed methodology to guide the public administration in the assessment of the greenness of items, providing definitions, classifications and instructions on how to apply them to specific actions (Bova, 2021). In particular, the eco-budget (*ecobilancio*) is an annex to the budgetary plan with details regarding expenditure on environmental protection and resource management. Since 2010, pursuant to Law 196/2009, a similar document reporting the budgetary execution of the same expenditure items was presented (*ecorendiconto*). The eco-budget for the year 2021 provides a medium-term planning for the period 2018-23 and it is planned to allocate about EUR 6 billion in environmental spending. In Figure 2, the composition of Italy's eco-budget by environmental objectives is reported (MEF, 2021a). It can be observed that about half of the environmental allocation is devoted to air & climate, soil and water, and water resources objectives. Green budgeting also reports by activity of environmental protection (CEPA) and of resource management (CREMA)¹¹. The two classifications complement each other and allow for a comprehensive and detailed treatment of the environmental goals. To account for different contributions to an objective, the Italian authorities assign a weight in percentage to each action of a program in order to express the extent to which it contributes to the environment at large and, then, to each specific objective.

¹¹ The CEPA classification includes activities whose main purpose is prevention, reduction and elimination of pollution, while the CREMA classification includes activities whose main purpose is preserving and maintaining the scope of natural resources and their safeguarding against depletion.

Figure 2. Composition of Italy’s eco-budget 2021 by environmental objectives



Source. Our elaboration from MEF data (2021)

Since 2017, the *Allegato Indicatori Benessere Equo e Solidale* (BES) is published as an appendix of the annual document on economy and finance (DEF), where data on CO₂ emissions, and other gas emissions, per-capita are reported with the indication of the different targets to be achieved (*indicatore dominio Ambiente*). In 2020, CO₂ emissions decreased by about -0.5 tons with respect to the previous year following the COVID-19 pandemic restrictions, while expectations for the year 2021 register +0.3 tons per-capita following the economic recovery (MEF, 2021b). This indicator provides a description of the quality of environment and the impact of climate change policies *lato sensu* in the Italian economy. There are another two important documents in the Italian green budgeting process. According to the Law 28/2015, every year the Ministry of Environment publishes a *Catalogue of harmful and favorable subsidies to the environment* that report direct subsidies (spending laws) and indirect subsidies (tax expenditures) related to the environment; in 2018, spending laws were equal to about EUR 15.3 billion, where tax expenditures were equal to EUR 19.7 billion. Moreover, the annex on Climate of the Stability Program reports on progress in the implementation of commitments for the reduction of GHG emissions.

The Italian RRP provides relevant support to green transition, including energy efficiency renovations of buildings, both through tax incentives and direct investments for renovations of public buildings, schools, courts, hotels, museums, cinemas and theatres. The plan also includes measures to support offshore power production and smart electricity grids, and actions to reduce GHG emissions from transport, with investments in sustainable urban mobility as well as railway infrastructure to support a shift from more carbon-intensive modes of transport. In detail, the main resources/objectives are expected to be allocated as follows: i) target of 72% of renewable energy by 2030; ii) about EUR 23.88 billion to sustainable mobility, of which 30% is to be allocated to local mobility; iii) EUR 140 million to the green community for supporting small villages and provincial projects; iv) EUR 15 billion for resilient land and sea ecosystems. The RRP's Mission 2: *Ecological Transition* is made up of the following «components»: C1) Sustainable agriculture and circular economy; C2) Renewable energy and mobility; C3) Energy Efficiency and renewal of public and private buildings; C4) Protection of land and water resources. It has to be noted that a mix of tax credits (ex. Industry 4.0 package, etc.) and regulations are expected to effectively support the green transition.

In the next years, the Italian fiscal system has to manage and address three main challenges, as stated in the Country Specific Recommendations for Italy of the Council Recommendation of 2019 and 2020: i) the very low economic growth, well below both the Euro area and the EU average; ii) the high tax burden on labour and capital that discourages employment and investments; iii) the persistence of regional and individual disparities in economic and social conditions. In these circumstances, the design of a welfare-enhancing tax system oriented towards the promotion of a smart, sustainable and inclusive economic growth path is crucial. To achieve these objectives, the Italian Government has planned to reform and modernise the Italian tax system in two main directions. First, to shift the tax burden from labour taxes, which are detrimental for economic growth, to environmentally-related taxes (e.g., taxes on waste, energy consumption, pollution, vehicles, etc.), in a budget-neutral way. Environmentally-related tax policies pursue different goals such as counterbalancing the reduction of tax burden on labour by raising tax revenues, and promoting EU-wide energy targets including the decarbonisation of the industrial system. Second, to implement cohesion-friendly tax policies aimed at reducing regional disparities, which are relevant and persistent in Italy, and sustaining the localization of specific economic

activities in lagging regions. Recent examples of such tax policies include PIT/CIT tax credits for smart and sustainable investments in lagging Southern regions. Therefore, the careful evaluation of the overall effects of environmental fiscal reforms is crucial nowadays.

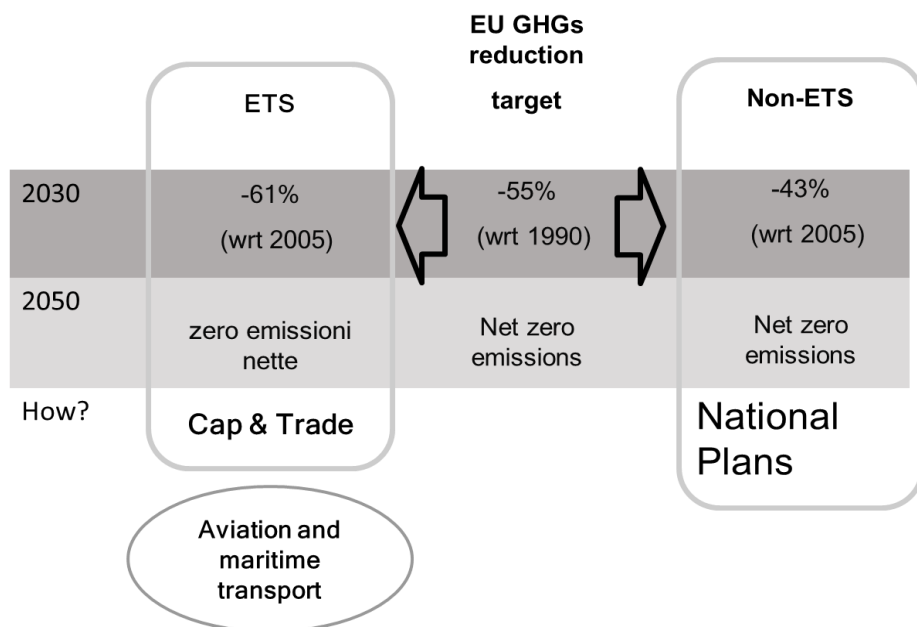
3. An evaluation of mitigation policies in Italy

3.1. Policy framework

In 2009, the EU adopted a set of policy actions - Directives, Regulations and Decisions - called the *20-20-20 Package*, which defined the following climate and energy objectives for the EU to be achieved by 2020: a) 20% reduction in CO₂ equivalent emissions compared to 1990; b) 20% of energy production from renewable sources in gross inland consumption; c) 20% reduction in final energy consumption. The three targets have been translated into national targets and assigned to each MS: the first two targets are binding at national level, while the third is binding only at EU level. In 2014, an agreement called *2030 Climate & Energy Framework* was adopted with the aim of improving the 20-20-20 Package over the period 2021-2030 as follows: a) 40% reduction in emissions compared to 1990; b) 27% of energy production from renewable sources on gross inland consumption; c) 27% improvement in energy intensity. In September 2020, the EU Commission proposed to raise the 2030 greenhouse gas emission reduction target, including emissions and removals, to at least 55% compared to 1990.

On July 14, 2021, the European Commission unveiled a *Fit for 55* package containing legislative proposals designed to enable the achievement of the intermediate targets of the European Green Deal, a 55% reduction in greenhouse gas emissions by 2030 compared to 1990 levels. The package is made up of 12 legislative instruments designed to achieve the objectives set by European climate legislation, and to give the necessary acceleration to the reduction of greenhouse gas emissions in the coming decades, and are applied in different sectors from the energy and climate sector to land use, from transport to taxation. In particular, the EU Emissions Trading System (ETS) remains at the core of the mitigation strategy and its revision aims at reducing the applicable cap on emissions from certain economic sectors each year. The Commission's proposal increases the annual rate of emission reductions, phases out free allowances for aviation and includes maritime transport in the ETS. In figure 3, we report the new EU strategies for mitigation policies.

Figure 3. The new EU strategy for mitigation policies



The transition to a net zero emissions economy requires a profound transformation of the national energy system and, in particular, the power generation sector. Accurate modelling of the power generation sector is crucial with a broad characterisation of technologies and their evolution in the medium and long term. In addition, the definition of segmented GHG emissions regulation at the EU level requires the development of appropriate tools to evaluate the effectiveness and the impact of the numerous policies adopted on the economic system (Antimiani et al., 2013; 2016).

3.2 Methodology and data

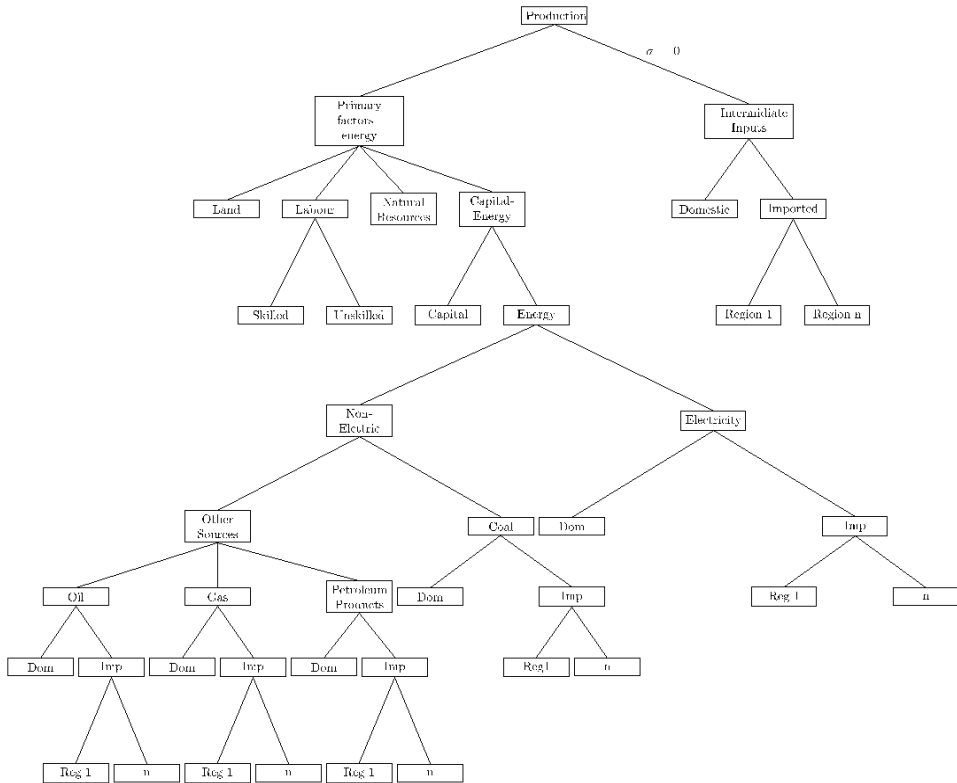
Given the complexity of climate change issues and the implications for the environment and the economy, in this work, we use a macro modelling approach based on the GTAP-E model (McDougall et al. 2007): a dynamic multi-regional (140 regions) and multi-sector (67 economic sectors) general economic equilibrium model (CGE) ERMES (Economic Recursive-dynamic Model for Environmental Sustainability). In the ERMES framework, the representative agents are firms, households and governments. Sectoral and

input markets worldwide are modelled in an open economy. The model is able to simulate a very broad set of policies: energy-climatic, fiscal (e.g., the reduction of the so-called tax wedge), and trade (e.g., the introduction of import tariffs and export subsidies), by assessing their impact both on the economy as a whole and on individual sectors. ERMES falls into the category of top-down models that also allow the indirect effects of economic policies to be analysed, i.e., how and to what extent a shock affecting certain sectors spreads to other sectors of the economic system.

In ERMES, 11 types of technology are modelled, including renewable energy sources used for electricity generation, which assume different degrees of substitutability between the different technologies. In addition, since the reduction targets cover all GHG emissions, i.e., CO₂ emissions from the combustion of fossil fuels and CH₄, N₂O and FGASS emissions from agriculture, industrial processes and the residential sector, all GHGs are modelled in ERMES. As a result, it is possible to provide a framework fully consistent with the climate policies defined at European and international level. Due to the crucial role of international trade, in ERMES, GHG emission reduction policies/mitigation policies are analysed for all European countries in order to assess the possible impacts on the competitiveness of the Italian economic system and on the security of energy supply.

Industries are modelled through a representative firm that minimises costs by taking input prices as data. In turn, production prices are given by average production costs. Figure 4 illustrates the nested production function (nest) of each representative enterprise within the model. Each nest in the tree combines single or composite inputs into a constant elasticity production function (Constant Elasticity of Substitution - CES or Constant Ratios of Elasticities of Substitution Homothetic - CRESH). The first nest combines the added value with the other intermediate inputs with a Leontief-type function so that the proportions remain fixed during the simulation. The added value, as we continue to the left of the tree, is obtained by combining the factors of production, i.e., land, labour (skilled and unskilled), natural resources and the capital and energy bundle with a CES type function. In turn, the capital & energy bundle is the result of the combination of physical capital and energy. Energy is distinguished between electricity and the rest of the energy produced for transport or heating.

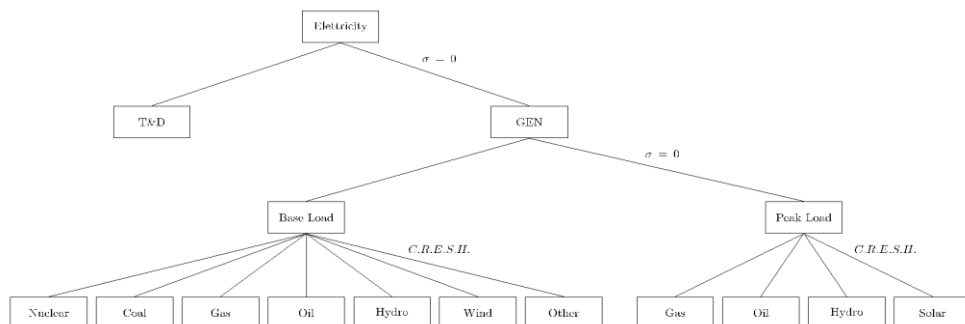
Figure 4 – ERMES model supply structure



In modelling the electricity generation part, Peters' approach (2016a) was followed. Electricity is the result of two components, «generation» which is the production of electricity itself and «transmission and distribution» which includes the distribution of electricity produced through the electricity grid. There is no substitution between these two components, i.e., the transmission and distribution costs are directly proportional to the amount of electricity generated. Finally, generation distinguishes between peak and base technology. A special feature of the electricity sector is that supply has to meet demand instantly. Electricity demand can fluctuate considerably throughout the day (during the daytime hours the demand for electricity is higher than at night; moreover, during the same daytime hours there are peaks in demand around midday), the week (during weekdays the demand is usually higher than on public holidays) and the seasons (the demand during the winter

months is lower than in summer). Some technologies can adapt more easily to these fluctuations by adjusting production (supply) instantaneously, while others require longer technical time. For example, coal-fired power plants cannot easily regulate electricity production in response to sudden changes in demand that can occur within the same day and are therefore classified as 'base' production, which means that it is not competitive in meeting peak demand or instantaneous changes in demand. On the other hand, power plants fuelled with natural gas and oil are able to quickly adjust electricity supply and are therefore competitive in meeting peak demand. In order to replicate these characteristics of electricity generation in the model, the technologies have been separated into two virtual base and peak nests. The core technologies are nuclear, coal, gas, oil, hydro, wind and other. Peak technologies are gas, oil, hydro and solar. In figure 4, we report the structure of the power sector as in the model.

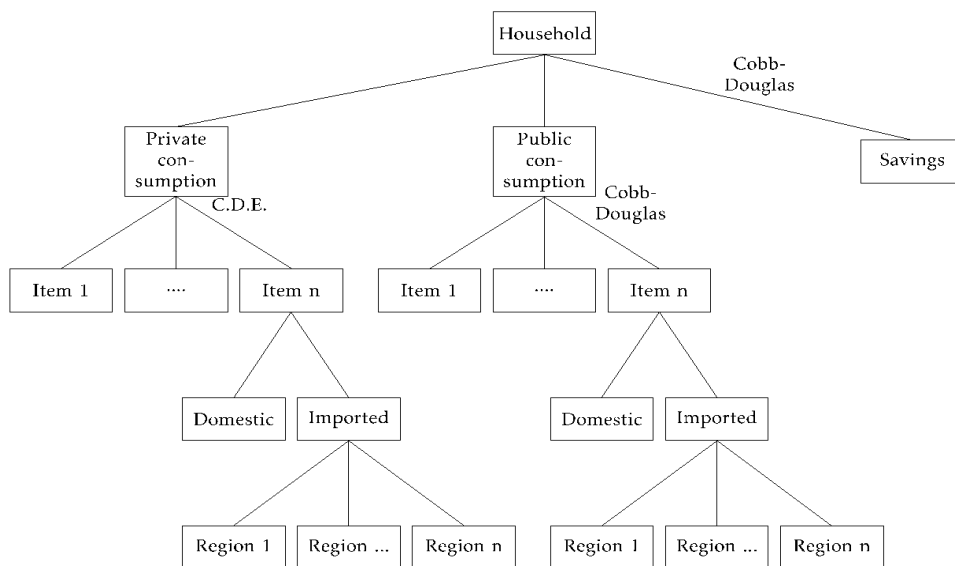
Figure 5 – ERMES model power sector structure



The demand system follows the GTAP standard structure. The economy is modelled according to a representative agent in each region whose Cobb-Douglas utility function allocates expenditure between private consumption (C), public expenditure (G) and savings (S). In turn, the constrained optimisation behaviour of the household in Region *r* for private consumption *C* is represented by a non-homothetic utility function CDE, «Constant Difference of Elasticities» (Hanoch, 1975). There is no explicit form of utility function for this functional form. Demand for private goods is derived from the differentiation of the expenditure function with respect to price and using Roy's identity. A Cobb-Douglas utility function is instead

used for public expenditure. In this case the shares of expenditure are constant on all types of goods. In Figure 6, we report the demand system as in the model.

Figure 6 – ERMES model demand system



Following Ianchovichina and McDougal (2012), the capital stock varies over time according to a recursive dynamic. In each simulation the capital stock in the following year is the same as in the last, minus the net of depreciation and increased by the investment as follows:

$$K_{r,t} = I_{r,t} + (1 - \delta)K_{r,t-1}$$

where $K_{r,t}$ is the capital in the Region r at the end of period t , $K_{r,t-1}$ is the capital in the previous period, δ is the depreciation rate and I_r is the investment in the Region r . In other words, in the future, the new capital stock may differ from the accumulated stock for two reasons: first, one can invest in new capital, then, depreciation can decrease the value of the existing capital stock. Depreciation is due to wear and tear, rupture or obsolescence of capital goods and is equal to δ a share of the existing capital stock.

As for GHG emissions, the model incorporates information on emissions of all greenhouse gases listed in the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and 14 fluorinated gases (PFC, HFC and SF₆). CO₂ emissions are generated by the combustion of fossil energy products by the various sectors of the economy, including large-scale emitters such as the energy and industry sectors and smaller ones such as the residential sector. Information on the rest of the non-CO₂ greenhouse gases is introduced into the model using the GTAP satellite database (Irfanoglu et al., 2015). In particular, the database distinguishes between three emission sources: those related to input consumption (e.g., fertiliser use in agriculture), those related to the use of primary factors (e.g., rice or capital land in livestock production) and those related to production (e.g., wastewater treatment). Emissions from the use of inputs evolve in proportion to the demand for these inputs. Emissions from the use of primary factors are linked to the evolution of their consumption. Finally, emissions from production are linked to production. For example, nitrous oxide emissions from the use of fertiliser use depend on demand from the agricultural sector (i.e., rice, other crops, vegetables and fruit) for the fertiliser producing sector (chemical sector). Methane emissions from rice cultivation are linked to land demand. A more detailed discussion of the approach taken can be found in Orecchia and Parrado (2013a, b).

The ERMES model is able to simulate a very wide set of policies. Emission mitigation policies in CGE models are mainly implemented through carbon taxes, explicit or implicit, aimed at internalising the external costs produced by polluting activities. The introduction of a price for CO₂ emissions allows us the simulation of two different policies: introduction of a carbon tax, and consequently the amount of emissions is defined endogenously by the model; introduction of an emissions cap, and consequently the carbon price is defined endogenously by the model. Carbon taxes are introduced in the model through specific *ad valorem* rates depending on the source of emissions: fossil fuels; primary factors, such as capital or land; some production sectors. Emissions tax rates are calculated, for each emission source, as the ratio between tax revenues and total tax base. Subsequently, the *ad valorem* tax is added to the supply price of the asset, thus determining the market price that households and firms face. The increased revenue generated by carbon taxation increases the government's income.

Cap on emissions.

The introduction of a cap \underline{E}_r on emissions is done through a special equation that imposes, for each sector j , a limit on the level of GHG emissions ($TGHG_r$) allowed for each Region r .

$$\underline{E}_r = \sum_{j=1}^J TGHG_{j,r}$$

The emission cap can be set exogenously by a policy maker at a certain level, leaving the model free to determine the carbon tax endogenously. ERMES also allows us the simulation of an emissions trading system (ETS) between two or more countries similar to the European system EU-ETS. To simulate the introduction of an ETS, a cap is set on the total amount of certain greenhouse gases that can be emitted by the sectors and countries covered by the system. Within this limit, the sectors receive (grandfathering) or buy (auctioning) emission allowances, which they can trade if necessary. The scarcity of allowances means that the available allowances have a price.

In the model, in particular, countries that trade «permits» form a single “block” and behave as if they were a single country with an overall emissions cap that determines a single price. Each sector will decide whether to respect the quota or issue more or less according to its own abatement costs (and therefore sell or buy «permits»), as the optimal conditions are always verified for each sector which maximises its profit and each agent its usefulness.

ERMES is built on the model prepared by the GTAP - Global Trade Analysis Project -¹² consortium and, in particular, it relies on the static model

¹² GTAP is promoted by an international consortium that includes, among others, institutions such as the World Bank, OECD, WTO, UNCTAD (United Nations Conference on Trade and Development), the European Union Commission and the International Trade Commission of the United States. Within the GTAP project both a database and a general economic equilibrium model have been developed, both hosted and periodically updated by the University of Purdue (United States of America). The model was initially used to assess trade agreements such as the Uruguay Round Agreement of the WTO but, more recently, also to assess international climate agreements within the IPCC (Intergovernmental Panel on Climate Change) and the UNFCCC. Moreover, most of the multi-regional economic-energy and environmental models derive from the GTAP model and use the GTAP Data Base: the OECD ENV-Linkages model, GEM-E3 of the EU Commission, and the EPPA of the Massachusetts Technical Institute.

GTAP-E (McDougall and Golub, 2007); it uses the data contained in the GTAP 9 Data Base (Aguilar et al., 2016). In our contribution, the GTAP's original structure has been extensively modified and updated in order to assess the impacts of greenhouse gas emission containment policies on the Italian economy. In particular:

- the capital stock is not fixed, but varies over time according to the so-called recursive dynamics;
- a recent version of the GTAP Data Base, i.e. 9.2b¹³, was used. It updates the input-output tables to those of 2010 among the most recent available for Italy and the EU;
- the energy system of the model has been extended in detail and considers the possibilities of substitution between 11 different types of sources, including renewable and clean energy (Peters, 2016a; 2016b);
- substitution between energy sources is based on CRESH - Constant Ratios of Elasticities of Substitution, Homothetic - (Hanoch, 1975) functional forms with different levels of substitution for each technology;
- CO₂ emissions from energy processes have been included; in addition to those of CH₄, N₂O and F-gases from agriculture, industrial processes and residential¹⁴;
- energy volumes per source and per final sector of use and import and export flows are included;
- the economic policy module allows three types of measures to be imposed simultaneously on different sectors: tax, setting an emissions cap and a cap & trade;
- gas types (CH₄, N₂O, and F-gases), economic sectors and countries covered by the economic policy measure can be selected;
- the economic sectors have been disaggregated considering those included in the ETS (blue cells in Table 2) and non-ETS (orange cells);
- Countries were aggregated giving their relevance as a trading partner considering the volume of bilateral trade with Italy.

¹³ <https://www.gtap.agecon.purdue.edu/databases/v9/default.asp>

¹⁴ A more detailed discussion of the approach taken to introduce taxation on non-CO₂ emissions can be found in Orecchia and Parrado (2013 a, b).

Table 2. ERMES – sector breakdown

Sectors	
Paddy rice	Ferrous metals
Wheat	Metals nec
Cereal grains nec	Metal products
Vegetables, fruit, nuts	Motor vehicles and parts
Oil seeds	Transport equipment nec
Sugar cane, sugar beet	Electronic equipment
Plant-based fibres	Machinery and equipment nec
Crops nec	Manufactures nec
Bovine cattle, sheep and goats, horses	Transmission and Distribution
Animal products nec	Nuclear power
Raw milk	Coal-fired power
Wool, silk-worm cocoons	Gas-fired power as base load
Forestry	Wind power
Fishing	Hydroelectric power as base load
Coal	Oil-fired power as base load
Oil	Other power: waste, biofuels, biomass, geothermal, tidal
Gas	Gas-fired as peak load
Minerals nec	Hydroelectric as peak load
Bovine meat products	Oil-fired as peak load
Meat products nec	Solar power: photovoltaic and thermal
Vegetable oils and fats	Water
Dairy products	Construction
Processed rice	Trade
Sugar	Transport nec
Food products nec	Water transport
Beverages and tobacco products	Air transport
Textiles	Communication
Wearing apparel	Financial services nec
Leather products	Insurance
Wood products	Business services nec

Paper products, publishing	Recreational and other services
Petroleum, coal products	Public Administration, Defence, Education, Health
Chemical, rubber, plastic products	Dwellings
Non-metallic minerals: cement, plaster, lime, gravel	

4. Empirical results

4.1 Calibration and Scenarios

Static calibration refers to the process by which the initial year or base year of the model is reconstructed. The GTAP Data Base used for the preparation of the ERMES model is version 9.2b which updates the Input-Output matrix of 2010 for Italy. The reference year of the database is 2011 and has been updated to 2015 by calibrating GDP, population, sectoral added value, sectoral emissions, energy volumes and fossil fuel prices to the observed data. In the dynamic calibration, a «counterfactual» balance is estimated, imposing a disturbance of exogenous factors to the model (e.g., population, GDP, stock of productive resources), building a future benchmark referring to the year 2030. Projections are taken from the EU Reference Scenario 2030 published in July 2021¹⁵. Since, at this stage, shocks related to mitigation policy are not included, the benchmark is a hypothetical picture of the world economic structure in 2030, in the absence of disruptive effects of any kind, and is called the baseline scenario (Business As Usual - BAU).

The following scenarios have been simulated with the ERMES model:

1. The “reference” scenario without additional mitigation policies: reduction of 40% of GHGs with respect to 1990 under cap and trade mechanism (ETS);
2. The “MIX” in which it is assumed that 55% emissions reduction with respect to 1990 in the ETS in line with the Fit for 55 package;
3. The “MIX-AUC” in which, in addition to the ETS, the reduction in emissions in non-ETS sectors is implemented with full auctioning in trade exposed sectors from 2015 onwards.

In this contribution, we do not explicitly analyse the effects of a full CBAM proposal implementation, which are investigated in a companion

¹⁵ <https://op.europa.eu/en/publication-detail/-/publication/96c2ca82-e85e-11eb-93a8-01aa75ed71a1>

work (Castaldi and Orecchia, 2021).

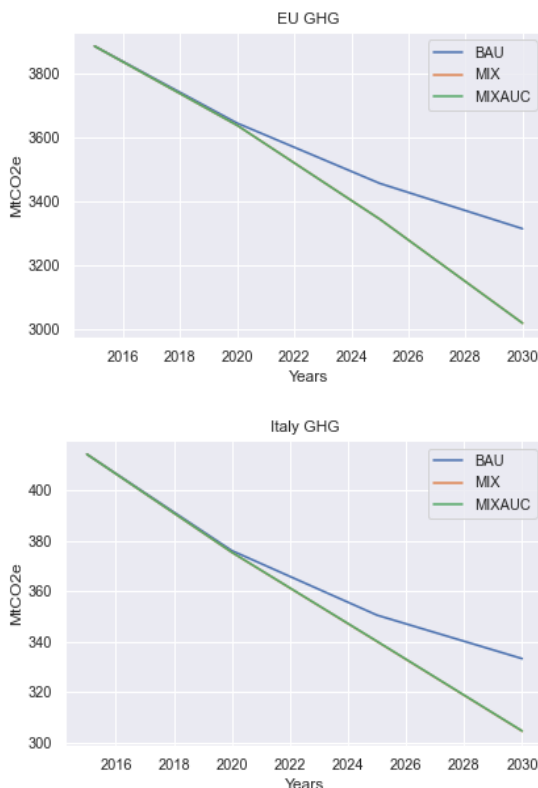
4.2 Main findings

In this section, we report the main results obtained by applying the ERMES model to simulate the effects of the two different scenarios (MIX and MIX-AUC) in terms of carbon leakage, that is, a rise in carbon prices following the climate change policies. This is endogenously calculated from the application of the model as a result of ETS exchanges among the MS. From 2020 to 2030, in all the scenarios, the emissions quota determines a reduction of 55% with respect to the levels of 2005. The first result is that, following the ETS, the carbon price rises to about 54.2 and 53.5 in the MIX and MIX-auctioning scenarios, respectively from a value of EUR 34.5 per ton/CO₂e of the reference scenario (i.e., Baseline). In Table 3, we report simulation results regarding the macroeconomic indicators. It is worth observing that, for instance, the additional reduction of emissions in MIX and MIX-auctioning scenarios of -9% leads to a small GDP loss of around -0.2% and to a leakage rate, which is calculated as the ratio between the increase of CO₂ emissions in countries that do not adopt mitigation policies and the reduction of CO₂ emissions in countries that adopt mitigation policies, equal to 0.71 and 0.75, respectively. Emissions in the Rest of the World increase by 0.38 and 0.40 in the two scenarios respectively. This finding suggests that, all things being equal, the carbon leakage effects of policies undertaken in the EU only can have relevant implications on competitiveness of EU MS.

Table 3. Simulation of environmental impact of the reforms

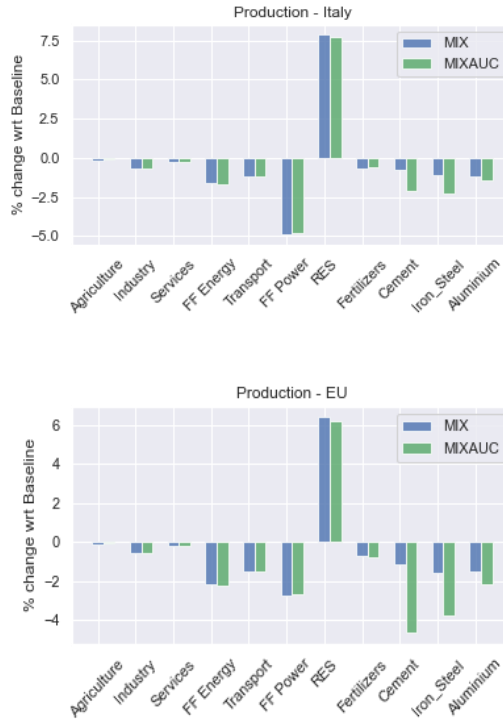
<i>Scenario</i>	GDP (% var. wrt 2030 baseline)		Emissions reductions (% var. wrt 2030 baseline)		Carbon Price (EUR per ton/CO ₂ e)	Emissions in the rest of the World (% var. wrt 2030 baseline)	Leakage rate
	TA	U	TA	U	EU	World	World
MIX	0.24	0.22	9.0	8.6	54.2	0.38	0.71
MIX -Auctioning	0.23	0.21	9.0	8.6	53.5	0.40	0.75

Figure 7. GHGs Emissions reductions in different scenarios (MtCO_{2e})



In addition, in the MIX-auctioning scenario, both imports and exports from the rest of world decrease with a net negative effect on the balance of trade, worsening the external commercial position of EU MS. This situation is counterbalanced if a full CBAM option is taken into account (Castaldi and Orecchia, 2021) at least for the sectors and products covered by the introduction of the CBAM mechanism. Finally, yet importantly, two more results are worth commenting upon. First, the loss of competitiveness of the Italian and EU economy is present when looking at the MIX and MIX-AUC scenarios, particularly in the energy-intensive sectors. Second, from a sector-specific perspective, sectors like cement, steel and iron register more pronounced welfare losses in Italy and the EU after simulating the effects of climate change policies.

Figure 8. Output by sector (% changes wrt Baseline)



In the rest of the economy, moreover, the impact of the mitigation policies simulated on production is no different under the two alternative scenarios. In the area of renewable energy, sectors like solar, wind-power and hydroelectric, register positive production changes both in the EU (about 6%) and Italy (about 7%). Lastly, from the demand side, the consumption prices show an increase in the sectors of heating, fuels, and electricity. Indeed, from our simulations, it shows that fuel prices increase by about 3% in Italy and the EU, while heating costs rise by about 9% in Italy and the EU. For a more detailed discussion, see (Castaldi and Orecchia, 2021).

5. Concluding remarks

Environmental objectives are at the forefront of the public debate and they are mounting in importance in the policy agendas of governments worldwide. One of the main policy tools is represented by green budgeting

and, in particular, green-tax reforms that can be implemented by a series of complementary measures like introducing new taxes or restructuring existing taxes (OECD, 2017). The recalibration of national, European and international policies for supporting a green transition is particularly timely given the need of focusing policy actions at the time of the COVID-19 pandemic crisis (IMF, 2021). This means that there is a need for aligning stimulus programs such as the European and national recovery and resilience plans with decarbonisation objectives. To achieve climate goals, however, there is a need for internal support (from citizens and firms) and external cooperation (among countries/continents) (Nordhaus, 2005). In other words, the principle of solidarity must inspire all climate change reforms (EU Commission, 2021).

In this work, we have contributed to the current discussion on the appropriateness of climate change policies in the EU and Italy in two main directions. First, we have provided a review of the main contents of the Union-wide and national climate change strategies in order to shed new light on recent measures, such as the European Green Deal and the Fit for 55 package at the EU level and the Italian recovery and resilience plan. In detail, we have selected the main laws and regulations regarding climate change and we have commented on the potential effects of such measures on public revenues. We have also clarified some concepts related to the green budgeting approach with application to Italy. Second, we have presented and discussed some results related to the application of the Fit for 55 package in terms of economic effects. Our impact assessment, based on a CGE-environmental model, shows heterogeneous effects of EU climate change policies on production, competitiveness, consumption and carbon leakage. The main policy message deriving from our empirical application, therefore, is that the support of climate change policies, both at national and Union-wide level, necessarily implies the understanding of the overall consequences of climate change policies.

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On the nature of the current tax on waste

Antonio Guidara (University of Catania)

Abstract: *The nature of the current waste tax (TARI) is analyzed, starting from two recent arrests by Court of Cassation, which are critically reviewed. This is done, also in a diachronic key (with reference to the precedents of the TARI), to demonstrate how de iure condito the spaces for a punctual charge of private law (a TARIP, that is private law asset income) are few or nil, while it is possible a punctual charge (always TARIP) that is a tax. In coherence, the work identifies the referring principles and rules (national and European), and some important implications (regarding the duty of VAT and the identification of the judge to whom the disputes relating to TARI are devolved).*

Contents: 1. Preamble – 1.1. Environmental taxes and the taxation on waste – 1.2. The troubled introduction of the TARI – 2. The taxable base of the tax on waste – 2.1 The taxable event and liable subjects – 2.2 Diachronic analysis of the taxable base's regulation – 2.3. The discontinuities introduced by TARES and TARI – 3. The fiscal nature of the current tax on waste – 3.1. The fiscal characteristics of TARI – 3.2. The interpretative provision of 2010 and the position of the Court of Cassation on TIA 2 – 4. Perplexities about TARIP – 4.1 The recent sentence of the Court of Cassation in 2021 – 4.2. Critical analysis – 4.3. Preferable conclusions on TARIP – 5. Reference principles – 5.1. Possible differences in the regulations – 5.2. The principles of the Italian Constitution – 5.3 References to EU law.

1. Preamble

1.1. Environmental taxes and taxation on waste – The increasing attention for the protection of the environment, either for the constitutional and legislative recognition (already in art. 9 of the Constitution soon after the birth of our Republic, but more so and recently with the changes made to art. 9 and 41 of the same¹), also and especially supranational recognition (for example

¹ Constitutional law of 11 February 2022, No. 1, intervenes on two fronts. On the one hand, it added a final paragraph to art. 9, which now states: «1. The Republic promotes the development of culture and scientific and technical research. 2. It safeguards the natural landscape and the historical and artistic heritage of the Nation. 3. It protects the environment, biodiversity and ecosystems, also in the interest of future generations. The law of the State governs the methods and forms of animal protection». On the other hand, it modified art. 41, which now states: «1. Private economic enterprise is free. 2. It may not be carried out against

title XX of the TFEU dedicated to the environment, in which arises the principle that «the polluter should pay», referred to in art. 191 paragraph 2, TFEU², or the rules for the protection and improvement of the environmental quality and compliance to sustainable development, referred to in art. 3 TEU³ and art. 37 EUCFR⁴)⁵, or for the spread of increasing sensitivity and aware-

the common good or in such a manner that could damage health, environment, safety, liberty and human dignity. 3. The law shall provide for appropriate programmes and controls so that public and private-sector economic activity may be oriented and co-ordinated for social purposes».

On the recent constitutional changes, for example, refer to: M. CECCHETTI, *La revisione degli articoli 9 e 41 della Costituzione e il valore costituzionale dell'ambiente: tra rischi scongiurati, qualche virtuosità (anche) innovativa e molte lacune*, in *Forum di Quaderni Costituzionali*, 3, 2021, p. 286 ff.; G. DEMURO, *I diritti della Natura*, in *Federalismi.it*, 23 February 2022. More generally, on the constitutional role of the environment, for example, refer to: B. CARAVITA, A. MORRONE, *Ambiente e Costituzione* in B. CARAVITA, L. CASSETTI, A. MORRONE (eds), *Diritto dell'ambiente*, Bologna, 2016, p. 17 ff.; S. GRASSI, *Ambiente e Costituzione*, in *Rivista Quadrimestrale di Diritto dell'Ambiente*, 3, 2017, p. 4 ff.

On environmental tax measures in our constitutional Charter, for example, refer to: R. ALFANO, *Tributi ambientali. Profili interni ed europei*, Giappichelli, Torino 2012, p. 51 ff.; S. DORIGO, *Fiscalità e ambiente nella prospettiva costituzionale italiana*, in S. DORIGO, P. MASTELLONE, *La fiscalità per l'ambiente*, Aracne, Roma 2013, p. 123 ff.

² It is established here that: «Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that “the polluter should pay”».

³ Particularly, it is noted that per art. 3 TEU paragraph 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».

⁴ Art. 37, under the heading «environmental protection» provides that «A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development».

⁵ On the gradual international and European claim to requiring environmental protection and the consequent appreciation of taxes as tools to achieve this, for example refer to, also for details: R. ALFANO, *Tributi ambientali. Profili interni ed europei*, cit., pp.7 ff., 127 ff.; P. MASTELLONE, *I tributi ambientali analisi economico-giuridica* in S. DORIGO, P. MASTELLONE, *La fiscalità per l'ambiente*, cit., p. 23 ff.; S. CANNIZZARO, *La matrice solidaristica dei principi europei e internazionali in materia ambientale e il ruolo della fiscalità nel sistema interno*, in *Rivista di Diritto Tributario*, 2017, IV, p. 95 ff.

ness due to the realisation of the mainly negative consequences of the exploitation of the environment (take, for instance, the *Global strike for future* occurred on 15 March 2019, which saw the participation of around ninety Countries and over 1325 cities⁶), also and inevitably concerns tax law.

It is no longer in doubt that: the consumption of scarce environmental goods creates diseconomies that must not be charged on the community, which should rather be dealt with by those who produce them; as well as taxes, aptly named environmental, are one of the successfully implemented tools to contain these diseconomies (and any social injustice that stems from them) and in some way internalise the environmental costs. However, the juridical debate on environmental tax requires some important clarifications that legislative intervention seems to be inadequately unaware of. The very notion of the environmental tax isn't easily interpreted: its conception is European, however there are precedents, even significant, in the rights of the States; the boundaries are uncertain due to flawed legislation within Europe, but more so at State level; there tends to be made a questionably useful distinction between environmental levy and levies with environmental function; they are not suitably framed in terms of their relationship with crucial constitutional principles, such as that of the ability to pay, especially when examining tax relief.

The purpose of this work is not to analyse environmental taxes⁷, rather the focus will be on one of these, the current «tax on waste», known as «TARI», regulated by paragraphs 641-668 of art.1 of Law No. 147 of 27 December 2013⁸: it is a municipal charge that applies to «the occupation or possession of premises and open land whatever their use, prone to producing urban waste»⁹ and is due «by anyone who occupies or possesses premises and

⁶ The data have been sourced from ANSA (National Associated Press Agency) and are available on their respective website, www.ansa.it (where various dedicated articles are found, including, for the source of the data, https://www.ansa.it/canale_ambiente/notizie/clima/2019/03/09/il-15-marzo-sciopero-globale-per-clima-studenti-in-piazza_6caf-bfa3-5ea8-47d5-b205-5d9dd6d13c30.html).

⁷ For their analysis see the contributions referred in notes 1 and 5 and notes 69 and 73.

⁸ It is the 2014 stability law, under the heading «Provisions for the annual and multi-year State budget (2014 stability law)».

⁹ See paragraph 641, which adds that «open land attached or ancillary to private dwellings, non-operative, and communal areas according to article 1117 of the civil code that are not occupied or possessed by a single individual are excluded from owing TARI».

open land whatever their use, prone to producing urban waste»¹⁰.

The decision to focus on the TARI results undoubtedly from the fact that: tax on waste is a levy with deep roots (it has been in use for around a century and precedes European regulations, to which it has been harmonised in time) and is widespread (in fact it is probably the most utilised environmental levy, when observing the parties directly affected); many reforms have interested it in the recent decades, which have modified its characteristics, regulations and also designations (most recently, the legislator removed the (controversial) attribution of the TARI to the unique municipal charge, known as IUC, according to art.1, paragraph 639, of Law No. 147/2013¹¹).

1.2. The troubled introduction of the TARI – A great number of regulatory interventions of various sorts and levels, not only concerning taxes, have occurred in succession. They were European interventions (including for example the directive of the Council No. 851/2018/UE and 852/2018/UE of 30 May 2018¹²), although most of all were national (in particular laws and

¹⁰ See paragraph 642, which adds that «in case of multiple occupiers or possessors, they are held to the fulfilment in full of the single charge».

¹¹ The reference is to art.1: paragraph 738, of Law 27 December 2019, No. 160, according to which «effective as of the year 2020, the unique municipal tax under article 1, paragraph 639, of Law 27 December 2013, No. 147, is abolished, with the exception of provisions concerning the tax on waste (TARI); the municipal property tax (IMU) is regulated by the provisions under paragraphs 739 to 783»; paragraph 780, of the same law, according to which «effective as of 1 January 2020 the following are repealed: ... paragraph 639 and the following paragraphs of article 1 of Law 27 December 2013, No. 147, concerning the institution and regulation of the unique municipal tax (IUC), limited to provisions on the regulation of IMU and TASI. Provisions regulating the TARI remain withstanding...».

The same paragraph 639 states: «The unique municipal tax (IUC) is introduced. It is based on two tax requirements, one constituted by the possession of property and linked to their nature and value, the other to the provision and utilisation of municipal services. The ICU is made up of the municipal property tax (IMU), of capital nature, owed by possessors of properties, excluding primary residences, and of a component due for services, divided between the tax on inseparable services (TASI), due by both the possessor and occupier of the property, excluding those intended as primary residence of the possessor as well as the occupier and their family, with the exception of those properties registered as luxury properties on the records, categories A/1, A/8 and A/9, and the tax on waste (TARI), intended to finance the waste collection and disposal service costs, due by the occupier».

¹² The first amended the directive of the European Parliament and of the Council No. 98/2008/CE of 19 November 2008 on waste; the second amended the directive of the European Parliament and of the Council No. 94/62/CE of 24 December 2014 on packaging and packaging waste.

regulations, which will be dealt with *infra*¹³) and local (numerous regulations enacted – and that should have been enacted – in compliance with art. 52, paragraph 5, Legislative Decree No. 446 of 15 December 1997). And in many cases there have been interventions expressive of questionable choices, done in haste or poorly thought out, difficult to enact or cause of (even gross) errors in the point of application, ephemeral or in any case destined to be of short duration. We recall the substitution of the detailed and sufficiently consolidated regulations of the TARSU (tax on solid urban waste disposal), referred to in articles 58-81 of Legislative Decree 15 November 1993, No. 507, with the limited and lacking Environmental Hygiene Charge, known as TIA or TIA 1 introduced by art. 49 of Legislative Decree 5 February 1997, No. 22.

And of course such interventions led to the creation and fuelling of a remarkable litigations, for the number of disputes, but also for the type, entity and duration of the same, some of which were inconclusive or unsatisfactory, which in turn: involved almost all the existing judges (with repeated interventions of the Constitutional Court and the United Sections of the Court of Cassation¹⁴); strongly compromised the action of the municipalities and even their financial stability, especially in the presence of deliberations not made by the competent bodies (on the assumption of the non-fiscal nature, originally alleged, of the tax in question); engulfed or risked engulfing the action of some judges (mainly of the tax commissions, most involved in the cases) due to the, often trifling, disputes; also concerned bodies other than the municipalities on the active side, among which even the Agenzia delle entrate [TN: Revenue Agency] (on the commitment of VAT on the levy in question, when it was claimed to be of private nature, and the consequent refunds, when its fiscal nature had been established).

In 2013, precisely with the introduction of the TARI, the regulations seem to have reached a relative stability and probably allow a flatter consideration remark, even if the attention of scholars, though heightened over time, continues to be scarce.¹⁵ The focus of this article is on the nature of the TARI.

¹³ See art.1, paragraphs 738 and 780, of Law 27 December 2019, No. 160.

¹⁴ We recall that according to rulings No. 238 of 24 July 2009 of the Constitutional Court (with comment by M. LOVISETTI, *Per la Corte costituzionale la TIA è un tributo. Ma le SS.UU. della Corte di cassazione la pensano diversamente*, in *Rivista di Giurisprudenza Tributaria*, 2009, p. 861 ff.) and No. 8313 of 8 April 2010 of the United Sections of the Court of Cassation (in *Corriere Tributario*, 2010, p. 1587 ff.).

¹⁵ Among the more mature reflections we note recently G. SELICATO, A. SORRISO CHIECO, *La Tassa sui rifiuti*, in A. URICCHIO, P. GALEONE, M. AULENTA, A. FERRI (eds), *I*

And it is so because, if in the first place its levying nature is not or should not be in question, the *litterae legis* have fuelled many doubts in this regard (even reaching to an interpretive law in the opposite direction), which the jurisprudence has not always dispelled. The starting point, in fact, is given by a recent ruling by the United Sections of the Court of Cassation, No. 11290 of 29 April 2021, which: on the one hand shares a previous decision of the United Sections of the same court, ruling No. 8631 of 7 May 2020¹⁶, which, through the application of a questionable rule of authentic interpretation, affirms the private nature of the TIA 2; on the other hand, it identifies within the TARI, whose levying nature is not brought into question (even if it is an evolution of the TIA 2), a private component, as long as the municipality realises a system of accurate measurement of waste and opts for a corresponding fee (pursuant to art.1, paragraph 668, of Law 147/2013). However, there are no real reasons beyond a substantial enhancement of the *nomina iuris*; and similarly, it can be said for the aforementioned precedent of 2020 (in relation to which at least there was at least the impact of an interpretive rule)¹⁷.

2. The taxable base of the tax on waste

2.1. The taxable event and liable subjects

Tracing back the evolution of the waste taxation regulation¹⁸, it is noted that there is continuity in the regulation of the tax event and the liable subjects.

Paragraph 641 of art.1 of 147/2013 states that «the taxable event for the TARI is the possession or occupation of premises and open land, for any reason, likely to produce urban waste»; according to art.1, paragraph 642, liable subjects are those who «possess or occupy any premises and open land whatever their use, likely to produce urban waste».

tributi comunali dentro e oltre la crisi, Cacucci, Bari 2021, p. 173 ff. For a systematic classification, in the same volume see A. URICCHIO, *La riforma dei tributi comunali*, p. 3 ff.

¹⁶ Also see the identical Cassation No. 8632 of 7 May 2020.

¹⁷ In this regard, please refer to what will be better said in the following paragraphs 3 and 4.

¹⁸ To that end, refer for example to: M. LOVISETTI, *La TARSU: tassa e tariffa per la gestione dei rifiuti urbani*, Sistemi editoriali, Napoli 2010; G. DEBENEDETTO, L. LOVECCHIO, *Dalla Tarsu alla TARES. Guida all'applicazione della nuova Tassa rifiuti e servizi dopo il D.L. 8 Aprile 2013, n. 35*, Maggioli, Santarcangelo di Romagna 2013; G. SELICATO, A. SORRISO CHIECO, *La Tassa sui rifiuti*, cit., p. 174 ff. May it be allowed to refer also to the broader work of the author A. GUIDARA, *Dalla TARSU alla TARIP tra diritto tributario e suggestioni privatistiche*, in *Ambientediritto*, 2022.

The corresponding regulation of the municipal tax on waste and services, known as TARES, is proposed under better formulation, ex-art.14 of Legislative Decree 6 December 2011, No. 201 (as converted by law 22 December 2011, No. 214) and in substance similar considerations can be made for the precedents of the TARES, which were mentioned earlier.

2.2. Diachronic analysis of the taxable base's regulation

The matter complicates when we look to the regulations for the taxable base. To this end it is necessary to look at the different rules dedicated to the tax base in their succession and proceed to a more functional diachronic exposition (from TARSU to TARI): of course, we proceed in broad terms.

Thus, TARSU refers to ordinary average quantity and quality of waste liable to be generated in the premises and areas taxed according to the use to which they are intended, as well as the cost of waste disposal; with the possibility – added at a later time – for municipalities, not of large size, to choose quantity and quality of waste effectively produced¹⁹. It is also expected that local authorities adopt rates for homogeneous categories and subcategories of waste and following the parameters of the law²⁰. As are reductions provided for, decided expressly by the municipalities, that better adapt the tax to the underlying taxable capacity, such as those that distinguish homes with a single occupant or of which a seasonal or limited and discontinuous use is made²¹.

With the introduction of the TIA 1, the need for full coverage of service costs is affirmed, as required by European standards and by the principle

¹⁹ Art. 65, paragraph 1, Legislative Decree 507/1993, as replaced by art. 3, paragraph 68, lett. E), of 28 December 1995, No. 549, states: «the tax may be proportional in that it is calculated on the basis of the ordinary average quantity and quality, per unit of taxable surface area, of solid urban waste, and waste regarded as such, liable to be generated in the premises and areas through the type of use for which they are intended and on the basis of the cost of disposal, or for municipalities with population of 35000 citizens or lower, on the basis of the quality and quantity effectively generated of solid urban waste and the cost of disposal».

²⁰ See art. 65, paragraph 2, Legislative Decree 507/1993, «The municipalities are to lay down the rates for each standard category or sub-category, in accordance with the cost coverage ratio chosen within the statutory limits, by multiplying the cost, estimated for the forthcoming year, of disposal per verified unit of taxable surface area by one or more quantitative and qualitative waste production coefficients».

²¹ See art. 66 and 67 Legislative Decree 507/1993.

that «the polluter pays» codified in them²². This leads to an increase in taxation, but also and inevitably a greater focus on the underlying taxable capacity. Also, narrowing the focus to art. 49 Legislative Decree 22/1997, this translates as: basically, in the distinction of the rate in a fixed quota, «determined in relation to the essential components of the cost of the service» («referring in particular to the investments for the works and the related amortisation [depreciation]»), and in a variable quota, «related to the amount of waste collected, the service provided, and the amount of operating costs, so that the full coverage of investment and operating costs is ensured»; but also in an articulated expression of the tariff, in reference to a normalised method for calculating its items and to a financial plan about measures relating to the service, in the possibility of reductions (such as those related to separate collection or waste recovery), in the provision of objectives to improve productivity and the quality of the service provided.

In the space left by the TIA 1 stands TIA 2, which, even in its short life, better finalises the existing regulations²³, providing, for example, that: «the waste management tax is proportional in that it is calculated on the basis of the ordinary average quantity and quality of waste generated per surface unit, in relation to the uses and type of activities carried out, on the basis of parameters, determined by the rules referred to in paragraph 6, which also consider income indices sorted by user and territorial bands» (the applying rules, as we know, are never issued, negatively affecting the validity of TIA 2²⁴); «in determining the tax, ancillary costs, related to the management of urban waste such as, for example, road sweeping costs, are also covered».

²² The “polluter pays” principle has its roots in the economics theory known as welfare economics (see A.C. PIGOU, *Welfare economics*, Italian translation by M. Einaudi, UTET, Torino 1968); on its origins, interpretation and evolution see M. MELI, *Il principio comunitario “chi inquina paga”*, Giuffré, Milano 1996. Among the tax law studies see for example: C. VERRIGNI, *La rilevanza del principio comunitario “chi inquina paga” nei tributi ambientali*, in *Rass. Trib.*, 2003, p. 1614 ff.; P. SELICATO, *Imposizione fiscale e principio “chi inquina paga”*, in *Rass. trib.*, 2005, p. 1160 ff.; R. ALFANO, *Tributi ambientali*, cit., p.12 ff.; P. MASTELLONE, *Il ruolo dell’Unione Europea nella creazione di un “diritto tributario ambientale” all’interno degli ordinamenti degli Stati membri* in S. DORIGO, P. MASTELLONE, *La fiscalità per l’ambiente*, cit., p. 92 ff.; S. CANNIZZARO, *La matrice solidaristica dei principi europei e internazionali in materia ambientale e il ruolo della fiscalità nel sistema interno*, in *Rivista di Diritto Tributario*, 2017, IV, p. 95 ff., especially p. 98 ff., 114 ff.; M.A. ICOLARI, *Per una dogmatica dei tributi ambientali*, Editoriale Scientifica, Napoli, 2018, p. 71 ff.

²³ See art. 238 Legislative Decree 152/2006.

²⁴ See *infra* note 27.

Similar considerations can be made for the TARES both due to its short life, and because it does not innovate much the precedents as to the determination of the taxable base; it even refers to the same rules provided for in the regulations of the TIA 1 (Presidential Decree 158/1999), except for: increases *ex lege*, the return of several reduction to the primary regulations, the delegation to the municipal Council of various specifications. And in the same place of the TARES stands the TARI, whose better completeness, for example, on the taxable surface areas can be appreciated in its regulations; it is worth noting the possibility that the municipality – as an alternative to the rules based on the TIA 1, Presidential Decree 158/1999, containing the so called normalised method, and pending its revision – proceeds on its own adjusting, on the example of what happened for the TARSU, but with more precise indications, «the tax on the ordinary average quantity and quality of waste generated per surface unit, in relation to the uses and type of activities carried out as well as the cost of the waste service»²⁵.

From the above, even with the inevitable approximation that distinguishes it, it emerges that, in the regulations of the taxable base, a clear detachment is found in the transition from TARSU to TIA 1, and is given by the need for full coverage of the costs of the service, which implies an increase in taxation, but also a greater attention to the underlying taxable capacity; although it must be said that there had ultimately been interventions towards a greater or integral coverage of costs in the TARSU regulation²⁶.

However, as much as we tend towards a situation of effectiveness (in spite of which at the moment it is difficult to imagine to reach on a large scale), the determination of the taxable base is still performed on ordinary-average criteria, in fact we continue to refer to the (so called) normalised method as per Presidential Decree 158/1999²⁷: the gradual refinement and

²⁵ The quotation is taken from paragraph 652 of art.1 of Law 147/2013. See more on this in paragraphs 651-654 bis of the same art. 1.

²⁶ See paragraph 3 bis of art. 61 Legislative Decree 507/1993 (added from art. 3, paragraph 68, lett. b), of Law 28 December 1995, No. 549) and paragraph 23 of Law 23 December 1998, No. 448.

²⁷ Indeed, an attempt was made to overcome the normalised method as per Presidential Decree 158/1999, providing for its maintenance on a transitional basis and its replacement by a new regulation. However, the latter - provided for TIA 2 (in paragraph 6 of art. 238 of Legislative Decree 152/2006), and then for the TARES (in the original version of paragraphs 9 and 12 of art.14 Legislative Decree 201/2011), has never been enacted, and for this the legislator: for TIA 2 authorises the municipalities to use the current regulations in a transitional way (i.e. Presidential Decree 158/1999) ex art. 2 quater of Legislative Decree 30

progressively greater adherence to reality of these criteria can only be appreciated, however this does not change its nature; moreover, the property component continues to have a decisive weight in the “presumptions” of waste production and use of the disposal service. Due to this, even with the corrective measures mentioned above, we obtain a reading of substantial continuity with the regulations of the TARSU, even concerning the determination of the taxable base (and more so when considering the interventions last brought to the TARSU²⁸). But it could not be otherwise since, as we have seen, the taxable event of the tax remains the same and, as is known, the taxable base of a levy is closely linked to its taxable event: the taxable base, in fact, allows it to be measured, expressing the value on which to apply the rate (and thus calculate the tax); it is said, for this reason, that a «tax event is what causes the applicability of a tax (the *an debeatur*); taxable base is what determines its measure (the *quantum debeatur*)»²⁹.

December 2008, No. 208 (as converted from Law 27 February 2009, No. 13); for the TARES consolidates the transitional regulation (with the amendments to paragraph 9 quoted and with the repeal of paragraph 12 quoted as per art. 1, paragraph 387, lett. b, of Law 24 December 2012, No. 228 and art. 1, paragraph 387, lett. d, of the same Law 228/2012).

For the TARI, the regulation to be enacted is no longer mentioned, there is only a reference to Presidential Decree 158/1999 (art., paragraph 651, of Law 147/2013 states «The municipality takes into account the criteria determined by the regulation referred to in the Presidential Decree 27 April 1999, No. 158 in the calculation of the tax»). This: saves the possibility for the municipality – already provided for the TARSU, but still based on ordinary-average criteria, referred to in the following paragraph 652 (see what was said earlier and to note 25) – «alternatively ... and in compliance with the "polluter pays" principle, established in article 14 of Directive 2008/98/EC of the European Parliament and of the Council, of 19 November 2008, concerning waste» to «adapt the tariff with the ordinary average quantity and quality of waste generated per surface unit, in relation to the uses and type of activities carried out as well as the cost of the waste service»; with simplifications (indicated by the same paragraph 652 quoted pending the revision of the quoted Presidential Decree 158/1999) and with the specifications referred to in the following paragraphs.

On the difficulties of abandoning the normalised method see for example and recently G. SELICATO, A. SORRISO CHIECO, *La Tassa sui rifiuti*, cit., p. 180 ff.

²⁸ See *supra* note 26.

²⁹ For the sake of conciseness and clarity, the words expressed by F. TESAURO, *Manuale di diritto tributario. Parte generale*, UTET Giuridica, Milano 2017, p. 109 have been (translated and) repeated. However, similar clarity is already found in A.D. GIANNINI, *Il rapporto giuridico d'imposta*, Giuffrè, Milano 1937, p. 189 ff. (and, for a summary, see from the same Author, *I concetti fondamentali del diritto tributario*, UTET, Torino 1956, p. 168).

2.3. The discontinuities introduced by TARES and TARI

With the introduction of the TARES, there is a decisive novelty, admittedly little regulated, that is the possibility for municipalities that have set up «systems for accurate measurement of the quantity of waste collected by the public service», to «provide for the application of a tariff of proportional nature instead of the tax», which would be «applied and collected by the entity entrusted with the urban waste management service». This: following a precise choice by the authority, to be made by means of its own regulation, and also on the basis of ministerial criteria; and without prejudice to the fact that the tax is «limited to the component aimed at covering the costs relating to the indivisible services of the municipalities»³⁰.

In the same way the TARI also provides for an accurate tariff, the so known TARIP, to which a poorer regulation is applied – paragraph 668 of art. 1 of Law 147/2013³¹– compared to that of the TARES and which inevitably might generate, (major) problems: for example in the determination of the TARIP, the local authority seems to be able to set its own criteria that are complementary and/or alternative to the ministerial ones³².

3. The fiscal nature of the current tax on waste

3.1. The tax characteristics of the TARI

The foregoing description is intended to clarify the fiscal nature of the waste tax: in itself and in its tormented legislative evolution. This is an anticipation of the conclusion of the reasoning being developed, but the outcome could not be another [could not be different]: the fiscal characteristics are obvious, as are the continuities from TARSU to TARI, mostly on fundamental aspects. Rather, the dissenting voices should be analysed and final attention should be paid to discontinuity.

³⁰ See *amplius* art. 14, paragraphs 29-32, Legislative Decree 201/2011.

³¹ It provides that: «Municipalities that have implemented systems for the accurate measurement of the amount of waste collected by the public service may, by regulation referred to in article 52 of Legislative Decree No. 446 of 1997, provide for the application of a tariff having a proportional nature, instead of the TARI. In calculating the tariff, the municipality may take account of the criteria determined by the regulation laid down in Presidential Decree 27 April 1999, No. 158. The corresponding tariff is applied and collected by the entity entrusted with the urban waste management service. In calculating the tariff, the municipality may take account of the criteria determined by the regulation laid down in Presidential Decree 27 April 1999, No. 158».

³² See previous note.

Taxes are characterised by «the duty to provide a service, in the absence of a synallagmatic relationship between the parties, as well as the connection of this service with public expenditure, in relation to an economically relevant premise»³³: this is what the Constitutional Court has said on several occasions, in line with the commonly accepted notions (in our system there are no normative definitions of the tax)³⁴ and with the definitions found in other systems³⁵.

These characteristics are undoubtedly to be found in the TARI: it is due on (uniquely) the occurrence of a taxable event, which expresses a precise economic relevance (i.e. taxable capacity), and regardless of the use (and the intensity of the use) of the waste management service; the public purpose is evident in the allocation to an essential public service (that of waste management), the costs of which are intended to be covered in full (i.e. to share the full costs among members of the community).

The rules governing TARI are very clear on these characteristics. The same can be said for its predecessors, starting with the TARSU: given the

³³ The quotation is taken from C. Cost. 11 October 2012, No. 223, however the same words were used by C. Cost. 28 October 2011, No. 280. These statements in turn refer to various precedents expressly referred to in them.

³⁴ The notion of tax, as is well known, although recurring in numerous legal provisions, even adjectivised, is not provided by them. It is agreed, however, to attribute to it an extra-legal genesis, essentially economic and sociological, to which reference should be made, which, in a nutshell, can be summarised as the compulsory pecuniary payment in favour of a tax authority and for the financing of its institutional activities, it being understood that the notion must adhere as closely as possible to the contexts in which it occurs and may also assume a variable breadth. See for example S. LA ROSA, *Principi di diritto tributario*, Giappichelli, Torino 2020, p. 1 ff., however already *similiter* to A.D. GIANNINI, *I concetti fondamentali del diritto tributario*, cit., p. 58: «Taxes have the threefold characteristic that they are due to a public body, that they have their legal basis in the State's governing power, and that they are imposed for the purpose of providing the means for the financial needs of the State».

³⁵ The definition given in Article 2 of the Spanish *Ley general tributaria* of 2003 stands out: «*Los tributos son los ingresos públicos que consisten en prestaciones pecuniarias exigidas por una Administración pública como consecuencia de la realización del supuesto de hecho al que la ley vincula el deber de contribuir, con el fin primordial de obtener los ingresos necesarios para el sostenimiento de los gastos públicos*». Or, on the other side of the Atlantic, one might recall the definition in art. 2 of *Model Tax Procedure Code* of 2015 of Latin American countries: «*Taxes are the pecuniary considerations that the State demands by virtue of its tax enforcement power, which arises from the occurrence of the taxable event as set forth by law, and such law binds said taxable event to the duty of paying taxes aimed at meeting public needs*».

continuity of the taxable event, liable persons and taxable base, as mentioned above, there are or should be no doubts in qualifying them as taxes, without the different designations or regulatory deficiencies of TIA 1 and TIA 2 being able to hinder a preferable reconstruction of the system.

The Constitutional Court has had opportunity to say and reiterate this. It did so with reference to TIA 1 in the significant judgement 238 of 2009³⁶, where: it rightly devalues the *nomen iuris* («taxes are to be identified independently of the *nomen iuris* ... Moreover, the term “tariff” – in the tradition of tax legislation – has a neutral semantic value, in the sense that it is not necessarily opposed to terms such as “tax” and “levy”, so much so that even art. 58 of Legislative Decree No. 507/1993 provides verbatim that TARSU (i.e. a “tax” and, therefore, a “levy”) is applied “on the basis of a tariff»), like other external aspects; the continuity between TARSU and TIA is highlighted, especially with regard to the identity of the «generator of the obligation to pay» and of the «obligated parties», to the «same authoritative and non-syllanagmatic structure», to the overlapping of the taxable bases («the commensuration criteria of the two levies are analogous ... the aforementioned «standardised method» for determining the TIA is fully consistent with the criteria established by law for the commensuration of the TARSU») also in relation to the costs to be covered («also cover the public expenses relating to an indivisible service, rendered in favour of the community and, therefore, not linked to a synallagmatic relationship with the individual user», «the only substantial difference between the two levies is that, while for the TARSU the revenue must correspond to an amount between the entire cost of the service and a minimum cost consisting of a percentage of that cost determined on the basis of the financial situation of the municipality... In the case of the TIA, the tax levy must, on the other hand, always ensure full coverage of the cost of the services»); it concludes that «the ... structural and functional characteristics of the TIA ... make it clear that this levy has all the characteristics of a tax ... and that ... it constitutes a mere variant of the TARSU ..., retaining the tax label proper to the latter». This, then, is in line with other rulings of the same Court, always with reference to TIA 1 (and in the wake of the aforementioned judgement), but also with reference to other taxes³⁷; and the case

³⁶ See *supra* note 14.

³⁷ See orders No. 64 of 24 February 2010 and 300 of 20 November 2009.

More often, as in the case decided by judgement 238/2009, the Constitutional Court was called upon to make a statement on the notion of the tax in question or even to identify the jurisdiction to which the relevant disputes should be referred; we recall, for example,

law of the Court of Cassation is consolidated in the sense of the fiscal nature of TIA 1³⁸.

In this context, one should rather ask what type of tax it is. In fact, notwithstanding the label of tax or tariff, one can reasonably think that they are in the presence of a charge. It is worth noting that: the TARI is due simply based on the occurrence of the taxable event ("the possession or occupation for any reason of premises or open land, whatever their use, liable to produce urban waste") with no way of avoiding it; the correlation between the tax and the waste disposal service expresses a situation of normality, not also of reality, so much so that the tax is due even when the disposal service is not provided (this is acknowledged by paragraphs 656 and 657 of art.1 of Law 147/2013, providing for appropriate reductions) and that those who do not meet the requirement and do not pay the tax also benefit from the service; the taxable event is still measured by criteria of normality (which, however refined, disregard the use or extent of the use of the service) and according to a presumed underlying taxable capacity, likely to be contaminated by elements that have nothing to do with the service itself (such as the taxable capacity of the family or the ISEE (equivalent economic situation indicator), referred to in paragraph 682 of art.1 of Law 147/2013). And for the purposes of classifying the levy in question as a tax, the consideration that it would cover the costs of divisible public services is certainly not helpful, since it also covers indivisible services (such as the sweeping and cleaning of public spaces and areas or the disposal of waste found therein), even if the distinction between indivisible public services and divisible public services, which is typical of public economics, could be imported *sic et simpliciter* into tax law.

rulings: No. 64 of 14 March 2008, No. 130 of 14 May 2008, No. 34 of 1 February 2006, No. 141 of 8 May 2009. But, of course, the Court has been called upon to pronounce on the fiscal nature or otherwise of various revenues irrespective of jurisdictional issues, such as for example in rulings: No. 256 of 20 June 2007; No. 335 of 10 October 2008.

A. FEDELE, *La definizione di tributo nella giurisprudenza costituzionale*, in *Rivista di Diritto Tributario*, 2018, I, p. 1 ff. reviews the case law of the Court on the notion of the tax.

³⁸ Cass. SS. UU. 8313/2010 was cited previously (*supra* note 14), but there are indeed numerous pronouncements of the Court of Cassation in the same direction (recently see, for example, No. 7187 of 15 March 2021; No. 22901 of 21 October 2020; No. 16994 of 13 August 2020; No. 6149 of 5 March 2020), even if there is no lack of isolated voices to the contrary (such as Cass. 27 January 2020, No. 1839, with a criticizing note by A. GIOLO, *Con un "corto circuito" la Cassazione crea la giurisdizione "a tempo" sulla Tia1*, in *Diritto e Pratica Tributaria*, 2021, II, p. 374 ff.).

3.2. The interpretative provision of 2010 and the position of the Court of Cassation on TIA 2

In light of what was previously said, it is strange that in 2010 the legislator issued an interpretative provision: art.14, paragraph 33, of Legislative Decree 31 May 2010, No.78 (as converted into Law 30 July 2010, No. 122). It states: «The provisions of article 238 of Legislative Decree 3 April 2006, No. 152, shall be interpreted as meaning that the nature of the tariff provided for therein is not fiscal. Disputes relating to the above tariff, arising after the date of entry into force of this decree, shall fall within the jurisdiction of the ordinary courts».

This intervention is strange not only because in the light of what has been said, and in the same way as TIA 1, there should have been no doubt as to the fiscal nature of TIA 2, but also because the requirements of the interpretative law were lacking. In fact, we were not faced with an equivocal formulation of the text of the law, nor were there any doubts as to the interpretation to be attributed to it; moreover, TIA 2 had not yet entered into force (given that its adoption by the municipalities was conditional on the issuing of a specific regulation, which was never issued³⁹) and the text that is introduced is – itself – equivocal (if TIA 2 is not a tax, there is no need to affirm the ordinary jurisdiction over the relevant disputes, and even less so from a specific date!)⁴⁰.

³⁹ The municipalities were given the possibility, introduced at a later date, of adopting the TIA 2 on the basis of existing regulations: see paragraph 2 quater of art. 5 of Legislative Decree 30 December 2008, No. 208 (added by conversion law 27 February 2009, No. 13), as well – for the postponement of the deadlines – as paragraph 21 of art.23 of Legislative Decree of 1 July 2009, No. 78 (as converted by Law August 2009, No. 102) and paragraph 3 of art.8, paragraph 3, of Legislative Decree 30 December 2009, No. 194 (s converted by Law 26 February 2010, No. 25).

⁴⁰ The sense of the legislative intervention can probably be seen in the attempt to subject TIA 1 to VAT, as emerges from circular No. 3/DF of 11 November 2010 of the Ministry of Economy and Finance (see in particular the following passage: «it is expressed ... the opinion that TIA1 should continue to be subject to VAT, as already asserted by the financial Authorities in the various interventions that have taken place over time ... The circumstance that TIA2 may ultimately be regulated by the provisions relating to TIA1 leads to the conclusion that the levies have similar characteristics and that the legislator's intention was, with art. 14, paragraph 33, also to give TIA1 a new guise, pending the issue of the regulations referred to in article 238, paragraph 6. Therefore, if in the light of the new provisions the two levies are now governed by the same regulatory sources, it does not appear rational to attribute to TIA1 a different legal status from that of TIA2. Consequently, if TIA2 is in the nature of a fee, and as such is subject to VAT, the same cannot be said for the TIA1»). The attempt,

The jurisprudence of legitimacy, even if not obliged, reacts decisively, criticising such intervention and qualifying the provision as not interpretative, but innovative, i.e. with *ex nunc* and not *ex tunc* effects: we recall the *obiter dicta* in Cass. No. 3293 and 3294 of 2 March 2012.⁴¹ However, with reference to TIA 2, the civil courts are once again faced with disputes as to whether or not the TIA 2 is subject to VAT, leading the Court of Cassation to affirm its nature as a mere fee: this is resolved by the judgement of the United Sections 8631/2020 cited at the beginning, which is in line with a criticised precedent of the same Court, judgement No. 16332 of 21 June 2018⁴², departing from (what was ruled by the court of appeal, but also from) what was set forth in the order of referral⁴³.

The ruling is not at all acceptable, since it glosses over the doubts raised by the order of referral to the United Sections (which does not even follow the argumentative process) and bases the affirmation of the private nature of TIA 2 only on literal arguments⁴⁴. On the one hand, it refers to the

however, was unsuccessful, since case law has reacted decisively to it: in addition to the rulings referred to in the text and in the following note, see for example Court of Cassation No. 3756 of 9 March 2012 and No. 5831 of 13 April 2012. On the genesis of art. 14, paragraph 33, Legislative Decree 78/2010 see also A. GIOLO, *Con un "corto circuito" la Cassazione crea la giurisdizione "a tempo" sulla Tial*, cit., p. 384 ff.

⁴¹ The judgements state: that the «provision appears rather convoluted and intimately contradictory: if the "tariff" "is not fiscal" the jurisdiction seems not to be assigned to the tax court even for disputes arising prior to the entry into force of decree 78»; «it is possible that through the cited rule, the Administration, which drafted the measure, previously intended to subject the payment to VAT under the TIA ... It must be noted, however, that if this was the intention, the *intentio legislatoris* did not translate into a *voluntas legis*, i.e. an adequate regulatory content»; that «the case law of the Constitutional Court and of this Court was ... unequivocally oriented in the sense of considering the TIA 1 to have fiscal nature and not to be a fee. Therefore, the provision on TIA 2 is innovative in nature, or – rather – establishes a tariff that the legislator intended to be ontologically different from the "first TIA"». See also the previous note.

⁴² The judgement has been criticised by several parties: see C. SCALINCI, *La Tariffa integrata ambientale, la cd. TIA 2, non sarebbe un tributo ma un corrispettivo soggetto a IVA*, in *Rivista di Diritto Tributario online*, 26 July 2018; A. GIOLO, *TIA1 e TIA2: gemelli diversi sotto il profilo dell'iva*, in *Dir. Prat. Trib.*, 2019, II, p. 2593 ff. See also *infra* nota 44.

⁴³ It is Court order No. 23949 of 25 September 2019.

In line with the pronouncements of the United Sections 8631 and 8632 of 2020 the most recent decisions of the Court of Cassation are: 28 August 2020, No. 18013; 1st June 2021, No. 15284.

⁴⁴ Among the critics we note F. FICHERA, *La c.d. TIA-2, natura giuridica e associabilità all'IVA*, in *Rassegna Tributaria*, 2020, p. 838 ff., to be read along with ID., *Giurisdizione tributaria e nozione di tributo. Il caso della c.d. TIA-2*, in *Rassegna Tributaria*,

interpretative provision of art.43, paragraph 33, DL 78/2010, badly flawed and criticized by other pronouncements of the same Court, which (now) is defended with “balancing acts”, going so far as to affirm «*pro futuro* temporal effects» (which, however, would undermine the meaning of the authentic interpretation). On the other hand, reference is made to certain passages of art.238 of Legislative Decree 152/2006 – the references to the «production of waste», the qualification of the tariff as a «fee for the provision of the service», the setting of the tariff at the «quantity and quality of the waste produced» – which, however, are read in isolation and overlooking other related/complementary passages, which complete the meaning: in fact, it is clear that art. 238 refers to waste that might be produced and not to waste that is produced; however, there is no mention of this in the judgement and even decisive words are omitted from the references to the rules (indeed, the tariff is not based on «the quantity and quality of waste produced», but on «the *ordinary average* quantity and quality of waste generated *per surface unit, in relation to the uses and type of activities carried out, on the basis of parameters, determined by the rules ... which also consider income indices sorted by user and territorial bands*», as stated by the cited paragraph 2 of art.238). And the weakness of the literal arguments is all the more evident, since (besides their questionable use and the conduct of the reasoning) it is in contrast with the devaluation of the *nomina iuris* affirmed precisely in the matter of taxation of waste, but not exclusively, by almost all the judges involved⁴⁵, as well as by the referral order.

For the sake of completeness, it should be added that the judgement refers to other precedents of the Court of Cassation. However, it cannot be said that there are particularly significant precedents, because: there are also

2020, p. 72 ff., where Cass. 16332/2018 is criticised, as well as the more recent and briefer Cass. SS. UU. 27 January 2020, No. 1839. It should be added that the doctrine, by way of experiment, shows that the reasons put forward by the Constitutional Court (in judgement No. 238/2009) with reference to TIA 1 can be referred to TIA 2 in order to demonstrate its tax nature: see A. GIOLO, *TIA1 e TIA2: gemelli diversi sotto il profilo dell’iva*, cit. , p. 2594 ff.

⁴⁵ See *in primis* Constitutional Court 238/2009 and Cass. SS. UU. 8313/2010, mentioned previously. More recently, see for example: C. Cost. 14 December 2017, No. 269; Cass. SS. UU. 4 June 2020, No. 10577. Also, in EU law, labels are disregarded and the substance is looked at for the purpose of qualifying a revenue as a tax: see for example, and recently, C. JEU 18 January 2017, Case C-189/15, *Istituto di Ricovero e Cura a Carattere Scientifico (IRCCS)*.

rulings that express a different approach⁴⁶; the precedents referred to mostly come from non-fiscal sections and essentially adhere to the only judgement that deals *funditus* with the problem of the nature of TIA 2, i.e. No.16332/2018 cited above; the latter, which also comes from a non-fiscal section, ultimately limits itself to using literal arguments, so much so that it has been criticised by several parties⁴⁷.

4. Perplexities about TARIP

4.1. The recent sentence of the Court of Cassation in 2021

It is important to have lingered on the criticism of the private qualification of TIA 2 because *mutatis mutandis* there is a risk of repetition with reference to TARIP⁴⁸, so much so that there has been a recent important ruling in this direction: Cass. SS. UU. No. 11290/2021, referred to at the beginning, which contributed to the author's thoughts.

The judgement resolves in favour of the ordinary courts a regulation of jurisdiction in a dispute which had arisen before the tax courts (although) following a challenge to a TARIP invoice, which the Court of Cassation qualified as a private law fee: hence the affirmation of ordinary jurisdiction.

4.2. Critical analysis

The ruling: builds on the precedent on TIA 2, judgement 8631/2020, which it refers to and whose approach and content it shares; it is based on the

⁴⁶ See Cass. SS. UU. No. 17113 of 11 July 2017, intervened on the additional charge to TIA 2, whose tax nature is declared.

⁴⁷ See *supra* note 42.

⁴⁸ The relevance for the purposes of the TARIP is grasped by the Court of Cassation order 23949/2019 cited above, which refers the question of the nature of the TIA 2 to the United Sections (but it doesn't develop the ruling of the United Sections 8631/2020, which follows). The order, thus, concludes: «the Court considers that the question relating to the legal nature of the integrated environmental tariff, known as T.I.A. 2 and its subjectation to VAT, requires a ruling by the Court in its most typical expression of nomofilachy: indeed, this is a question of principle of particular importance, because of the very significant (and immediately perceivable) practical-applicative effects arising from it, both with reference to the aforementioned integrated environmental tariff, and with regard to the establishment of the (subsequent) TARI, regulated by L. No. 147 of 2013, Article 1, paragraphs 641 et seq. which provides that municipalities, where a system of punctual measurement of waste is in place, may apply a fee as an alternative to the traditional Tari. The new legislation – as precised in the introduction – is structured in such a way that the same problems will arise as those faced with regard to the T.I.A.2 concerning its fiscal or private nature.

awareness of the fiscal nature of TARI, from which TARIP differs; it bases the decision on four types of reasons, which it is worth considering here.

Two issues immediately appear to be irrelevant: the compatibility of VAT with compulsory payments *ex lege* (which may be included in the concept of the provision of services under art.3 of Presidential Decree of 26 October 1972, No. 633); and the provision, in the municipal regulations for adopting the TARIP, for the devolution of the relevant disputes to the ordinary courts. It goes without saying, in fact, that: whether or not VAT is due and the identification of the competent authority, whether ordinary or tax court, should follow from the affirmation of the private or fiscal nature of the claim; the authoritative nature of the latter is sufficient to exclude the subjective profile of the VAT requirement, calling into question the notion of entrepreneur under art.4 of Presidential Decree 633/1972 (and the related notion of liable subject set out in European Directive No. 2006/112 of 28 November 2006, as specified in art.13)⁴⁹, not that for the provision of services or of financial activities (in the order of national and EU law); certainly, a secondary source, and for that matter a local one, such as the municipal regulation, cannot affect the division of jurisdiction, that is to say, a matter which the Constitution reserves to the law, and moreover to the State under ex art. 117, paragraph 1, of the Constitution.

The other two orders of reasons seem to have greater importance. On the one hand, we highlight the legislative qualification of the tariff as a fee and the provision, once again legislative, of an alternative to the TARI (in art.1, paragraph 668, Law 147/2013)⁵⁰. On the other hand, and in continuity

⁴⁹ A significant example is the judgement of the United Sections of the Court of Cassation no. 5076 of 15 March 2016, which, with reference to TIA 1, excludes the subjective profile of the VAT taxable event pursuant to Article 13 of Directive 2006/112 and refers to some precedents of the Court of Justice (indeed, the judgement also excludes the objective profile of the VAT taxable event: it excludes that there is a provision of services, reasoning on the absence of a synallagmatic relationship between the service and the service in return). The considerations expressed are much more in-depth, especially with reference to EU law and the case law of the Court of Justice, in A. GIOLO, *TIA1 e TIA2: gemelli diversi sotto il profilo dell'iva*, cit., p. 2611 ff.

⁵⁰ See the following passage: «Nevertheless, irrespective of the *nomen iuris* assigned to that service by the paragraph in question (a tariff of proportional nature), it appears incontrovertible that the primary provision in question, in establishing that “(the) municipalities which have implemented systems for the accurate measurement of the quantity of waste delivered to the public service may, by regulation pursuant to Article 52 of Legislative Decree 446 of 1997, provide for the application of a tariff of proportional nature instead of the

with these statements, reference is made to: the provision that entrusts to a Ministerial Decree the establishment of «criteria for the implementation by municipalities of systems for accurate measurement of the quantity of waste delivered to the public service or management systems characterised by the use of corrective measures to the criteria for the allocation of the cost of the service» (as per paragraph 667 of Law 147/2013); the Ministerial Decree implementing it, 20 April 2017, where it is established that «the accurate measurement of the quantity of waste collected is obtained by determining, as a minimum requirement, the weight or volume of the quantity of RUR collected from each user by the public waste management service» (RUR stands for «residual urban waste»).

However, the first argument is a literal one: it does not stand up to the devaluation of the *nomina iuris* affirmed by the judgement in question, as well as in the field of waste taxation (but not only) by almost all the judges who intervened (several judgements are referred to by the same judgement); rather, it goes against the substantialist approach that, where there is any argument about the jurisdiction (such as, for example, in the matter decided in Cass. 11290/2021 cited above), is expressly established by the legislator, which devolves «to the tax jurisdiction all disputes concerning taxes of every kind and species, whatever their designation» (thus art.2 Legislative Decree 546/1992, which reiterates the irrelevance of the label). Nor is it worth noting that TARIP is provided for by law «in place of the TARI», since the former does not replace the latter, it only replaces a part of it, the variable part; but it could not be otherwise, so much so that the secondary sources, national and local, express themselves in this sense, and so did the TARES regulation, which, as mentioned above, introduced the accurate tariff into the system.⁵¹

But the second order of reasons is also literal. However, they are taken into account *litterae legis*, as they relate to the accurate measurement, the quantity of waste collected, the type of waste (known as RUR), and its weight and volume. And beyond the criticisms that can be reiterated regarding the meaning of the literal data, as mentioned above, it is surprising that the ruling in question looks only at certain passages of the law and reads them in isola-

TARI”, must be understood as delineating the scope of that tariff in alternative terms to the waste tax, whose tax nature, as has been seen, is not disputed».

⁵¹ In fact, in the hypothesis of the introduction of the accurate tariff, art.14 paragraph 33, Legislative Decree 201/2011, provided for the persistence of the tax limited to the component aimed at covering the costs of indivisible services.

tion, neglecting or omitting other related/complementary passages that complete the meaning: in other words, it is surprising that the judgement in question persists in the error found in judgement 8631/2020 cited above.

To dismantle this reasoning it is worth noting that according to Ministerial Decree 20 April 2017, ex art.1, paragraph 667, of Law 147/2013 already is the basis of TARIP: the accurate measurement concerns only a part of the collected waste, the residual urban waste or RUR, which is what remains from the waste subject to separate collection and which does not even constitute the majority of urban waste (so much so that the municipalities may *ex lege* continue to use the normalised method referred to in Presidential Decree 158/1999⁵²);⁵³ the measurement of waste is hardly effective, since indirect weighing of waste is intended as an alternative to direct weighing (even concurrently and for the same waste) and since aggregate users (such as condominiums) are possible, where quantities and volumes are attributed on a *per capita* basis (based on the number of members of the household referred to each user) or according to parameters (as per Presidential Decree 158/1999)⁵⁴; the amount of the TARIP may be proportional (also) with the number of services provided and their quality, regardless of their use⁵⁵; the approval of the tariffs by the Municipality is not affected.

It should be added that the implementation of accurate waste measurement systems does not imply the transition to the tariff of a proportional nature, as per art.1, paragraph 668, cited above, since, as the latter article states, «municipalities may provide for» such a transition; but they may also maintain – as is likely to happen and practice seems to confirm – the *status*

⁵² Indeed, it is recalled that ex art.1, paragraph 668, of Law 147/2013 «the municipality, in the commensuration of the tariff, may consider the criteria determined by the regulation of the Presidential Decree 27 April 1999, No. 158».

⁵³ See art. 4 of Ministerial Decree 20 April 2017. Quantities of other separately collected fractions or waste streams may be measured, but the choice is left to the municipalities and the measurement is, in any case, simplified.

⁵⁴ Indirect weighing is based on the volumes of waste, which are however those of the containers, whose weight is estimated. In any case, it concerns waste other than residual municipal waste (for which the differences in weight are considerable), if the municipalities so decide (see *supra* previous footnote).

Aggregate users (as per articles 7 and 8 of the Ministerial Decree of 20 April 2017) are those for which it is not possible or convenient to directly measure the quantity presented by each user. They are domestic users, but non-domestic users may be included: in this case, their waste must be delivered separately or determined according to parameters (as per Presidential Decree 158/1999).

⁵⁵ See art. 9 of Ministerial Decree 20 April 2017.

quo, thus remaining under the tax regime. Of course, it cannot be ignored that, regardless of any municipal decision to convert, TARIP cannot be avoided; nor can it be overlooked that among the costs that it too is called upon to cover are those of irrecoverable credits relating to previous years and even to previous taxes⁵⁶.

Therefore, the assertion of the private nature of TARIP, as set out in judgement No. 11290/2021, is not at all convincing.

4.3. *Preferable conclusion on TARIP*

Indeed, literal arguments can be found *aliunde*. Thus, in the language of the law, as in practice, a distinction is made and/or tends to be made between the tariff-tax and the tariff-fee⁵⁷, thereby endorsing or wishing to endorse the qualification of the latter as revenue under private law. This, however, raises a number of perplexities: we are still in the presence of a few expressions, ambiguous or in any case susceptible to different interpretations; the regulatory framework in which they are located is meagre and does not justify the transition from public law to private law, especially if we consider

⁵⁶ TARIP is also subject to the provisions of art. 654 bis of Law 147/2013 («among the cost components, any shortfall in revenues relating to incoverable credits with reference to the environmental hygiene tariff, the integrated environmental tariff, as well as to the municipal tax on waste and services (TARES)»), as noted, for example, in: *Risposte a quesiti, Telefisco 2019*, 8 February 2019, Ministero dell’Economia e delle Finanze, § 3 (https://www.finanze.it/export/sites/finanze/.galleries/Documenti/Varie/RIV_Telefisco_2019_quesiti_Mef_tributi_locali.pdf); G. SELICATO, A. SORRISO CHIECO, *La Tassa sui rifiuti*, cit., p. 191 ff. On the subject see also M. AULENTA, *Ambiente: piccoli tributi crescono in Rivista di Diritto Finanziario e Scienza delle Finanze*, 2020, I, p. 99 ff.

⁵⁷ Recently, see, for example, art. 1, paragraph 48, of Law 30 December 2020 No. 178, where it is provided that: «Starting from the year 2021, for a single real estate unit for residential use, not rented or given in commodate use, owned in Italy by way of ownership or usufruct by persons not resident in the territory of the State who are holders of pensions accrued under the regime of an international convention with Italy, residing in a State of insurance other than Italy, the proper municipal tax referred to in article 1, paragraphs 739 to 783, of Law 27 December 2019 No. 160, shall be levied at the rate of one half and the waste tax having the nature of a tax or the waste tariff having the nature of a fee, referred to, respectively, in paragraph 639 and paragraph 668 of article 1 of Law 27 December 2013, No. 147, shall be due at a reduced rate of two thirds».

Also, recently and purely by way of example, see also: the ARERA resolution No. 443 of 31 October 2019; the IFEL (Istituto per la Finanza e l’Economia Locale) (TN: Institute for Local Finance and Economy) note of 2 March 2020 commenting on the aforementioned ARERA resolution; the circular No. 37259 of 12 April 2021 of the Ministry of Ecological Transition.

that the matter is covered by the reservation of law ex art.23 of the Constitution; even if such a transition were possible, it would not offer guarantees of adequate protection of the public interests involved in waste management; no real reasons to go to such length are found (nor adduced).

Rather, it is noted, *de iure condito* and beyond the labels used, that the TARIP is nothing more than a component of the TARI, which is characterised by a different determination of the taxable base (more precisely, of a part thereof) with criteria that tend towards greater effectiveness, which are, however, still permeated by partial measurements, flat rates, parameters and taxable events. In other words, we are still moving – albeit with the necessary adjustments and appreciable improvements – in the wake of what had begun for the TARSU through art.65, paragraph 1, Legislative Decree 507/1993⁵⁸. In addition, the genesis of the relationship already lacks the characteristics of the synallagmatic contract, which binds service and service in return and represents the essence of the contract, while the authoritative characteristics of the tax remain (since we are still in the presence of a coercive pecuniary performance in favour of a taxing authority), in accordance with what has been affirmed several times by the Constitutional Court⁵⁹: with reference to the taxation of waste, we recall judgement 238/2009 on TIA 1⁶⁰.

This is not to exclude outright the possibility that TARIP might be private in nature, it only means that at the moment the conditions do not seem to be in place to achieve this. Rather, there seems to be a goal towards which we are striving, but which we have not yet reached. The future will probably be one in which everyone decides on their own waste (how to dispose of it, who to entrust it to, do it themselves, sell any that is valuable, etc.) and acts in accordance with the logic and instruments of private law: this is the direction in which the legislator seems to be moving, but it cannot be denied that important steps still need to be taken, despite the emphasis that may be expressed in many quarters; moreover, we cannot underestimate a series of concrete problems which are not easy to solve and that go beyond the accurate measurement of waste (and which are linked, for example, to the creation of adequate and suitably distributed waste collection points, the organisation of

⁵⁸ In fact, art. 65, paragraph 1, of Legislative Decree 507/1993 allowed municipalities, other than large ones, to choose the quality and quantity of waste actually produced. See *supra* paragraph 2 and note 19.

⁵⁹ See *amplius* what is reported *supra* in paragraph 4.1.

⁶⁰ And some of the considerations made by Cass. 23949/2019 cited above with reference to TIA 2 can be taken up: see *supra* note 48.

door-to-door collection, payment times and methods, and the various technologies that can be employed). The situation does not change if one goes to the distinction between presumptive TARI, accurate TARI (tax) and proportional Tariff, present in some local regulations and endorsed by resolution No.443/2019 of ARERA (Autorità di Regolazione per Energia Reti e Ambiente) (TN: Regulatory Authority for Energy, Networks and the Environment), depending on the charging methods used⁶¹; if anything, this distinction may confirm the different ways in which the “polluter pays” principle is interpreted, the compatibility of accurate taxes with the fiscal nature of the claim, and the difficulties in reaching a private law tariff.

5. Reference principles

5.1. Possible differences in the regulations

The considerations made, even with the perplexities raised, allow us to draw some conclusions about the possible differences in the regulations depending on whether the “TARI tax” is “presumptive” or “accurate”, or whether the TARI becomes a “proportional tariff”.

The aim is to clarify the principles of reference in order to allow the beginning of broader evaluations regarding the viability of possible alternatives for local authorities, alternatives: that do not limit themselves on the *nomina iuris*, as happened with TIA 2, but also with reference to TARIP in the criticised ruling of the Court of Cassation No. 11290/2021 cited above; which, until guidelines are established (as happened with TIA 2), can lead to the emergence of critical positions in jurisprudence (with respect to the few precedents) following the example of what happened in the aforementioned order of the Court of Cassation No. 23949/2019 cited above. (and what has already happened with the affirmation of the tax nature of TIA 1: definitively established with the cited Constitutional Court 238/2009 and Cass. SS. UU. 8313/2010).

Obviously, this work has not the aim to deepen the theme, in the following paragraphs only the main aspects will be mentioned.

⁶¹ ARERA's intervention – of which resolution No.443/2019, previously referred to in the text (see *supra* note 57) – derives from the attribution to the same Authority, by paragraph 527 of art. 1 of Law 27 December 2017, of the functions of regulation and control of the cycle of urban and assimilated waste as provided therein.

5.2. *The principles of the Italian Constitution*

Thus, there is no doubt that the “TARI tax” is subject to the reservation of the law pursuant to ex art.23 of the Italian Constitution («No obligation of a personal or financial nature may be imposed on any person except by law»), which requires that the choices regarding taxes be made by the legislator. More precisely: since this is a relative reserve, the law is responsible for regulating the essential aspects of the services imposed, with further aspects being regulated by secondary sources (as happens in the subject *de quo*, where municipal regulations supplement/specify the legislative discipline); the administration has no margin of choice (identification, weighing and composition of the interests involved) on the *an* and *quantum debeat*, while there are margins of choice (on the collection and) on aspects relating to the *quomodo* and the *quando debeat*. Things should not change much with the “proportional tariff”, which still falls within the group of imposed patrimonial services (subject to the reservation ex art.23 of the Italian Constitution.), unless we assume future scenarios in which everyone is free to choose whether to recycle waste or dispose of it themselves, to whom to entrust it, under what conditions to do so, or utopian scenarios in which no waste is produced.

Similarly, the “TARI tax” is subject to the duty to contribute in accordance with the taxable capacity pursuant to ex. art.53 of the Italian Constitution («all shall contribute to public expenditure in accordance with their taxable capacity»): all the more so if it tends to be classified as a levy, rather than as a tax, as discussed above⁶². While the transition to the “proportional tariff” would mark the abandonment of the principle in question, which is proper to taxes, in favour of fees for the services received, essentially based on the quantity and quality of the waste collected. However, the current regulations are firmly anchored to indices of taxable capacity, such as the occupation or possession of premises and areas, the size of their surfaces, their uses, the activities carried out in them, and the number of users of the service; and these indices are likely to be contaminated by elements that have nothing to do with waste management (such as a family's taxable capacity or their ISEE, as per paragraph 682 of art.1 of Law 147/2013). The result is a complex regulatory framework that is difficult to overcome *sic et simpliciter* with a resolution of the Municipal Council⁶³: further legislative interventions are

⁶² See *supra* paragraph 4.

⁶³ In fact, it is necessary to identify the mandatory and special legislative provisions that cannot be derogated from; in compliance with these provisions and as far as they are not regulated by them, the municipalities can legitimately make choices in the exercise of their

probably necessary and certainly more attempts and application feedback than those recorded so far⁶⁴.

5.3. *References to EU law*

Looking at the principles of European law, the distinction between a “tax” and a “proportional tariff” itself is of little importance, since the European principle of “the polluter pays”, as set per art.191, paragraph 2, TFEU (but not only therein⁶⁵), referred to several times by the rules on waste taxation⁶⁶, is compatible with both classifications of the TARI⁶⁷; rather, in order to appreciate its compatibility, one should look at the overall structure of the interests involved and guaranteed by both the public and private solutions. The same can be said if we look more generally at the provisions of Title XX of the TFEU, dedicated to the environment, to which art.191 is ascribed: in fact, taxes are one of the instruments to achieve the objectives of environmental policy as set out in art.191⁶⁸.

regulatory powers; the latter must then be compatible with the former and, more generally, a coherent and systematic framework must be the result.

⁶⁴ Among the special provisions, specifically impacting on the discipline of the “proportional tariff”, we point out: art. 1, paragraph 838, of Law 27 December 2019, No.160; art. 1, paragraph 48, of Law 30 December 2020, No. 178 (referred to *supra* in note 57).

⁶⁵ Among the European provisions that expressly mention said principle we recall art.14 of the previously mentioned (see *supra* notes 12 and 27) directive No. 98/2008 (as replaced by art. 1, paragraph 1, point 15 of directive No. 851/2018 cit.). Also see *supra* note 22.

⁶⁶ Thus, in Law 147/2013, the principle is expressly referred to in paragraphs 652 and 667 of art.1.

⁶⁷ See following note.

⁶⁸ See, for example, the Commission Communication “Environmental taxes and charges in the single market” 97/C 224/04, published on 23 July 1997, which states that: «In order to reach environmental objectives, which are increasingly set in the context of framework legislation at EU level, Member States have, apart from measures harmonized at Community level, a multitude of economic, technical and voluntary instruments at their disposal. Environmental taxes and charges form part of the range of environmental instruments and can be an appropriate way of implementing the ‘polluter pays’ principle, by including the environmental costs in the price of a good or service. These instruments can thereby induce consumers and producers into environmentally more sustainable behaviour».

It should also be recalled, by way of example, that the Court of Justice in its decision C-254/08 of 16 July 2009 (proceedings) found the TARSU to be compatible with the “polluter pays” principle and more generally with European legislation («48. ... *as Community law currently stands, there is no legislation adopted on the basis of Article 175 EC imposing a specific method upon the Member States for financing the cost of the disposal of urban*

It is useful to ask whether the TARI is an environmental tax, meaning a tax directly affecting pollutants⁶⁹. Environmental taxes are a category of European construction, which is relatively recent and still unrefined: its origins can be found in a European Commission Communication of 1997, which states that «in order to be considered “environmental”, a tax should have a taxable base that has clear negative effects on the environment», but also that «a tax whose positive effects on the environment are less evident, but still

waste, so that the cost may, in accordance with the choice of the Member State concerned, equally well be financed by means of a tax or of a charge or in any other manner»).

⁶⁹ Reference is made to environmental taxes in the strict sense, if the category of environmental taxes also includes taxes “with an environmental purpose” or “with an environmental function”, which can conversely be defined as environmental taxes in the broad sense. However, the fact that the tax may have or has an environmental purpose, i.e. to discourage/incentivise activities, uses and production that affect the environment, is not particularly important, since the taxes can be used for purposes other than raising resources to meet public expenditure: in fact, the purposes denoting the tax are characterised by the broadness of their contents, except for special cases such as purpose taxes. For some time now, the doctrine has shown how the public body introduces taxes «with the aim of providing the means for its financial needs» (see A.D. GIANNINI, *I concetti fondamentali del diritto tributario*, cit., p. 58); so much so that in those legal systems in which there has been a codification of taxes, such as the Spanish *Ley General Tributaria*, the following is expressly stated: «*Los tributos, además de ser medios para obtener los recursos necesarios para el sostenimiento de los gastos públicos, podrán servir como instrumentos de la política económica general y atender a la realización de los principios y fines contenidos en la Constitución*» (see *supra* note 35). Therefore, it is not very useful to distinguish, as it is done (see, for example, and recently, M.A. ICOLARI, *Per una dogmatica dei tributi ambientali*, cit., p. 68 ff.), between taxes “with environmental purpose” or “with environmental function”, which in substance are still traditional taxes.

On environmental taxes there are several contributions, among which, by way of example and more recently, we mention, also for references: F. GALLO, *Profili critici della tassazione ambientale*, in *Rassegna Tributaria*, 2010, p. 303 s.; R. ALFANO, *I tributi ambientali*, cit.; S. DORIGO, P. MASTELLONE, *La fiscalità per l'ambiente*, cit.; L. PEVERINI, *I tributi ambientali*, in L. SALVINI, G. MELIS, *L'evoluzione del sistema fiscale e il principio di capacità contributiva*, Cedam, Padova 2014, p. 719 ff.; F. PITRONE, *Would environmental taxes by any other name smell as sweet?*, in L. SALVINI, G. MELIS, *L'evoluzione del sistema fiscale e il principio di capacità contributiva*, cit., p. 763 ff.; A. BUCCISANO, *Fiscalità ambientale tra principi europei e costituzionali*, in *Diritto e Pratica Tributaria*, 2016, I, p. 590 ff.; V. FICARI (ed), *I nuovi elementi di capacità contributiva. L'ambiente*, Aracne, Roma, 2016; A. URICCHIO, *I tributi ambientali e la fiscalità circolare*, in *Diritto e Pratica Tributaria*, 2017, I, p. 1849 ff.; M.A. ICOLARI, *Per una dogmatica dei tributi ambientali*, cit.; M. AULENTA, *Ambiente: piccoli tributi crescono*, cit., p. 71 ff.

clearly identifiable, could also be considered environmental»⁷⁰; its introduction is found in a 2011 Regulation of the European Parliament and of the Council, which defines an environmental tax as «a tax whose taxable base is a physical unit (or a proxy of a physical unit) of something that has a proven, specific negative impact on the environment»⁷¹. This means that: the taxable event of the environmental tax is the polluting act or activity, upon the occurrence of which the tax liability arises (referring to the above-mentioned European sources, one could say “manifesting negative effects on the environment” or “producing a specific and proven negative impact on the environment”); the liable subjects are those who actualise the above-mentioned taxable event, i.e. pollute (meaning, again referring to the European sources, “manifesting negative effects on the environment”, “producing a specific and proven negative impact on the environment”); the taxable base of the environmental tax is a pollutant, the measurement of which makes it possible to quantify the tax (the taxable base is expressly defined in the EU regulation as the «physical unit (or a proxy of a physical unit) of something that produces a specific and proven negative impact on the environment»⁷²).

It is undoubted that waste “has negative effects on the environment” and/or “produces a specific and proven negative impact on the environment”. Moreover, they: constitute the taxable event and the liable subjects for the TARI, albeit potentially (premises and open areas are taxed as they are «likely to produce urban waste» pursuant to ex art.1, paragraph 641, of Law 147/2013 and those who occupy or possess them are required to pay); they constitute the taxable base, as the costs relating to the waste management service are shared, even if the measurement is based on criteria which, although refined over time, are still present and largely normal. It is true that situations of potentiality and/or normality are taxed, but this should not come as much of a surprise, given that: this is also the case for other taxes, such as, for example, property income or IRAP (regional tax on productive activities); under EU law, the environmental effects of taxes (which are classified as environmental) can also be estimated; there are specific features of waste production and management that are difficult to regulate in any other way at present; a vision is expressed that is probably still *in itinere*, but which tends towards fairly

⁷⁰ See the Commission Communication “Environmental taxes and charges in the single market” 97/C 224/04, referred to *supra* in note 68.

⁷¹ See art. 2 of Regulation No. 691/2011 of the European Parliament and of the Council of 6 July 2011.

⁷² The italic is added by the author.

clear (waste tax) objectives. So there should be no doubt that the TARI is an environmental tax and, like the latter, is a fiscal levy (and not a price linked to a public service)⁷³. This, together with the absence or the difficulty of configuring a synallagmatic relationship, should (contribute to) exclude or marginalise the “proportional tariff”.

⁷³ There can be no doubt that environmental taxes belong to the category of taxes, rather than to that of fees, since, as rightly observed by many, their purpose is to prevent and/or reduce damage to the environment and certainly not to restore it, in line with the European principles of environmental protection under ex art.91 TFEU (where the second paragraph states: «Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that “the polluter should pay”»). See, for example, F. GALLO, *Profili critici della tassazione ambientale*, cit., p. 304 ff., where the following is also effectively noted: «the function of restoring environmental damage undoubtedly exists, but it is a fundamental task of the state and of the regional or local bodies responsible for environmental protection, to be financed through general taxation, and cannot be reduced to a specific service rendered by these bodies in return for the payment of a tax. ... the construction of a tax as a fee, that is, as an instrument for financing the environmental restoration service, would have the effect, unacceptable to the legal system, of “authorising” the polluter to pollute, except in so far as he would then have to bear the costs of the restoration activity» (see *amplius* p. 303 ff.). Already, however, for example: F. GALLO, F. MARCHETTI, *I presupposti della tassazione ambientale* in *Rassegna Tributaria 1999*, p. 137 ff.; C. VERRIGNI, *La rilevanza del principio comunitario “chi inquina paga” nei tributi ambientali*, cit., p. 1626 ff.

Thus, the “polluter pays” principle, as set out in the above-mentioned article of the TFEU, certainly does not translate into an onerous licence to pollute (in return for the payment of a tax), but should rather be read in close connection with the preventive purposes of the precautionary principle, the principle of preventive action, and the principle that environmental damage should as a priority be rectified at source, which precede it in the list contained in art. 191, paragraph 2, cit.; moreover, if it were referred to taxes, it would not be applicable in the absence of a public environmental restoration service, which would be the probable premise of environmental taxes. And it is inevitable that, where it assumes a compensatory (or restorative) content, albeit always possible, though in a residual manner by virtue of the “principles that preventive action should be taken, that environmental damage should as a priority be rectified at source”, which precede it in art. 192, paragraph 2, TFEU, it does not at all follow the path of taxes, to which such content is extraneous.

Incentives for eco-sustainability: proposals for a landscape-integrated approach

Francesca D'Angelo (University of Catania)

Abstract: *The protection of the landscape is not usually considered relevant in EU “green” policies. For this reason, the paper aims to define what kind of impact eco-incentives have on the features of landscapes (not only natural ones, but also cities and villages, industrial sites, infrastructure settings etc.), to suggest the integration of this element within other policies, especially if they concern human activities that may significantly alter the “shape” of the territory.*

Contents: 1. Premise: eco-incentives and the side effects on landscape quality – 2. Landscape versus Environment: complementary but different interests – 3. A case of convergence: the Common Agricultural Policy (CAP) example – 4. A case of conflict: the incentive programs for the production of renewable energy – 5. Conclusions.

1. Premise: eco-incentives and the side effects on landscape quality

Since the 1960s, many States and supranational institutions have recognised the devastating repercussions on environmental resources (air, water, soil etc.) caused by economic development processes. Despite encouraging economic growth, phenomena, such as intensive crops, deforestation, urbanisation, soil covering, and the construction of huge infrastructures, induce a massive waste of environmental resources and permanently affect its multifunctioning. Consequently, the urgency to combine efficiency and competitiveness targets with eco-sustainable standards has gradually entered both international and European institutions' agendas and national policies.

To reach these objectives, the European Union has tried to overcome the traditional *command and control* approach and has based a wide part of its action on various incentive-based programs¹.

¹ In literature, *inter alia*, A.L. BOVENBERG, L.H. GOULDER, *Environmental Taxation and Regulation*, in *Handbook of public Economics*, n. 3, 2002; S. BREYER, *Regulation and its reform*, Harvard University Press, Cambridge 1984, *passim* and p. 261 ff.; M. CLARICH, *La tutela dell'ambiente attraverso il mercato*, in *Dir. Pubbl.*, n. 13, 2007,

Economic incentives², such as *green payments* and other types of help, in fact, turned out to be more capable than regulation and authorisations in successfully encouraging national institutions and economic actors to move towards a *green transition*.

The need to accelerate the achievement of environmental goals has recently led the European Commission to set out a *New Green Deal for the European Union*³, with the purpose of coordinating and implementing European and national strategies in many different environmental areas (food security, air pollution etc.). The recently adopted *EU Recovery Plan (EuRP)*, with its huge investment plan boosted by *Next Generation EU*

p. 219 ff.; P. DELL'ANNO, *Diritto dell'ambiente*, VI ed., Cedam, Padova 2021; C.S. HOLLING, G.K. MEFFE, *Command and control and the pathology of Natural Resource Management*, in *Conservation biology*, n. 2., 1996, p. 328 ff.; R. PARTAIN, *Coordinating Public and Private Sustainability. Green Energy Policy, International Trade Law, and Economic Mechanisms*, Routledge, London 2020; R.B. STEWART, *Markes versus environment?*, European University Institute, Jean Monnet Chair Papers, n. 19, 1995; ID., *A new generation of environmental regulation?*, in *Cap. U. L. Rev.*, n. 29, 2001, p. 21 ff.; ID. *Il diritto amministrativo nel XXI secolo*, in *Riv. trim. dir. pubbl.*, 2004, p. 18 s. In this perspective, S. MORATTI, *Green Deal Europeo: nuove prospettive per la fiscalità dell'energia nelle politiche di gestione dei rischi climatici*, in *Rivista di diritto finanziario e scienza delle finanze*, n. 1, 2020, p. 439 ff., highlights that the impact of human activity on climate change is significant: according to recent studies of the *Intergovernmental Panel on Climate Change (IPCC)*, human activity can be traced back to current phenomena such as global warming, the sea-level rising and the intensification of extreme weather events. See also, G.F. CARTEI (ed), *Cambiamento climatico e sviluppo sostenibile*, Giappichelli, Torino 2013.

² About the incentive measures in the Italian legal framework, see L. BENADUSI, *Attività di finanziamento pubblico: aspetti costituzionali ed amministrativi*, in *Riv. trim. dir. pubbl.*, 1966, p. 890 ff.; E. CROCI, G. PERICU, *Sovvenzioni (dir. amm.)*, in *Enc. Dir.*, XLIII, Giuffrè, Milano 1990; G. PERICU, *Le sovvenzioni come strumento di azione amministrativa*, Giuffrè, Milano 1967; D. SERRANI, *Lo Stato finanziatore*, Franco Angeli, Milano 1971; G.P. MANZELLA, *Gli ausili finanziari*, in S. Cassese (ed) *Trattato di diritto amministrativo. Diritto amministrativo speciale*, IV, Giuffrè, Milano 2003, p. 3752 ff., V. SPAGNUOLO VIGORITA, *Problemi giuridici dell'ausilio finanziario pubblico a privati*, Editoriale Scientifica, Napoli 1964, p. 119 ff.

³ The *Eu Green Deal* acts, starting from the Communication of the Eu Commission COM(2019) 640, adopted in Brussels, 11 December 2019, can be found and read at eur-lex.europa.eu/legal-content/EN/TXT/?qid=1576150542719&uri=COM%3A2019%3A640%3AFIN. See also, G. SEVERINI, U. BARELLI, *Gli atti fondamentali dell'Unione europea su "transizione ecologica" e "ripresa e resilienza": prime osservazioni*, in [giustiziaamministrativa.it](https://www.giustiziaamministrativa.it), 2021.

(described as «the largest stimulus package ever financed in Europe»)⁴, will perform a key role in its implementation.

The above-mentioned measures and strategies will have a relevant impact on national policies: in Italy, for example, a new Ministry for Ecological Transition has been established and the *Italian Recovery and Resilience Plan* (It-RRP), submitted to the EU Commission on May 2021, addresses a high percentage of its resources (almost 37%) to ecological transition⁵. Thanks to the *Recovery and Resilience Facilities* and to the ambitious incentive-based programs supported by the EU, a *green revolution* is about to take place in the coming years.

The starting point of this paper is that the incentivised activities, while positively impacting the environment (the so-called externalities)⁶, can also have a huge impact on the features of landscapes (not only natural ones, but also cities and villages, industrial sites, infrastructure settings etc.).

The side-effects on landscape do not seem to be distinctly considered at a European level, as evidenced by the circumstance that the *eco-conditionality* clause and the *do no significant harm* principle, which Member States must comply with for admission to EURP's next steps, do not include the achievement of specific goals related to landscape quality. Moreover, landscape does not represent a subject of harmonisation⁷, and Eu policies consider the renovation of natural capital (such as biodiversity)

⁴ See: ec.europa.eu/info/strategy/recovery-plan-europe_it. For an overview about the topic, see A. PADOA SCHIOPPA, A. IOZZO, *Globalizzazione e Unione Europea, sfide e strategie. Profili istituzionali del Green Deal*, Torino, Centro studi sul federalismo, 2020; T. ROSEMBUI, *Climate Change and the New Green Deal*, in *Ambientediritto.it*, n. 4, 2019.

⁵ The Italian Plan (available on www.governo.it/it/articolo/piano-nazionale-di-ripresa-e-resilienza/16782) is divided into six missions, articulated in components and lines of intervention. To accelerate the «green revolution» (second mission, dedicated to the “*Green Revolution and Ecological Transition*”), the Plan allocates 59.5 billion euros, almost 70 billion if considering the resources of React-Eu (1.31 billion) and the contribution of the Complementary Fund (9.16 billion).

⁶ The well-known definition was used by J. STIGLITZ, *Economics of the public sector*, II ed., Norton, New York 1988.

⁷ The European Court of Justice (6th March 2014, judgment no. 206), distinguishing environment from landscape, considered the latter extraneous to its competencies. For a deeper analysis of the relevance of the landscape among the International legal framework, see A. STRECKER, *Landscape Protection in International Law*, Oxford University Press, Oxford 2018.

or natural landscapes simply as additional (and merely consequential) externalities of the execution of environmental strategies.

Nevertheless, in the Italian legal framework, the landscape is globally relevant in its cultural, historical and identity assets, and its management must respect the sustainability principle (according to art. 3 *quater* of the Italian Environmental Code). Therefore, the impact caused on its elements by the incentivised activities must be accurately taken into account; in fact, contrary to popular belief, even best environmental practices can affect landscape quality (for instance, as it will be shown in par. 4, wind farms or solar panels are known for their negative visual impact).

Moving from these premises, the questions leading this study are the following: How can incentives to be granted for eco-sustainability purposes be shaped in order to integrate landscape quality targets and avoid the loss of cultural values, without hampering the achievement of Eu environmental goals?; Are there any existing examples of landscape integrated approaches (LIA) which can be used as leading and repeatable pattern?; How can the management of environmental information be improved in order to consider landscape information?; What role could regions perform, both in the management of aid and the monitoring of its results?

In the following paragraphs, the difference between the notions of *environment* and *landscape* in the Italian legal system will be preliminarily reconstructed. Subsequently, an example of incentives that produce positive externalities for both the environment and the landscape at the same time (par. 3) and an example of incentives positively impacting the environment but with negative repercussions for the landscape (par. 4) will be taken into consideration.

In the final paragraph some proposals will be articulated in order to systematically integrate cultural landscape in environmental policies and to grant incentives for eco-sustainability.

2. Landscape versus Environment: complementary but different interests

First of all, it is necessary to recall the distinction between the notion of *landscape* and the notion of *environment* in the Italian legal system in order to explain why these two interests do not necessarily coexist harmoniously and may collide with each other when a best

environmental practice is subsidised or tax facilitated.

Although the Italian Constitutional Court, in recent judgments, tends to consider them as complementary and overlapping⁸, the two above-mentioned notions are linked to different interests and subject to specific and separated disciplines (i.e., Legislative Decree no. 152/2006, known as *Environmental Code*, and Legislative Decree no. 42/2004, *Code of Cultural Heritage and Landscape*). The related administrative functions are also devolved to different administrative authorities at state level (Ministero per la Transizione Ecologica for the environment, and Ministero della Cultura for the landscape).

This distinction, which has historical origins, is currently highly argued among Italian scholars and within the jurisprudence⁹, can be summarised as follows: while the environmental discipline considers the space in its ecological dimension and aims at preserving the biosphere through «*the prudent and rational use of natural resources*» (soil, water,

⁸ In some judgments, the Italian Constitutional Court defined landscape as the “*form of the territory and the environment*” (judgment no. 196/2004), which protection must therefore be intended “*in the broad sense of ecological protection and conservation of the environment*” (see judgments no. 391/1989; and no. 430/1990).

⁹ In one of the first studies on the subject, M.S. Giannini pointed out that the expression “environment” is polysemantic and, from a legal point of view, may indicate three complexes of regulations and movements of ideas: those relating to the landscape, those relating to ecological protection, those relating to urban planning (Id., «*Ambiente*»: *saggio sui diversi suoi aspetti giuridici*, in *Riv. trim. dir. pubbl.*, 1973 and in Id., *Scritti*, I, Giuffrè, Milano 2005, p. 447 ff., esp. p. 455 ff.). See also, M.S. GIANNINI, *Difesa dell'ambiente e del patrimonio naturale e culturale*, now in Id., *Scritti*, VI, Giuffrè, Milano 2005, p. 247 ff. About the distinction between environment and landscape, see also P. CARPENTIERI, *Paesaggio, ambiente, urbanistica: interrelazioni e distinzioni*, in (7) *Ambiente e sviluppo*, 2003, p. 635 ff.; S. FOÀ, *Paesaggio e discipline di settore*, in G. CUGURRA, E. FERRARI, G. PAGLIARI (eds.), *Urbanistica e paesaggio*, Editoriale Scientifica, Napoli 2006; L. PERFETTI, *Premesse alle nozioni giuridiche di ambiente e paesaggio. Cose, beni, diritti e simboli*, in *Riv. giur. amb.*, 2009, p. 1. In a recent paper, P. CARPENTIERI, *Paesaggio, ambiente e transizione ecologica*, in www.giustiziainsieme.it, 2021, affirms the need to keep the two goods distinct to prevent the stronger one (almost always the environment) from “engulfing” the other.

air and climate)¹⁰, the discipline relating to the landscape¹¹ considers the space in its aesthetic and cultural dimension. The former implies the use of objective criteria and canons belonging to scientific fields such as chemistry, physics, biology etc.; the latter concerns the sphere of human perception and implies knowledge in the field of literature, history, anthropology, semiotics etc.

Since they coexist in the same domain (i.e., the physical space taken into consideration), the two interests are often simultaneously involved in the same cases and may relate to each other either in terms of convergence or, because of their distinction, in terms of conflict.

The following study aims at showing that incentive programs must carefully recognise the features of this relationship.

In particular, in the first case (i.e. convergence), positive externalities for the quality of the landscape should be addressed and maximised. The importance of this aspect is underlined by the fact that the Italian discipline of landscape protection is mainly based on a conformative model (recalling the traditional *command and control* pattern) and is often unable to counteract phenomena linked to omissive conducts, such as cultivation abandonment, depopulation of inland areas, physiological erosion of materials, or desertification, which may cause a deterioration of the landscape. The incentives provided for other purposes (such as the environmental ones) but with positive returns for the landscape, can therefore fill this regulatory gap and contribute to the

¹⁰ See article 2 (1) of the Italian Environmental Code. However, it should be considered that art. 5 defines “environmental impact” as the “*significant effects, direct and indirect, of a plan, programme or project, on the following factors: population and human health; biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; territory, soil, water, air and climate; tangible property, cultural heritage, landscape*” therefore, referring to a broad and all-encompassing notion of environment.

¹¹ According to the European Landscape Convention (Florence, 2000), “Landscape” means “*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*”. About the definition of «landscape» in the Italian legal system, starting by the article 9 of Constitution, a key role has been performed by a well-known paper of A. PREDIERI, *Paesaggio (voce)*, in *Enc. Dir.*, XXXI, Milano, Giuffrè 1981. See also, for an overview, P. CARPENTIERI, *La nozione giuridica di paesaggio*, in *Riv. trim. dir. pubb.*, n. 2, 2004, p. 363 ff.; S. AMOROSINO, *Introduzione al diritto del paesaggio*, Laterza, Roma-Bari 2010, p. 37 ff.; E. BOSCOLO, *Appunti sulla nozione giuridica di paesaggio identitario*, in *Urbanistica e appalti*, n. 7, 2008, p. 797 ff.

achievement of the quality targets established in the landscape planning acts¹².

On the other hand, if the incentivised activities produce positive externalities for the environment but lead to a significant decrease of landscape quality (the second case considered in this paper), the impact should be carefully analysed and, as far as possible, minimised, in order to prevent irreversible damages.

Below, we will consider some examples of incentives with significant externalities for the landscape in order to highlight existing patterns of integrated approach. We will show those to be replicated and some dysfunctions, as well.

3. A case of convergence: the Common Agricultural Policy (CAP) example

An example of incentives that may have positive repercussions on the landscape is represented by agricultural aid.

Agricultural practices, in fact, significantly impact the configuration of landscapes, imprinting on them special features which are strictly related to Italian identity, history and traditions (shaping a particular category of landscape, generally defined *farmed or rural*)¹³. Consequently, the rural policies developed at different government levels (European, national, and regional) and the financial aids granted to farmers, affecting the quantity and techniques of production¹⁴, have several repercussions on the “appearance” of rural landscapes.

¹² For example, Article 143(para. 8) of the Cultural Heritage and Landscape Code expressly states that the landscape plan may identify “*incentive measures*” for the implementation of projects aiming at conservation, recovery, redevelopment, enhancement and management of regional areas, with particular reference to areas “*significantly compromised or degraded*”. About the role of landscape planning in the Italian legal system, see G.D. COMPORI, *Piani paesaggistici (ad vocem)*, in *Enciclopedia del Diritto*, Annali, V, Giuffrè, Milano 2012, p. 1047 ff.

¹³ According to the well-known definition of Emilio Sereni, a rural landscape represents “*the form that man, in the course and for the purposes of his agricultural production activities, consciously and systematically imprints on the natural landscape*” (E. SERENI, *Storia del paesaggio agrario italiano*, Laterza, Bari 1982, p. 29). See also E. DEL MASTRO, *La tutela del paesaggio rurale: tendenze evolutive a livello nazionale e comunitario*, in *Aedon*, n. 2, 2005.

¹⁴ It has to be considered that farmers generally orientate their decisions on the basis of economic reasons, i.e. the exchange price of the goods and the subsidies on which they can rely on.

It should be noted that the above-mentioned impact is not necessarily positive, as demonstrated by a brief recap of the historical evolution of the related discipline.

In fact, in the beginning, the Common Agricultural Policy (CAP, instated in 1962)¹⁵, pursuing the objective of maximising production, encouraged the specialisation and simplification of the cultivation systems, with the extension of monoculture and livestock. Viticulture, olive, fruit, and vegetable cultivation, animal husbandry and dairy production have all been involved in this intensification of production, impoverishing the quality of the landscape¹⁶.

Since the 1990s, however, the Common Agricultural Policy has begun to recognise the so-called multifunctionality of agriculture (recognised for the first time in 1992 during the *Earth Summit* in Rio and merged into *Agenda 2000*), which consists in the capacity of agriculture to produce not only food but also additional utilities, such as ecosystem services (ES) and, for what is relevant for the purpose of this study, the

¹⁵ About the CAP, in general terms, see D. BIANCHI, *La politique agricole commune*, Bruylant, Bruxelles 2006, p. 30 ff.; L. COSTATO (ed), *Trattato breve di diritto agrario italiano e comunitario*, Cedam, Padova 2003, p. 201 ff.; A. FIORITTO, *Agricoltura (amministrazione della)*, in *Dig. disc. pubbl.*, vol. I, UTET, Torino 1987, p. 115 ff.; A. FORTI, *Sulla adeguatezza delle misure ambientali contenute nella Pac2014-2020 rispetto all'obiettivo della tutela dell'ambiente e del territorio agrario: una questione di punti di vista*, in *Studi in onore di Luigi Costato*, I, *Diritto agrario e agroalimentare*, Jovene, Napoli 2014, p. 369 ff.; A. SORRENTINO, L. CACCHIARELLI, M. RONCHINI, *I profili economici della nuova Politica Agricola Comunitaria*, in I. CANFORA, L. COSTANTINO, A. JANNARELLI (eds), *Il Trattato di Lisbona e la nuova PAC. Atti del convegno di Bari 27-28 marzo 2014*, Cacucci, Bari 2014.

¹⁶ As noticed by M. BROCCA, *Paesaggio e agricoltura a confronto. Riflessioni sulla categoria del paesaggio agrario*, in *Riv. giur. ed.*, 2016, n. 1, p. 1 ff., and D. SALPINA, *How sectoral policy can benefit the protection of multi-functional cultural heritage? The case of agricultural landscape and the EU rural development policy*, in *Aedon*, 2019. An analytical description of the changes that the rural landscape has undergone since the Second World War, also due to the alternation of different policies is reported in the *Primo Rapporto sullo stato del Paesaggio Rurale*, realised by Osservatorio Nazionale dei Paesaggi Rurali, delle pratiche agricole e conoscenze tradizionali, Laboratorio del Paesaggio e dei Beni Culturali (CULTLAB), Università degli Studi di Firenze, settembre 2018. See also the *Rapporto sullo stato delle politiche per il paesaggio, Osservatorio nazionale qualità del Paesaggio*, in www.beniculturali.it, p. 254 ff.

care of rural landscapes, which generally do not have market value¹⁷ but are susceptible of integration into the local economy, contributing to the overall well-being of an area¹⁸.

As a consequence of this change of perspective, the conservation and enhancement of the rural landscape, initially considered as an indirect and accidental product of agricultural activity, has been progressively included in the objectives to be achieved within the CAP¹⁹ and expressly incorporated into financial aid planning.

In this direction, the traditional price support measures – which characterised the first phase of the CAP – have been substituted with direct payments to farmers, aiming at remunerating them for the production of additional services, which includes the care of rural landscapes²⁰. This

¹⁷ Landscape is sometimes classified as “public good”, other times “common good”, while it is generally accepted that landscape is an “out-of-market” good, and it is not spontaneously produced for economic purposes. For example, the Report *Public Goods and Public Intervention in Agriculture* (European Network for Rural Development, www.enrd.ec.europa.eu) states that, when the market is unable to meet the demand for environmental goods such as biodiversity or cultural landscapes, “public policies must be implemented to encourage the necessary action. This requires the establishment of clear rules as the starting point of an eligible action or, in many cases, the use of public funds to incentivise supply”.

¹⁸ See A. FARINA, *The cultural landscape as a model for the integration of ecology and economics*, in *Bioscience*, n. 50 (4), 2000, p. 313 ff.; L. SCHALLER, S. TARGETTI, *Agricultural landscapes, ecosystem services and regional competitiveness. Assessing drivers and mechanisms in nine European case study areas*, in *Land Use Policy*, n. 76, 2018, p. 735; J. SAYER, T. SUNDERLAND et al., *Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses*, in *Pnas*, n. 110 (21), 2013, in www.pnas.org; I. ZASADA, *A conceptual model to integrate the regional context in landscape policy, management and contribution to rural development: Literature review and European case study evidence*, in *Geoforum*, n. 82, 2017, p. 1. About the multifunctionality of agriculture, see R. HENKE (ed), *Verso il riconoscimento di una agricoltura multifunzionale. Teorie, politiche, strumenti*, Edizioni Scientifiche Italiane, Napoli 2004; G.A. PRIMERANO, *Il carattere multifunzionale dell'agricoltura tra attività economica e tutela dell'ambiente*, in *Dir. Amm.*, n. 4, 2019, p. 837 ff.

¹⁹ See, for example, the EEC Regulation no. 2328/1991, which empowers States to grant aid in sensitive areas from the point of view of the protection of the environment, the conservation of the countryside and the landscape. See also EEC Regulation No. 2078/1992, which aims at promoting the use of agricultural production methods which reduce the polluting effects of agriculture, a land management in a manner compatible with environmental protection and the care of abandoned agricultural and forest land.

²⁰ G.A. PRIMERANO, *Il carattere multifunzionale dell'agricoltura*, cit., p. 837 ff.

remuneration is no longer tied to the volume of production (the so-called decoupling) and is contingent on compliance with the conditionality clause²¹ (first pillar of the CAP). In particular, the Eu Regulation (n. 1307/2013), embraced a “*targeted approach*”, introducing seven multifunctional payments, each one with specific objectives; among them, the “green” component is relevant, which is a form of compensation for providing environmental public goods that are not remunerated by the market²².

Moreover, within the framework of the second pillar of the CAP (rural development policy), various incentive measures with potential benefits for the landscape are envisaged, such as investments in fixed assets, agri-environment-climate payments and village renewal services in rural areas. These measures must be structured through national plans, and cascading, from the regions, through the regional strategic plans, which play a pivotal role in the management of aid²³. A systematic analysis of the measures foreseen in regional plans and of their impact on the landscape was carried out in 2018 by the *Italian Institute of Services for the Agricultural Food Market* in collaboration with the Ministry of Agricultural, Food and Forestry Policies²⁴.

²¹ As highlighted by M. BROCCA, *Paesaggio e agricoltura a confronto*, cit., the “*minimum level of landscape maintenance*” appears in the specification of the statutory management requirements under which the conditionality rule is based (reg. n. 1306/2013). About the conditionality clause, see L. RUSSO, *La condizionalità da condizione a fine*, in *Riv. dir. agr.*, 2007, I.

²² It is stated that member States must allocate 30% of their national envelope of direct payments to the financing of the green component.

²³ The European Union’s rural development policy was introduced as the second pillar of the CAP under the *Agenda 2000* reform. It is co-financed by the European Agricultural Fund for Rural Development (EAFRD) and regional or national funds. In the 2014-2020 multiannual financial framework, some EUR 100 billion were allocated to rural development in the EU budget, with an additional EUR 61 billion being provided by the Member States as national co-financing for such measures. In the context of the CAP reform the July 2020 agreement on the multiannual financial framework foresees a 19% decrease in Pillar II appropriations compared to the previous period; the *Next Generation EU* Fund will reinforce the EAFRD budget by EUR 8 billion to help rural areas make the necessary structural changes to achieve the objectives of the European Green Deal and the Digital Transition Pact. For more details, see: <https://www.europarl.europa.eu/factsheets/en/sheet/1110/il-secondo-pilastro-della-pac-la-politica-di-sviluppo-rurale>

²⁴ Report *Le principali misure che impattano sul paesaggio rurale: un’analisi dei bandi regionali 2014-2020* (available on www.reterurale.it).

It should also be noticed that the reform of the Common Agricultural Policy (CAP 2023-2027, which has been the object of a provisional political agreement signed in June 2021 between the negotiators of the European Parliament, the EU Council, and the European Commission), shows an increasing attention to the needs of landscape protection. In fact, in accordance, not only with the *Green Deal* but also with the new *European Biodiversity Strategy 2030*, the protection of the landscape is one of the nine *specific objectives* of the future CAP, as proposed by the European Commission²⁵.

The above-mentioned example represents an interesting and strong model of landscape integrated approach, namely not simply aware of the potential positive repercussions that the incentivised activities may have on the landscape but also finalised to incorporate these externalities in the granting of aid, in order to support and maximise the benefits for landscape quality.

This model can be replicated with reference to other incentive programs that, in various ways, encourage activities which may potentially have a positive impact on the landscape, for example, reforestation, bonification or the recovery of abandoned industrial sites, the so-called brownfields (*infra*, para. 5).

4. A case of conflict: the incentive programs for the production of renewable energy

As previously mentioned, it is important to acknowledge that the environment and landscape represent similar yet different interests. This leads to the consideration of an opposing hypothesis to the one discussed earlier, namely that economically incentivised activities, even if they produce positive externalities for the environment, are at the same time detrimental to the landscape quality.

A paradigmatic example of such a conflict is represented by the incentives aimed at supporting the construction of plants for the production of renewable energy: eolic, photovoltaic, biomass, mini-hydroelectric and so on.

The construction and activation of these plants are essential to achieving the objectives of reducing emissions of climate-changing gases. These objectives have been in place since 1997, marked by the signing of

²⁵ See the summary at: ec.europa.eu/info/sites/default/files/food-farming-fisheries/key_policies/documents/cap-specific-objectives-brief-6-biodiversity_en.pdf.

the *Kyoto Protocol*, and have been progressively reinforced over time, until arriving at the recently-approved *European climate law*²⁶, which aims to reduce emission levels from 40%²⁷ to almost 55% by 2030 (compared to 1990' levels) and to achieve climate neutrality by 2050. In order to reach these goals and to foster the development of the *green sector*, several programs have been enforced since the 1980s to encourage private investments, through the provision of different incentive tools, such as Green or White Certificates, the all-inclusive tariff, the so-called “Energy Account” and European, national and regional contributions²⁸.

However, the quick and disordered spread of such plants has soon revealed its impactful attitude on the morphology of the territory. Photovoltaic plants, for example, are known for their negative impact on rural areas or on city views (if placed on the roofs of houses); similarly, offshore wind farms are highly contested because they may alter the views of the skyline that can be enjoyed from the sea and vice versa²⁹. Another significant example is represented by onshore wind farms: entrepreneurs, in fact, tend to locate these plants on the top of mountains or hills that constitute areas with higher wind speed, but, at the same time, these

²⁶ See www.europarl.europa.eu/news/it/press-room/20210621IPR06627/legge-ue-sul-clima-approvato-l-accordo-sulla-neutralita-climatica-entro-il-2050.

²⁷ The EU is also party to the Paris Agreement on climate change (submitted in 2015), which aims to keep global warming well below 2°C, while making efforts not to exceed 1.5°C. The EU's “nationally determined contribution” aims at a 40% reduction of greenhouse gas emissions by 2030, compared to 1990 levels. See G. ROSSI, *Diritto dell'ambiente*, 4th ed., Giappichelli, Torino 2017; M. CAFAGNO, *Principi e strumenti di tutela dell'ambiente*, Giappichelli, Torino 2007.

²⁸ The characteristics of these different tools and the evolution of the related discipline, starting from the process of liberalisation of the renewable energy market (Italian law no. 308/1982) and the regulation of the access to incentive tariffs (Law no. 9/1991, strengthened by Legislative Decree n. 79/1999), are summarised by G.M. CARUSO, *Fonti energetiche rinnovabili*, in G. ROSSI (ed), *Diritto dell'ambiente*, 4th ed., Giappichelli, Torino 2017, p. 408 ff. As evidenced, a key role was performed by the Legislative Decree no. 28/2011 (transposing the Directive EEC/ 2009/28), subsequently amended by the Decree-Law no. 91/2014 (so-called “Incentive Decree for renewables”), which marked a reversal of the trend, providing with retroactive effect the remodulation of economic incentives, considered too burdensome. See also F. FRAYSSE, *Fra protezione e competitività: le politiche pubbliche in campo ambientale*, in E. CASTORINA (ed), *Lezioni di diritto comparato dei servizi pubblici*, Editoriale Scientifica, Napoli, 2017, p. 19 ff.

²⁹ The first project in Italy aiming at building an off-shore plant coast regards the Molise region and, more precisely Termoli.

locations have great landscape value and, in almost all cases, are subject to constraints (called “vincolo paesaggistico *ex lege*”) imposed since 1985 by law no. 431 (the so-called Galasso law).

The construction of wind farms therefore requires a necessary balance between landscape protection and the production of energy from clean and renewable sources³⁰.

Despite its importance, this issue has not been considered systematically in the Italian legal system, and the achievement of a balance between the two interests has been substantially left, on a case-by-case basis³¹, to individual authorisation procedures, currently disciplined by art. 12 of Legislative Decree no. 387/2003 and attributed to the competence of the single region or the State, depending on the power of the installation. It is an integrated procedure, which provides for the participation of all the administrations involved (including those responsible for the protection of the landscape and the release, if necessary, of the landscape authorisation³²) within the framework of a conference model defined *conference of services* (regulated by law n. 241/1990)³³.

Moreover, in order “*to ensure a correct insertion of the plants, with specific regard to the landscape*” the above-mentioned art. 12, par. 10,

³⁰ In the literature, see F. DE LEONARDIS, *Criteri di bilanciamento tra paesaggio e energia eolica*, in *Dir. amm.*, 2005, p. 892 ff. More recently, see M. MELI, *Quando l'ambiente entra in conflitto con sè stesso, fonti energetiche rinnovabili e tutela del paesaggio*, in *Ambienteditto.it*, n. 2, 2021; M. SANTINI, *Ambiente e paesaggio tra conflitti valoriali ed istituzionali*, in *Urb. app.*, n. 3, 2020, p. 301 ff.

³¹ About the need for a synchronic assessment of public interests in the context of an administrative procedure, see Constitutional Court, judg. no. 69/2018 and, more recently, no. 177/2021, where is declared the constitutional illegitimacy of a regional legislation “*that does not respect the reservation of administrative procedure and, therefore, does not allow to operate a concrete balance of interests, strictly adhering to the specificity of the places, prevents the best enhancement of all the public interests involved and, consequently, violates the principle, in accordance with European Union legislation, of the maximum diffusion of plants from renewable energy sources*” (*inter alia*, judg. no. 286/2019, no. 106/2020, no. 69/2018, no. 13/2014).

³² The landscape authorisation, disciplined by art. 146 of lgs. decree n. 24/2004, is required only for those areas which are bounded for landscape purposes.

³³ About the mechanisms disciplined by the Legislative Decree no. 387/2003, M. SANTINI, *Ambiente e paesaggio*, cit., p. 302, underlines that “complexity” has promptly transformed itself into a “complication” from a regulatory and an administrative point of view.

settled the approval of specific guidelines³⁴, on which basis the Regions may indicate areas and sites *not suitable* for the installation of specific types of plants. In particular, par. 17 of the above-mentioned guidelines (adopted, seven years later, by ministerial decree of 10 September 2010) states that each region, on the basis of a specific inquest, proceeds to indicate, in the planning act, the unsuitability of each area in relation to “specific types and/or sizes of plants”, justifying the incompatibilities with reference to the protection objectives pursued. Moreover, it should be noted that the judgement of unsuitability formulated by the Region does not (*recte*, should not) represent an absolute prohibition to the plants but expresses a high probability of a negative outcome of the case-by-case conducted evaluation and, therefore, has the function of “accelerating” the procedure (Guidelines, par. 17.1)³⁵.

In practice, the lack of systematic planning and a prior definition of the areas “*suitable*” for renewable electricity farms, led the superintendent to systematically deny the authorisation of such installations, especially wind farms, considering wind turbines *tout court* harmful to the landscape (without a global and systematic assessment of the different interests coexisting on the territory)³⁶; furthermore, even outside the bounded areas (the so-called buffering areas), these authorities have often expressed negative legal opinions, blocking the construction of the plants (or, in any case, giving rise to numerous contentions) and

³⁴ To be adopted by the Unified Conference, on the proposal of the Minister of Productive Activities, in agreement with the Minister for the Environment and Protection of the Territory (today: Ministero per la Transizione Ecologica) and the Minister for Cultural Heritage and Activities (today: Ministero della Cultura). The guidelines were adopted, seven years later, by ministerial decree of 10 September 2010. As the Constitutional Court has repeatedly specified (most recently, in judgment no. 177/2021; but see also jud. no. 106/2020 and no. 86/2019) these guidelines form expression of the “loyal collaboration” between the State and the Regions and “*constitute, in purely technical sectors, the completion of the primary legislation*”; therefore they “*have mandatory nature and must be applied uniformly throughout the national territory*”.

³⁵ *Inter alia*, TAR Sardegna, II, decision no. 573/2020.

³⁶ During the authorisation procedures, a plant is evaluated individually, often without taking into account other plants already authorised or existent in the same territorial context: as evidenced by the Minister of Culture, this limits the necessary and fundamental evaluation of the cumulative effects, which may be greater than the sum of the impacts individually evaluated (especially if considering projects of different types and sizes).

causing the nullification of several investments³⁷.

The conflict between the two interests, in short terms, has allowed a “hyper protection” of the landscape (accentuating the conflict relating to the environment and between the administrations). Consequently, it has prevented Italy from achieving the objectives of spreading renewable energy and has also paralysed the development of the related market sector.

The high number of constraints (including landscape constraints) to the construction of such farms has therefore led to the paradoxical outcome of “discouraging” the use of incentives: between 2020 and 2021, for example, many auctions banned by the Gestore dei Servizi Energetici (GSE) for the allocation of incentives have gone deserted. In addition, according to the *Observatory on renewable electricity sources* created by Anie Rinnovabili (the manufacturers of devices and plants), new photovoltaic, wind and hydroelectric installations reached a total of 181 megawatts of power in the first quarter of 2021, a slight increase of +2% (compared to the 1st quarter of 2020). The results are diversified: positive for photovoltaic (+32%) and highly negative for hydroelectric (-79%) and wind (-31%)³⁸.

To stem this paradoxical effect, the Italian legislator has intervened many times in order to simplify the decision-making process and to reduce the powers of interference and veto of the Soprintendenza in the procedure for the authorisation of electricity plants from renewable sources, especially with regard to not bounded and buffering areas (see, in particular, the changes made by the decree law no. 77/2021, which, among other novelties, has taken away the power to oppose the final determination

³⁷ It should be noticed that the Guidelines provide for the intervention of the Soprintendenze, with the expression of a legal opinion, also in the case of interventions to be carried out in non-bounded areas, but «buffering» (in Italian, “contermini”) to those. The Guidelines qualify as buffering or bordering the areas that fall within a radius of 6/7 kilometers (50 times the height of wind towers) from the plant. As highlighted by S. AMOROSINO, “Nobiltà” (dei proclami politici) e “miseria” (dell’amministrazione ostativa) in materia di impianti di energia da fonti rinnovabili, in *Riv. giur. ed.*, n. 6, 2020, p. 497 ff. the consolidated practice of Soprintendenze is in the sense of considering the bordering areas equivalent to those bounded, asserting the legal opinion as binding and impeding the positive conclusion of the v.i.a. proceeding.

³⁸ www.anie.it/osservatorio-fer-giugno-2021

of the conference of services from the Ministry of Culture)³⁹.

Nevertheless, while responding to the appreciable need to “unlock” a sector congested by excessive constraints and to foster the reaching of climate goals, such a solution risks radically reversing the situation, preventing a careful consideration of the repercussions on the landscape quality, and avoiding an effective integration of the landscape in environmental protection policies (moreover, it does not appear capable of significantly reducing litigations and, on the contrary, may lead to an increase of them).

In order to ensure a more equitable balance between the two different interests, and to prevent the stronger one from “engulfing” the other, a proposal already formulated by the *Osservatorio nazionale per la qualità del paesaggio* (established at the Ministry of Culture), shall be taken into account. According to this proposal, it is necessary to implement territorial planning within the scope to identify the areas “suitable” for the production of electricity from renewable energy sources (surpassing, therefore, the negative approach of “not suitable” areas currently indicated by the Guidelines of 2010)⁴⁰. The identification of these areas should also

³⁹ The decree law was converted by Law no. 108 of 29 July 2021. In detail, article 30, modifies the regulation of the authorisation procedure for the construction of electricity production plants powered by renewable sources located in areas bordering those protected by landscape legislation. In the first paragraph it is provided that the Ministry of Culture participates in the procedure concerning these plants, including interventions connected and the infrastructures essential for the construction and operation, located in both bounded and buffering areas. In the procedures for authorising plants located in buffering areas, the Ministry of Culture expresses a non-binding legal opinion itself in the context of the conference of services. After the deadline for the delivery of the opinion has elapsed, the competent administration shall in any case decide about the authorization. In all cases, the representative of the Ministry of Culture can no longer activate the administrative remedies in opposition, against the determination of conclusion of the conference. In this regard, M. MELI, *Quando l'ambiente*, cit., highlights how the indication that the location of the plants is allowed even in bounded and buffering areas is imprecise and raises doubts of constitutional legitimacy, considering that the protection of the landscape has an anchor in the art. 117 of the Constitution, with respect for international obligations (i.e., the European landscape convention).

⁴⁰ The proposal is contained in a document from 15 December 2015, and called “*Wind Farms and Landscape – Summary notes on the state of the art and proposals for the definition of Lines of action by the MiBACT*”, available on the Ministry’s website (www.beniculturali.it/mibac/export/MiBAC/sito-MiBAC/MenuServizio/Osservatorio-paesaggio/Documenti/index.html). In the document, the Italian experience is compared with other European countries, where the installation of wind farms is the subject of a set

be integrated with the regional landscape plan⁴¹, which application is subjected to the *Code of Cultural Heritage and Landscape* that provides a concerted procedure between the State and Regions and, therefore, guarantees an adequate dialogue between the different authorities, preventing the Regions from an excessively wide use of the power of location. Environmental and landscape associations should also be involved in this process of planning and identifying areas intended to host the plants.

Furthermore, within the “*suitable areas*”, specific systems of competition between operators should be activated, in order to “reward” those projects better able to reconcile the needs of production with the protection of cultural heritage and landscape (see the case of offshore plants). In this direction, the procedures of “revamping” (general restructuring of the plant) or “repowering” (*i.e.*, upgrading to more efficient machines) of old or lower power producing farms should also be made more effective.

5. Conclusions

According to article 5 of the *European Landscape Convention*, signed in 2000 in Florence, “*each Party undertakes: [...] d) to integrate landscape into its regional and town planning policies and in its cultural, environmental, agricultural, social and economic policies, as well as in any other policies with possible direct or indirect impact on landscape*”⁴².

As shown in the previous paragraphs, the need to integrate the

of rules that concern, in an integrated way, the territorial planning of the plants, the guidelines for their construction and future disposal, the assessment of impacts (on both the environmental and the landscape). It is relevant, for example, the Positionpapier Windenergie of the Swiss Confederation; in Germany, the different levels of territorial planning, from that of the Lan, to large areas and the municipal scale, contain more precise identifications of the areas in which it is possible to propose wind farms, elaborated in collaboration with the Umweltverbaende (the associations representing the different environmental interests). The proposal is also mentioned by M. SANTINI, *Ambiente e paesaggio*, cit., p. 302.

⁴¹ About the landscape plan, see G.F. CARTEI, *Il paesaggio*, in S. CASSESE (ed), *Trattato di diritto amministrativo, Diritto amministrativo speciale*, II, Giuffrè, Milano 2003, p. 2109 ff.; G.D. COMPORTEI, *Piani paesaggistici* (ad vocem), in *Enciclopedia del Diritto*, Annali, V, Giuffrè, Milano 2012, p. 1047 ff.

⁴² The same principle is expressed by the *Carta Nazionale del Paesaggio*, prepared by the *Osservatorio nazionale per la qualità del paesaggio* and presented to the Ministry of Culture in 2018.

landscape within other policies (namely, to carefully consider the specific impacts of any initiative on the landscape quality, even if positive) is relevant not only with regards to the traditional *command and control* pattern (in order to justify the setting of boundaries to individual freedoms or the denials opposed to the granting of authorisations) but even in the case of implementing incentive strategies, especially if it regards human activities that may significantly alter the “shape” of the territory.

The adoption of a landscape-integrated approach in a systematic way appears even more urgent if we consider that many of the massive programs envisaged by the Italian Recovery and Resilience Plan may have severe repercussions on the landscape, which must be carefully analysed, planned and, as appropriate, maximised or minimised, in a short, medium, and long-term perspective.

The intervention programs that not only directly concern environmental policies but also have positive implications for the landscape, some of which are included in Mission 2 (named *Green Revolution and Ecological Transition*) could be considered, providing reforestation and forest protection measures as well as improving the quality of inland and marine waters. Waters and forests, in fact, not only perform extremely important functions for the environment, but also represent significant components of the landscape. Their protection or restoration can therefore contribute to enhancing the quality of the latter. Alongside the measures concerning environmental policies, the It-RRP sets additional measures in other fields that are able to contribute to the improvement of landscape quality, one of which could be considered Mission 5 (named *Inclusion and Cohesion*), which provides investments for the recovery and regeneration of buildings and urban territories, with particular attention to suburbs and internal areas as well as the construction of urban parks, to counteract urban degradation. The first mission of the third component (*Tourism and culture*) may also be considered, which proposes numerous investments in many relevant areas, such as the enhancement of cultural and historical sites of the main metropolitan cities; interventions in small, historic and rural villages; actions in support of slow tourism etc.

In these cases, the article shows an interesting existing pattern of landscape integrated approach, which is able to be replicated, represented by the subsidies provided in the agricultural sector. In the granting of aid, the care of the rural landscape is in fact considered as a relevant element,

to which a part of the subsidy is specifically addressed (*supra*, para. 3).

In contrast, additional programs of the It-RRP show a clear attitude to negatively affect the landscape, for example, a third of the total resources is allocated to incentives for the construction of renewable energy plants in order to generate 70 gigawatts of green energy, a necessary step in achieving a 55% reduction in carbon dioxide emissions currently produced by gas and coal-fired power plants, which make up 60% of the existing plants. Moreover, according to the *Annual Sustainable Growth Strategy 2021(Com2020-575)*, almost 37% of resources must be allocated to the green transition and climate goals, which, as shown in par. 4, do not necessarily reconcile with the needs of landscape protection⁴³.

In similar cases, the adoption of an integrated approach is more problematic, as it implies the acceptance of a sacrifice for one of the different interests. As highlighted in the paper (*supra*, par. 4), such a conflict is accentuated when the search for a balance between the two interests is deferred to decisions and assessments conducted on a case-by-case basis, in the absence of a prior definition of homogeneous criteria and parameters aimed at guaranteeing a more equitable balance.

Therefore, the initiatives that can be taken in this regard require a more intense collaboration between the different administrations, aimed at finding shared intervention strategies and keeping the sacrifice of the opposite interests at a minimum level⁴⁴. In order to reach an effective integration, a key role should be performed by landscape planning. It should contain a series of guidelines and directives to reconcile human activities that take place in a certain area with its landscape features and the pursuit of quality objectives.

Nevertheless, even in these cases, it cannot be excluded (and, indeed, it should be encouraged) that the incentives provided for environmental purposes could be “shaped” in order to “reward” those interventions that, with the same result, involve a lower sacrifice for the landscape.

⁴³ COM(2020) 575 final “*All national recovery and resilience plans will need to focus strongly on both reforms and investments supporting the green transition. To follow the commitment of the European Council to achieve a climate mainstreaming target of 30% for both the multiannual financial framework and Next Generation EU, each recovery and resilience plan will have to include a minimum of 37% of expenditure related to climate*” (eur-lex.europa.eu/legal-content)

⁴⁴ As evidenced by M. MELI, *Quando l'ambiente*, cit., a certain willingness to reach a compromise by the administrations is required but not always present.

In addition to “shaping” the attribution of the benefit in order to consider the impacts on the landscape (and, therefore, to intervene before the event, during the definition of the policies), it is also essential to evaluate after the event. (that is to say, once the incentivised activity has been undertaken) the concrete impacts on the landscape. This is meant to verify if there are deviations from expectations, to collect best practices (to be replicated) and, if necessary, make corrections. In addition to the involvement of technical expertise (normally involved in the landscape authorisation procedure or in environmental procedures), the participation of third sector entities and local communities (through the so-called “crowdsourcing”)⁴⁵ can also offer useful evaluation elements and data on the variation in the landscape perception, facilitating the overall assessment.

⁴⁵ A. COMBER, P. MOONEY, R.S. PURVES, D. ROCCHINI, A. WALZ, *Crowdsourcing: it matters who the crowd are. The impacts of between group variations in recording land cover*, in *PLoS One*, 11 (7), 2016.

Sustainability “in action”, from rhetoric to public politics

Francesca Leotta (University of Catania)

Abstract: *The paper aims to analyse the enforcement of the principle of sustainable development in the Italian legal system through the legislative provisions on «BES» indicators.*

Contents: 1. Sustainability in International Declarations: just a “Rhetorical Device”? – 2. The Introduction of Sustainability in the Italian Legal System – 3. «BES» Indicators in Italian Accounting and Public Finance Law - 4. Conclusions.

1. Sustainability in International Declarations: just a “Rhetorical Device”?

The concept of “sustainable development” is as pervasive as it is undefined, but maybe this is the secret of its success, which has been growing since the 1970s¹.

The first hints can be found with specific reference to the environmental context. At the *United Nations Conference on the Human Environment* (1972)², a link between economic development and the protection of the environment was designed, according to an anthropocentric view of nature as a source of material sustenance of men, to be preserved for future generations. Among the 26 principles of the *Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration)*, adopted during the forum, the need to define a rational and shared use of resources was mentioned several times, as well as the need to promote the development of

¹ The bibliography on the concept of sustainable development is huge and it is not possible to recall it in a comprehensive way: see, among others (both in English and Italian), D. PEARCE, *Economics, equity and sustainable development*, in *Futures*, Vol. 20, Issue 6, 1988, p. 598 ff.; F. LA CAMERA, *Sviluppo sostenibile: origini, teoria e pratica*, Editori Riuniti, Roma 2005; A. LANZA, *Lo sviluppo sostenibile*, IV ed., Il Mulino, Bologna 2006; A. SEN, *Sviluppo sostenibile e responsabilità*, in *Il Mulino*, n. 4/2010, p. 554 ff.; J.A. ELLIOTT, *An Introduction to Sustainable Development*, Routledge, London 2013; J.D. SACHS, *The Age of Sustainable Development*, Columbia University Press, New York 2015; A. GILLESPIE, *The Long Road to Sustainability: The Past, Present, and Future of International Environmental Law and Policy*, Oxford University Press, Oxford 2018; C.A. RUGGERIO, *Sustainability and sustainable development: A review of principles and definitions*, in *Science of The Total Environment*, Vol. 786, 2021.

² Held in Stockholm (5-16 June, 1972).

the poorest countries by using science, technology and education.

Gradually, sustainability has acquired a wider scope, referable to all areas of human action, in response to the economic and demographic growth of the post-war period. The unprecedented exploitation of natural resources and the hegemonic potentates have led to the globalisation of the economy, severe pollution of environmental matrices, exploitation, social inequality, disease and widespread poverty in large areas of the world: sustainability and its enforcement in politics worldwide is considered the imperative base of human development, the only rational way to solve all these problems.

The best-known definition of sustainable development was elaborated in 1987 by the *World Commission on Environment and Development*³, in a report with the evocative title *Our Common Future*: the «development that meets the needs of the present without compromising the ability of future generations to meet their own needs».

This statement - essentially nebulous, except for its marked emphasis on intergenerational solidarity - represents the main reference for the formalisation of sustainability in several international documents: the *Rio Declaration on Environment and Development* along with *Agenda 21*(1992)⁴;

³ Established in 1983 and chaired by a former Norwegian Prime Minister, Mrs. Gro Harlem Brundtland.

⁴ The *Rio Declaration on Environment and Development* was adopted during the *United Nations Conference on Environment and Development* (the so-called *Earth Summit*), held in Rio de Janeiro (3-14 June, 1992), together with *Agenda 21* (a dynamic program of joint actions to address environmental and development issues at international, national and local level), the *United Nations Framework Convention on Climate Change*, the *Convention on Biological Diversity*, the *Declaration on the principles of forest management*. Twenty years after the *Stockholm Declaration*, Principle 1 of the *Rio Declaration* states solemnly that sustainable development is human-centered («Human beings are at the centre of concerns for sustainable development») and principle 3 states that the right to the development of communities must be achieved by equitably taking into account the demands of progress and the environmental needs of current generations with those of future generations («The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations»). See: (in English) J.E. VIÑUALES (ed.), *The Rio Declaration on Environment and Development: A Commentary*, Oxford University Press, Oxford 2015; (in Italian) S. MARCHISIO, *Gli atti di Rio nel diritto internazionale*, in *Rivista di Diritto Internazionale*, n. 3/1992, p. 581 ff.; L. PINESCHI, *La Conferenza di Rio de Janeiro su ambiente e sviluppo*, in *Rivista giuridica dell'ambiente*, n. 3/1992, p. 706 ff.; ID., *Tutela dell'ambiente e assistenza allo sviluppo: dalla Conferenza di Stoccolma (1972) alla Conferenza di Rio (1992)*, in *Rivista giuridica dell'ambiente*, n. 3-4/1994, p. 493 ff.; T. TREVES, *Il diritto dell'ambiente a Rio e dopo Rio*, in *Rivista giuridica dell'ambiente*, n. 3-4/1993, p. 577 ff.

the *Millennium Declaration* (2000)⁵, which affirms eight global objectives (*Millennium Development Goals*) in order to preserve the priceless heritage given to us by nature⁶; the *Johannesburg Declaration on Sustainable Development* (2002)⁷, which emphasises the interconnection between environmental, economic and social profiles of sustainable development, the so-called “three pillars of sustainability”⁸.

Those that were initially considered as development problems related to the environment and natural resources were gradually investigated for their serious repercussions in economic and social terms, especially in the less developed countries, where the undisturbed exploitation of natural capital for the benefit of the strongest economies not only determines very serious risks to the ecosystem, but also exacerbates the already extreme conditions of poverty, hunger, disease, and illiteracy of the local population.

Therefore, from the *Rio Conference* onwards, the concept of sustainable development is variously present in several international conventions, not only those concerning the protection of the environment, but also the ones concerning the protection of human rights and the main economic, social and cultural issues, thus confirming the interconnection between all areas affected by human activities.

States definitely agree on the concept that “development”, viewed as the progress of human civilization, is enriched by many profiles that transcend economic data, in order to highlight the social, cultural, ethical implications, in a perspective of “multilevel” responsibility, which concerns all institutional actors, from the international to the local level.

Nevertheless, until now, the concrete policies in achieving global goals have been very disappointing, due to States rarely joining their efforts in

⁵ Adopted during the *Millennium Summit*, held in New York (6-8 September, 2000). See, among others: A. FODELLA, *Il vertice di Johannesburg sullo sviluppo sostenibile*, in *Rivista giuridica dell’ambiente*, n. 2/2003, p. 385 ff.; G. TAMBURELLI, *La Conferenza di Johannesburg sullo sviluppo sostenibile*, in *Ambiente & sviluppo*, n. 1/2003, p. 33 ff.

⁶ The document expresses the need for a decisive change in development models: «The current unsustainable patterns of production and consumption must be changed in the interest of our future welfare and that of our descendants».

⁷ Adopted during the *World Summit on Sustainable Development*, held in Johannesburg (26 August - 4 September, 2002).

⁸ The declaration poses a political commitment on the part of Member States: «Accordingly, we assume a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development - economic development, social development and environmental protection - at the local, national, regional and global levels».

promoting models of development which are truly fair and balanced for the entire planet.

Be that as it may, the United Nations continue to organise various meetings to verify and relaunch sustainability, including the *Rio+20 Conference (2012)*⁹, during which new guidelines on the green economy were adopted, with specific strategies to finance sustainable development interventions, as well as a *10-Year Framework of Programmes on Sustainable Consumption and Production (10YFP)*.

In 2013¹⁰, a review of the Millennium Global Development Goals began in order to overcome their application challenges, and finally, in 2015, during the *United Nations Summit on Sustainable Development*¹¹, a new global development plan was launched with the resolution *Transforming our world: the 2030 Agenda for Sustainable Development*, which provides a catalogue of 17 *Sustainable Development Goals (SDGs)*¹² together with 169

⁹ *United Nations Conference on Sustainable Development*, organised in Rio de Janeiro (20-22 June, 2012) 20 years after the historic meeting held in 1992. See, among others: P. COMINETTI, S. VERGALLI, *Lo sviluppo sostenibile da Rio 1992 a Rio + 20*, in *Equilibri*, n. 1/2012, p. 57 ff.

¹⁰ At the meeting organised on September 25 in New York by the President of the U.N. General Assembly (*President of the General Assembly's Special Event towards Achieving the Millennium Development Goals*).

¹¹ Held in New York (25-27 September 2015).

¹² «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: 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». On the legal nature of SDGs, see: M. MONTINI, *L'interazione tra gli SDGs ed il principio dello*

operational targets and 244 indicators, to be achieved in 15 years so as to improve people’s living conditions, fight poverty and protect the environment, primarily from climate change.

The declaration accompanying *Agenda 2030* reaffirms the need to harmonise the three pillars of sustainability (economic growth, social inclusion and environmental protection), recalling that they are deeply interconnected for the well-being of individuals and communities.

In the following years, many States have adopted plans to implement *Agenda 2030* (as they had already done for *Agenda 21*), but the COVID-19 pandemic has determined a serious - and probably unrecoverable - delay in achieving the SDGs, as noted in the latest reports drawn up by the U.N. Department of Economic and Social Affairs¹³.

For this reason, in 2022 (50 years after the first meeting on environmental protection) the U.N. General Assembly relaunched international dialogue and cooperation on sustainable development at the meeting *Stockholm+50: a healthy planet for the prosperity of all – our responsibility, our opportunity*¹⁴.

Three general principles of engagement were indicated - intergenerational responsibility, interconnectivity, implementing opportunity - to accelerate the protection of the environment and the achievement of well-being for all. The United Nations is still concerned with all the difficulties that afflict sustainable development policies worldwide, whose results are still very inadequate.

Reviewing the main steps of the international debate, it can be noted that the concept of sustainability is not limited to environmental protection, but also concerns the organisation and conduct of all human activities, due to their capability of improving the life and level of well-being of the

sviluppo sostenibile per l’attuazione del diritto internazionale dell’ambiente, in *federalismi.it*, n. 9/2019, p. 1 ff.

¹³ *The Sustainable Development Goals Report 2021* (<https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf>); *The Sustainable Development Goals Report 2022*, which underlines «the destructive impacts» of the COVID-19 pandemic and of the war in Ukraine «on the achievement of the Sustainable Development Goals» (<https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf>); *The Sustainable Development Goals Report 2023. Special edition. Towards a Rescue Plan for People and Planet* (<https://unstats.un.org/sdgs/report/2023/The-Sustainable-Development-Goals-Report-2023.pdf>)

¹⁴ Held in Stockholm (2-3 June, 2022).

community, both in prosperous economies and in less developed countries, where the need to overcome the major elements of inequality (poverty, hunger, disease, illiteracy, racism, gender inequality, ...) is urgent.

The definition of sustainable development, which has remained formally unchanged by the Brundtland Report, has been enriched over time with new substantial content, moving from an approach (in a negative sense) of limiting the environmental impact caused by development to an approach (in a positive sense) of enhancing the fundamental role of sustainable economic growth in social inclusion, as well as in environmental protection.

In other words, there is an increased awareness - at global level - that economic progress alone is insufficient to increase the well-being of the population, especially if extreme conditions of poverty, discrimination, illness and so on are not overcome by improving the level of social inclusion, which also generates virtuous collective environmental behaviour.

In order to consolidate economic growth over time, it is necessary to improve satisfactory levels of education, health care, social guarantees, protection of environmental resources, as widely as possible, thus making the three pillars of sustainability indissolubly welded in holding the building of development: if the support of one of them is lacking, the entire building is destined to collapse.

These considerations are valid in any context, from the least developed countries to the industrialised ones; for this reason, the formula of sustainable development has remained essentially indeterminate, solely to adapt to the various realities in the world.

Therefore, the essence of this concept can be concretely found in the need for all economic and political actors to avoid any form of exploitation, both of natural and artificial resources, and of human beings and communities themselves, with the aspiration to reach shared levels of development of human society at a global level.

The development of human activities meets the filter of sustainability, which requires the balance of economic interests, which invariably promote growth, with the social needs and the protection of the environment where such activities take place.

The reasons for profit must be combined with those for a more general welfare of the communities on which economic activities spread their (direct and indirect) influence, so as to support the expectations of future generations.

The formula of sustainable development certainly cannot offer unambiguous and predetermined solutions, but it undoubtedly highlights that

all actors involved in (economic, political, social) development have to share long-term perspectives. In addition to taking into consideration the needs of future generations, they have to create activities flexible enough to be easily updated, in order to diminish as much as possible their social and environmental impact.

The vagueness of the sustainable development formula, as pervasive as indefinite, is also reflected on at the juridical level¹⁵.

In the international legal system, its classification is envisaged both as a covenant principle, and as a generally recognised customary rule (by virtue of the constant reference in various international conventions), which therefore binds the action of States in the determination of development policies with regard to future generations¹⁶.

In any case, it is clear that it is not possible to outline a specific prescriptive content, but at most a purely programmatic one, both for legislators and for economic operators called upon to deal with this principle¹⁷.

The fact is that, being a concept so generic to seem “ethereal”, it is substantially impossible to have the certainty of its concrete application except in the most striking cases in which economic interests clearly override the social and environmental ones, negatively affecting the context to which they refer and damaging present and future generations.

2. Introducing Sustainability in the Italian Legal System

These considerations also recur in legal systems where the reference to

¹⁵ P. DELL’ANNO, *Principi del diritto ambientale europeo e nazionale*, Giuffré, Milano 2004, p. 75, underlines the ethical content of sustainability, despite the juridical one. On this point, also see: R. FERRARA, *Etica, ambiente e diritto: il punto di vista del giurista*, in R. FERRARA, C.E. GALLO (eds), *Le politiche ambientali, lo sviluppo sostenibile e il danno*, vol. 1 of *Trattato di diritto dell’ambiente* (directed by R. Ferrara e M.A. Sandulli), Giuffré, Milano 2014, p. 26.

¹⁶ The debate is very intense: see, among others, S. SALARDI, *Il diritto internazionale in materia di sviluppo sostenibile. Quali progressi dopo Rio?*, in *Rivista giuridica dell’ambiente*, n. 3-4/2008, p. 665 ff.; D. PORENA, *Il principio di sostenibilità. Contributo allo studio di un programma costituzionale di solidarietà intergenerazionale*, Giappichelli, Torino 2017, p. 269 ff.

¹⁷ M. MONTEDURO, *Principi del diritto dell’ambiente e conformazione della discrezionalità amministrativa: sviluppo sostenibile e non regressione*, in F. PUBUSA, D. MARONGIU (eds), *Ambiente, paesaggio, territorio. Principi e vicende*, Edizioni Scientifiche Italiane, Napoli 2017, p. 154 ff., considers the principle of sustainable development as «a mantra», not used but abused in its «declamation» in legislation, jurisprudence and doctrine.

sustainable development appears to be more “structured”, from a legal point of view, such as in the Italian system, in which the concept of sustainable development has been included among the cornerstones of environmental protection.

The first references to sustainability can be found in programmatic documents.

For the implementation of the international commitments of *Agenda 21*, we can refer to the National Plan for Sustainable Development (*Piano nazionale per lo sviluppo sostenibile*), outlined by the Ministry of the Environment and approved by the Interministerial Committee for Economic Planning (C.I.P.E.) on 28 December 1993.

In the plan, it is underlined that development can bring a real improvement to the quality of life while remaining within the limits of respecting the environment. The contribution of citizens is considered fundamental in supporting public policies and private economic activities, as well as the integration between environmental issues and production cycles and many other provisions apt to change consumeristic patterns.

Specific attention is dedicated to the selection of sustainability indicators and a national environmental accounting system, given the inability of GDP to represent an exhaustive measure of well-being, especially in terms of the sustainable well-being of future generations.

Linked to the National Plan and to the international debate, many local initiatives for the protection of the environment in economic activities have been promoted over the years, such as the so-called *Local Agenda 21* in regions, provinces and municipalities.

After the Johannesburg Summit in 2002, the C.I.P.E. approved the Environmental Action Strategy for Sustainable Development in Italy 2002-2010¹⁸, proposed by the Minister for the Environment and Land Protection. Four thematic areas were identified to achieve specific objectives according to international guidelines: climate and atmosphere; nature and biodiversity; quality of the environment and quality of life in urban environments; sustainable use of natural resources and waste management.

However, apart from an increased attention to environmental issues, those attempts to promote new development methods have not produced significant results in terms of greater sustainability of human activities,

¹⁸ Resolution no. 57 (2 August 2002). See: M. MONTINI, *La strategia d'azione ambientale per lo sviluppo sostenibile in Italia*, in *Rivista giuridica dell'ambiente*, 2002, p. 405 ff.

probably because of the (limited) conviction that this concept can only work in the sphere of environmental protection, and not in a wider perspective related to economic and social development¹⁹.

In 2008, following an interpretation aimed at enhancing the environmental profile with respect to the other two pillars (economic and social), the reference to sustainable development was included among the principles on the production of environmental law of the so-called Code of the Environment (Legislative Decree no. 152 of 3 April 2006), i.e. the general environmental rules for the adoption of regulations, policies and coordination acts and for contingent and urgent measures (art. 3 bis, paragraph 2, Legislative Decree no. 152/2006)²⁰.

Starting from the well-known definition of the Brundtland Report, art. 3 *quater*, Legislative Decree no. 152/2006 requires that any human activity, legally relevant under the Code, must comply with the principle of sustainable development in order to ensure that the satisfaction of the needs of current generations does not compromise the quality of life and the possibilities of future generations (paragraph 1).

Furthermore, the activity of the public administration must allow the best implementation of the principle of sustainable development, and to this end it is envisaged that whenever a comparative choice between public and private interests, characterised by discretionary power, has to be made, priority consideration must be given to the protection of the environment and cultural heritage (paragraph 2).

In more general terms, paragraph 3 specifies that, given the complexity of the relationships and interference between nature and human activities, the principle of sustainable development is for identifying a balanced relationship

¹⁹ On the weak attention paid to the concept of sustainable development in Italy and its implementation, at least from the 1990s to the early years of the new millennium, see: E. PIZZIMENTI, “Do Paradigms Matter?” *L’istituzionalizzazione dello sviluppo sostenibile in Italia (1992-2006)*, in *Rivista Italiana di Politiche Pubbliche*, n. 1/2008, pp. 109-110, who underlines that in those years Italy proved to be culturally backward and not so much interested in the question, as there was not an integrated elaboration of the relationship between environment and development. Therefore, the process of institutionalisation of the principle of sustainability has been characterised by long moments of stasis (1992-1996), unexpected leaps forward (1997-2001) and sudden reverses (2002-2006). More attention has been paid to the symbolic dimension of the paradigm, neglecting the institutional implementation.

²⁰ Art. 3 bis, Legislative Decree n. 152/2006 was introduced by art. 1, paragraph 2, Legislative Decree no. 4/2008 and then amended by art. 1, paragraph 3, Legislative Decree no. 128/2010.

between the inherited resources to be saved and those to be transmitted; in this way, the principle of solidarity is also included in the dynamics of production and consumption to safeguard and improve the quality of the environment in the future.

Finally, in paragraph 4 it is reiterated that the resolution of issues involving environmental aspects must be seen in the perspective of guaranteeing sustainable development, in order to safeguard natural ecosystems from the negative changes that may be produced by human activities.

These provisions present sustainability in very general terms, mostly reproducing international documents, but they hardly specify anything from a substantial point of view.

The implementation of the principle seems to be limited - within the juridical context - to the environmental legislation²¹, without specifically concerning the other two pillars of sustainable development, the economic and the social ones. Moreover, with reference to the discretionary activity of the public administration, paragraph 2 legislatively predetermines an “imbalance” in favour of the protection of the environment and cultural heritage, considered a priority, thus ranking - hierarchically, we could say - the public interests involved²².

However, the international concept of sustainable development does not provide for an absolute preference for environmental protection, but it presupposes a fair and rational reconciliation of economic and social needs with environmental ones²³. Therefore, the reference to sustainable development, invoked to justify the prevalence accorded to the environment and cultural heritage with regard to the discretionary choices of the public

²¹ See: C. VIDETTA, *Cultura e sviluppo sostenibile. Alla ricerca del IV pilastro*, Giappichelli, Torino 2018, p. 124. F. FRACCHIA, *Principi di diritto ambientale e sviluppo sostenibile*, in P. DELL'ANNO, E. PICOZZA (eds), *Trattato di diritto dell'ambiente*, Vol. 1 – *Principi generali*, Cedam, Padova 2012, p. 567 ff., underlines that the principle of sustainable development is not only referable to environmental choices, but also to all discretionary administrative activity. On the various positions expressed in doctrine and jurisprudence, see M. MONTEDURO, *Principi del diritto dell'ambiente*, cit., p. 158 ff.

²² As noted by C. VIDETTA, *Cultura e sviluppo sostenibile*, cit., p. 135, the legislator indicated a sort of hierarchy between interests, without however clarifying how this should affect the discretionary balance.

²³ As underlined by P. COMINETTI, S. VERGALLI, *Lo sviluppo sostenibile da Rio 1992 a Rio + 20*, cit., p. 62, if the three pillars of sustainability don't proceed in parallel, decisions are unbalanced and can create undeniable advantages in one's sector, but also unmanageable and harmful effects in other areas.

administration, does not seem to be entirely relevant and correct.

Probably, if we compare these provisions of the Legislative Decree n. 152/2006 with the strategic planning documents mentioned before, we can notice that these last have been formulated starting from a more complete vision of sustainability, at least from the point of view of the content rather than from the point of view of the results.

Moreover, it may be interesting to notice that, with the Legislative Decree no. 4/2008, the planning activity has been institutionalised in art. 34, Legislative Decree no. 152/2006, which provides for the update of the National strategy for sustainable development of 2002 (paragraph 3) and the preparation, by the Regions, of sustainable development strategies within the national objectives (paragraph 4).

The essential points of the multilevel planning are: the dissociation between economic growth and its impact on the environment; the respect for the conditions of ecological stability; the protection of biodiversity; the fulfilment of social requirements connected to the development of individual potential as prerequisites necessary for the growth of competitiveness and employment. In short, the environmental profile is always in the foreground, but it is also accompanied by the economic and social aspects of sustainability.

In 2015, after the approval of *Agenda 2030*, with Law no. 221 of 28 December 2015 (Environmental provisions to promote green economy measures and to limit the excessive use of natural resources) it was provided that the update of the National Strategy for sustainable development should be every three years, with the addition of a specific chapter on the “blue growth” of the marine context²⁴, and the commitment of the Regions to outline their respective sustainability plans.

The National Strategy for Sustainable Development (SNSvS), approved by the C.I.P.E. in 2017²⁵, is the first planning document to implement the 17 SDGs at national level up to 2030. It is divided into five areas (People, Planet, Prosperity, Peace, Partnership), all variously referring to the three pillars of sustainable development.

However, in 2020 the spread of COVID-19 delayed the implementation of the SDGs worldwide, upsetting economic systems, including the Italian one.

²⁴ Art. 3, paragraph 1, Law no. 221/2015, which integrates paragraph 3 of art. 34, Legislative Decree no. 152/2006.

²⁵ Resolution of 22 December 2017.

It is widely known that a great help has been provided by the European Union with the action plan *Next Generation EU*, adopted for the financial and economic recovery of its Member States, which is entirely centred on sustainability²⁶.

Consequently, sustainable development represents the core of the National Recovery and Resilience Plan *Italia Domani* (PNRR), prepared by the Government (with a complex procedure in which the institutional, economic and social actors of the country were involved) in order to benefit from the resources of the *Next Generation EU*, which was then transmitted to the European Commission (after the resolutions of the Parliament on 27 April 2021) and finally approved with the Decision of the ECOFIN Council of Ministers on 13 July 2021²⁷.

The six Missions of the Plan (digitization, innovation, competitiveness, culture and tourism; green revolution and ecological transition; infrastructures for sustainable mobility; education and research; inclusion and cohesion; health) are orientated according to the pillars of sustainable development, in order to facilitate a recovery and growth that should be not only economical but also inclusive and respectful of nature and human health.

At the present moment we are still halfway through implementing the PNRR, but of course it is desirable that this could lead to a real consolidation of the principle of sustainability of human activities in our society, determining a serious “change of mentality” towards long-term development, both in citizens and institutions.

²⁶ In particular, financial support from the plan, consisting of the Recovery and Resilience Facility (RRF), is expected to be granted to Member States on the basis of their respective national recovery and resilience plans, which must include reforms and public investment projects that promote sustainable growth and employment, climate action, the digital transition. In this way, an attempt is made to combine the international indications of the *Agenda 2030* with the response to the COVID-19 emergency, especially in the Member States most affected by the pandemic. On sustainable development as the inspiring principle of the interventions adopted by the European Union for the post-pandemic recovery, see: F. LEOTTA, “*Oltre*” *la gestione finanziaria dell'emergenza: dagli interventi post-pandemici agli stati “sostenibili” per il futuro dell'Europa*, in *Istituzioni del Federalismo*, n. 1-2/2022, p. 151 ff.

²⁷ For an analysis of the Italian PNRR, see V. VACCA, *Guida al Piano Nazionale di Ripresa e Resilienza*, Pacini, Pisa 2021; F. SALMONI, *Recovery Fund, condizionalità e debito pubblico. La grande illusione*, Cedam, Milano 2021; D. DE LUNGO, F.S. MARINI (eds), *Scritti costituzionali sul Piano Nazionale di Ripresa e Resilienza*, Giappichelli, Torino 2023.

3. «BES» Indicators in Italian Accounting and Public Finance Law

The previous paragraph lists the main references to sustainability in the Italian legal system, which were introduced to implement the commitments made at the international and E.U. level.

However, mere statements do not ensure a real application of the principle itself. The reason is obvious: sustainability is a dynamic concept which describes a development process that takes place over time; therefore, it is necessary to prepare operational tools that allow us, first of all, to know the starting context to be developed and, then, to periodically record the (positive or negative) changes determined by development interventions, which assess whether their impact is sustainable or not in the long term.

Without proper indicators, talking about subsidiarity is quite meaningless because we need to measure the impact that human activities have on the environment, the economy and society in order to understand if they can actually improve people’s lives in the present and in the future.

Therefore, to put sustainability “in action” at the operative level, the introduction of a monitoring system of economic and social growth in different contexts is fundamental, so as to orientate public and private activities towards real sustainable development.

Clearly, it is a very complex operation as it is not possible to have precise data about every human activity sector by sector. Instead, only approximate estimates are available for certain aspects that can be considered more relevant for their impact on the environment and society. Indicators are linked to a conceptual definition of a phenomenon, and every phenomenon (especially social ones) can be defined and approached in different ways²⁸, so it is predictable that the choice of the sets of indicators is quite hard.

From this point of view, a particular importance can be ascribed to art. 10, Law no. 196 of 31 December 2009 (Accounting and Public Finance Law), which regulates the Economic and Financial Document (DEF – *Documento di Economia e Finanza*), the main planning tool of Italian public finance, drafted by the Government and transmitted to Parliament by 10 April of every

²⁸ As underlined by L. ALAIMO, F. MAGGINO, *Misurare lo sviluppo sostenibile un esercizio complesso*, in *EyesReg*, Vol. 10, n. 4/2020, <http://www.eyesreg.it/2020/misurare-lo-sviluppo-sostenibile-un-esercizio-complesso/>, p. 2. The Authors address the (often ignored) issue of the measurement of social phenomena: it plays a fundamental role in the knowledge of the reality, which arises from the encounter between theory - that develops hypotheses and abstract concepts with their reciprocal relations - and empirics - that verifies hypotheses through empirical data, obtained through measurement (pp. 1-2).

year²⁹.

Par. 10-bis (introduced by art. 1, par. 6, lett. g, Law no. 163 of 4 August 2016)³⁰ requires a report, prepared by the Minister of Economy and Finance with data provided from ISTAT (Italian National Institute of Statistics), to be attached to the DEF, which illustrates the trend, in the last three years, of some indicators of sustainable development, as well as the projections in the reference period, in relation to the measures envisaged for achieving the economic policy objectives and the outline of the National Reform Program.

Those values are called indicators of «BES» (*Benessere Equo e Sostenibile*), i.e. Equitable and Sustainable Well-being Indicators, and they have been selected by a specific committee established at ISTAT³¹.

The Decree of 16 October 2017 of the Minister of Economy and Finance lists 12 BES indicators (applied since the 2018 DEF): 1) average adjusted disposable income per capita; 2) index of inequality of disposable income; 3) absolute poverty index; 4) healthy life expectancy at birth; 5) excess weight; 6) early exit from the education and training system; 7) rate of non-participation in work, with relative breakdown by gender; 8) ratio between the employment rate of women aged 25-49 with preschool children and women without children; 9) predatory crime index; 10) index of efficiency of civil justice; 11) emissions of CO₂ and other climate altering gases; 12) index of illegal construction.

It is clear that these indicators take into account some critical aspects of Italian society (also with reference to the SDGs indicated at international level in 2015), which has to be improved to promote fair development.

They recall a set of indicators already identified in 2011 by ISTAT, together with CNEL (National Council of Economy and Work)³², to begin a new data collection that is able to not only describe society from an economic point of view, but also highlights inequalities and other relevant non-economic data, as suggested by the international debate on the need to promote a multi-dimensional approach to the measurement of the well-being

²⁹ Moreover, the Government prepares a Note for updating the DEF (NADEF - *Nota di Aggiornamento del Documento di Economia e Finanza*), which must be transmitted to Parliament by 27 September of each year.

³⁰ To implement *Agenda 2030* at the national level.

³¹ The Committee for Fair and Sustainable Well-being Indicators was composed by: the Minister of Economy and Finance, the President of ISTAT, the Governor of the Bank of Italy and two experts on the subject (Prime Minister Decree of 11 November 2016).

³² At the end of 2010, a *Steering Group on the Measurement of Progress in Italian Society* was created, including representatives from civil society and entrepreneurs.

of societies, while adding to GDP (an economic indicator that measures the total value of goods and services produced by a State in a year) other tools that can detect, in a wider way, the social progress of a country.

In this regard, we can look to the well know analysis driven by the *Commission on the Measurement of Economic Performance and Social Progress*, created in 2008 by the President of the French Republic and directed by Joseph Stiglitz, Amartya Sen and Jean Paul Fitoussi, with the aim to discover more indicators of social progress, in order to create appropriate policies and influence the functioning of economic markets³³.

From this point of view, BES indicators, now formalised by Law no. 196/2009, allow us to have a broader vision of Italian society and economy, so that, thanks to the analysis of their trends, both major political bodies of the State and common citizens are able to verify over time the most evident effects of public policy.

In this way, the former can plan necessary actions to improve the well-being of the population with specific provisions, while people (better, the electorate) can check if those public policies do in fact work.

For this reason, par. 10 *ter* of art. 10, Law n. 196/2009 obliges the Minister of Economy and Finance to prepare a specific report, which is to be presented to Parliament, for the transmission at competent Parliamentary Committees by 15 February of each year, illustrating the evolution of the BES indicators on the basis of the effects determined by the Budget Law for the three-year period ongoing.

Thanks to the analysed provisions, sustainability enters in the first part of the budget cycle, during which the public finance goals are programmed according to the E.U. procedures; in this way, the main economic choices of the State can be orientated towards a development that is supposed to be more sustainable and equal in the long term.

It means that these indicators have become a fundamental tool in determining economic and financial policies, which allows them to be orientated towards sustainable development “tailored” for Italian society. In fact, only by strengthening the knowledge of the effects - both positive and negative - of human activities is it possible to orientate future choices towards

³³ The report can be downloaded at the address: <https://ec.europa.eu/eurostat/documents/8131721/8131772/Stiglitz-Sen-Fitoussi-Commission-report.pdf>. See also an update of the research: J. STIGLITZ, J. FITOUSSI, M. DURAND (eds), *For Good Measure: Advancing Research on Well-being Metrics Beyond GDP*, OECD Publishing, Paris 2018, <https://doi.org/10.1787/9789264307278-en>.

sustainability, both by public decision-makers at various levels, and private individuals or companies that live and operate in the territory.

It is certain that the attachment of BES indicators to the DEF responds to the need to expand the range of information, on the basis of which the economic and financial interventions of the State are planned, to be then confirmed in the Budget law, which authorizes all income and expenditure of the State and defines the management of the *res publica* from an economic and financial point of view.

Moreover, the circumstance that this broad consideration of the well-being of the population contributes to determining the economic policies of the State, reinforces the very value of the State Budget as a «public good» (as qualified by the Constitutional Court)³⁴, a democratic tool which has - as an ultimate goal - the fundamental task of improving citizens' well-being.

4. Conclusions

In conclusion, legislative provisions on BES indicators seem to be the most effective tools to enforce the principle of sustainable development in the Italian legal system, as they allow sustainability to operate directly in the core of public policies, mainly expressed in the Budget Law.

The analysis of BES Indicators is particularly important in a period of crisis, such as the one we have been experiencing since the beginning of the COVID-19 pandemic, as it allows us to monitor difficult situations that go beyond the economic aspect.

In the 2022 Report on the BES indicators³⁵, the Ministry of Economy and Finance underlined how useful this system of indicators was in investigating the problems of the 2020 recession, which was peculiar both for its origin and intensity, overwhelming many economic sectors. The worsening of some indicators (especially economic well-being, work-life balance and healthcare) required specific provisions in the Budget Laws for 2021 and 2022, expecting them to produce effects in the future.

Some of those results are now outlined in the 2023 Report on the BES

³⁴ Since the Judgement no. 184 of 2016. See, among others, M. DEGNI, P. DE IOANNA, *Il bilancio è un bene pubblico: potenzialità e criticità delle nuove regole del bilancio dello Stato*, Roma, 2017.

³⁵ The report can be downloaded at the address: https://www.dt.mef.gov.it/export/sites/sitodt/modules/documenti_it/analisi_programmazione/analisi_programmazione_economico/Relazione-BES-2022_03_03.pdf

indicators³⁶, which indicates a moderate trend towards recovery of economic well-being for the period 2023-2025.

This confirms that the Parliament and the Government certainly need to have a comprehensive picture of the entire society in order to undertake effective public actions, and the BES indicators give them important information.

Obviously, the set of BES is far from being complete; it can be improved by adding new indicators and being periodically updated.

Additionally, the results of the public finance provisions, delineated according to those indicators, need to be constantly monitored in order to verify if they are successful or not in terms of promotion of sustainable development by the State.

Nevertheless, this discipline undoubtedly represents a first fundamental step towards a concrete declination of the principle of sustainable development in the Italian public finance system, able to affect the planning process that leads to effective economic politics, wishing that those last can improve – in the middle and long term - the quality of the environment and of the society where citizens live.

In conclusion, although the principle of sustainability is so “evanescent” that it risks to be considered only as a rhetorical device, it cannot be *de facto* ignored by the main political Italian Institutions.

The path towards a more sustainable Italy is still long; however, by paying attention to BES indicators and improving them to intercept critical points of social, environmental and economic context, we can lay the foundations for a future society entirely balanced on the three pillars of sustainable development.

³⁶ The report can be downloaded at the address: https://www.dt.mef.gov.it/export/sites/sitodt/modules/documenti_it/analisi_progammazione/documenti_programmatici/Relazione-BES-2023.pdf

Green Public Procurement: a look into the past to meet future challenges

Ida Angela Nicotra (University of Catania)
Chiara Sagone (University of Catania)¹

Abstract: *This paper is focused on the importance of the environment in the public procurement field. Thanks to the growing attention dedicated to said theme by the European Institutions, the Italian legislator has renovated the discipline over time, and today the National Recovery and Resilience Plan gives new impetus to a “Green Revolution and Ecological Transition”, which produces its effects in the discipline of green public procurement.*

Contents: 1. Introduction - 2. Defining Green Public Procurement - 3. Sensitivity to Green Public Procurement in the EU landscape - 4. Italian legislation on Green Public Procurement from the 1990s to the present - 5. Green Public Procurement and the National Recovery and Resilience Plan.

1. Introduction

As will be seen in this dissertation, procurement and environmental protection have been considered, for many years, separate issues. In fact, the regulations on public procurement were initially focused on the pursuit of economic objectives, and particular consideration was given to the Protection of Competition² and, with it, to the guarantee of adequately promoted, transparent, impartial and correctly motivated procedures, with no provision for environmental issues³.

The procurement and environmental issues have converged since the signing of the Maastricht Treaty, which, among its many objectives, aimed to ensure a balanced development of economic activities and sustainable growth, compatible with environmental protection⁴. In this regard, there

¹ Paragraphs §1, 2, 3 were edited by Chiara Sagone, paragraphs §4, 5 were edited by Ida Angela Nicotra.

² For a general overview of the topic, M. CLARICH, *Considerazioni sui rapporti tra appalti pubblici e concorrenza nel diritto europeo e nazionale*, in *Diritto Amministrativo*, 1-2, 2016, pp. 71-92.

³ A. DI GIOVANNI, *L'ambiente sostenibile nel nuovo Codice degli appalti: green public procurement e certificazioni ambientali*, in *Il diritto dell'economia*, vol. 31, 1, 2018, pp. 157-180.

⁴ On environmental sustainability, also from a comparative perspective, G. CORDINI,

seems to be no doubt that «actions concerning environmental protection (...) necessarily have a “transversal” character, in the way that other policies (...) necessarily produce their effects on the environment; indeed, from this point of view, experience has shown that often the greatest risks for environmental protection derive precisely from the implementation of actions concerning other policies»⁵.

Constitutional jurisprudence has confirmed the accuracy of this consideration, qualifying the environment as a “transversal matter” or “non-subject matter”, as it implies «a set of tasks and functions, identifiable not by the content, but by the purpose to be pursued»⁶.

Today, when it is finally possible to achieve the idea of some constitutional environmental protection, through the long-awaited reform of Articles 9 and 41 of the Constitution⁷, the opportunity appears appropriate to

Qualità della vita e sostenibilità ambientale: principi costituzionali e regole, in *Il Politico*, 2009, year LXXIV, n. 3, pp. 139-167; V. PEPE, *Lo sviluppo sostenibile tra diritto internazionale e diritto interno*, in *Riv. giur. ambiente*, 2, 2002, pp. 209-242.

⁵ G. GARZIA, *Costituzione europea e tutela dell'ambiente: riflessioni e problemi aperti*, in www.giuristiambientali.it.

⁶ I. NICOTRA, *L'ingresso dell'ambiente in Costituzione, un segnale importante dopo il Covid*, in *Federalismi.it*, 30 June 2021, p. 3. Emblematic, in this regard, the sentences of the Constitutional Court n. 407 of 2002; 259 of 2004; 214 of 2005. There is an extensive bibliography on the subject, including: F.S. MARINI, *La Corte Costituzionale nel labirinto delle materie “trasversali”: dalla sent. n. 282 alla n. 407 del 2002*, in *Giur. cost.*, 4, 2002, pp. 2951 ff.; F. SCALIA, *Il carattere di «materia trasversale» della tutela dell'ambiente e dell'ecosistema e la potestà legislativa regionale in materia ambientale (osservazioni a margine della sentenza Corte cost. 12 aprile 2017, n. 77)*, in *Rivista DGA*, 3, 2017, pp. 1-24; C. DE BENETTI, *L'ambiente nella giurisprudenza della Corte costituzionale: dalla leale collaborazione alla sussidiarietà*, in *Diritto all'ambiente*, 1, 2002, pp. 1-21; P. DELL'ANNO, *La Tutela dell'Ambiente come “Materia” e come Valore costituzionale di Solidarietà e di Elevata Protezione*, in *Lexambiente*, 2001; M. MICETTI, *La tutela dell'ambiente nella giurisprudenza della corte costituzionale*, in *VV.AA., Scritti in onore di Antonio D'Atena*, Giuffrè, Milano 2015, pp. 1895-1935; M. BELLOCCI, P. PASSAGLIA, *La giurisprudenza costituzionale relativa al riparto di competenze tra Stato e Regioni in materia di «ambiente» e «beni culturali»*, in www.cortecostituzionale.it, April 2009; I. NICOTRA, *Ambiente, sicurezza, generazioni future: i nuovi diritti, oggi*, in *Percorsi costituzionali*, 1, 2010, pp. 89-100.

⁷ On June 9 2021, the Assembly of the Republic's Senate approved with 224 votes in favour, 23 abstentions and no votes against, a draft law for a constitutional revision containing amendments to Articles 9 and 41 of the Constitution, concerning environmental protection. It is intended, thus, to add a third paragraph to art. 9 («[The Republic] protects the environment, biodiversity and ecosystems, also in the interest of future generations. The State law regulates the ways and forms of animal protection»), as well as modifies the

reflect once again on the importance of the environment in the public procurement field. Furthermore, this is also in light of the huge opportunity arising from the National Recovery and Resilience Plan, which provides a large amount of resources for achieving ecological transition, also focusing on public contracts.

2. Defining Green Public Procurement

The *Green Public Procurement* (GPP) locution refers to the set of legal instruments aimed at integrating environmental interests within the legislative framework of public contracts⁸.

Certainly, this expression does not refer to a specific type of contract, as it can be applied to all types of procurements whereby public administrations focus on goods, works and services with a lower environmental impact.

In the notion at issue, there seems to be an objective profile, attributable to public procurement, and a teleological one, namely the objective of paying attention to environmental protection⁹.

The public procedures in question are focused on various profiles: such as *green design* and *manufacturing*, i.e. the design and production process with reduced environmental impact; *green distribution*, i.e. the type of packaging and the adoption of environmentally sustainable logistics; and the evaluation of raw materials to be used, recycled, reused, or final disposal of the product¹⁰.

provisions of the second and third paragraphs of art. 41 Cost. according to the following formulation: «Private economic initiative is free. / It cannot be carried out in contrast with social utility or in such a way as to damage health, the environment, security, freedom, human dignity. / The law determines the programs and the appropriate controls so that public and private economic activity can be directed and coordinated for social and environmental purposes». For further reading, G. SANTINI, *Costituzione e ambiente: la riforma degli artt. 9 e 41 Cost.*, in *Forum di Quaderni Costituzionali*, 2, 2021; I. A. NICOTRA, *L'ingresso dell'ambiente in Costituzione, un segnale importante dopo il Covid*, cit.

⁸ G. QUINTO, *Le variabili ambientali nella disciplina degli appalti pubblici*, in *ambienteditto.it*, 1, 2020, p. 4; for a very recent analysis of green public procurement, T. MÜLLER, *Green public procurement*, in C. PAGLIARIN, C. PERATHONER, S. LAIMER (eds), *Contratti pubblici e innovazione. Una strategia per far ripartire l'Europa*, Milano, 2021, pp. 45-62.

⁹ O. H. KASSIM, *I criteri di sostenibilità energetica e ambientale negli appalti pubblici. L'emersione dell'istituto degli "appalti verdi" nel panorama europeo e nazionale*, in *Italiappalti.it*, 14 February 2017, p. 2.

¹⁰ L. VENTURA, *Public procurement e sostenibilità. Convergenze trasversali dei*

As will be seen below, GPP intends to evaluate the entire “life cycle”, aiming at a long-term waste and expenditure reduction, considerably affecting the production system and markets.

In light of these considerations, the Green Public Procurement phenomenon has been defined, at an institutional level, as the «approach whereby public administrations integrate environmental requirements into all phases of the purchasing process, by encouraging the diffusion of environmental technologies and the production of eco-friendly products, through research and the choice of results and solutions that have the lowest impact on the environment throughout the entire life cycle»¹¹.

Recently, interest in environmental profiles in public procedures has arisen.

For a long time, the public administration adopted the “lowest price” criterion in order to safeguard the public interest in cost savings; subsequently, the commitments undertaken by States in terms of promoting fair and sustainable economic growth have reduced the importance of this parameter.

In Western legal systems, it was realised that the “lowest price” criterion was not the only way to achieve a good “value for money”: due to the increasing attention to sustainability and the growing awareness of the potential, not merely economic, of *public procurement*.

For this reason, the lowest price criterion has been supported or sometimes replaced by the “economically most advantageous offer” (or “*best value for money*”)¹². Therefore, a multi-criteria approach has emerged in which, in addition to price, other dimensions, including environmental and social ones, have been specifically mentioned in the technical specifications¹³.

In summary, the Green Public Procurement issue involves «the set of purchasing policies held, action taken, and relationships formed in response to concerns associated with the natural environment»¹⁴. Sensitivity to the

sistemi giuridici contemporanei, in *Rivista del commercio internazionale*, 1, 2020, p. 251.

¹¹ Action Plan for Environmental Sustainability (NAP GPP), point 1.1., Interministerial Decree 135/2008, version updated by Ministerial Decree 10 April 2013.

¹² Concerning the economically most advantageous offer criterion L. GILI, *La nuova offerta economicamente più vantaggiosa e la discrezionalità amministrativa a più fasi*, in *Urbanistica e Appalti*, 2017, pp. 24-25.

¹³ L. VENTURA, *Public procurement e sostenibilità. Convergenze trasversali dei sistemi giuridici contemporanei*, cit., p. 253.

¹⁴ Definition by G.A. ZISIDIN - S.P. SIFRED, *Environmental Purchasing: A*

issue has changed over time, due to the plurality of regulatory acts of EU and national origin that it is appropriate to analyse, to understand the developments and possible future outcomes.

3. Sensitivity to Green Public Procurement in the EU landscape

A first manifestation of uniform procurement rules at Community level is represented by Directives 92/50/EEC, 93/36/EEC and 93/37/EEC.

Of course, there was no environmental protection interest in said Directives. On the contrary, any environmentally friendly design by competitors would have had an adverse effect on them because of the high costs involved¹⁵.

With the signing and entry into force of the Treaty of Maastricht, the European Community has assumed the task of ensuring a balanced development of economic activities and sustainable growth, reconcilable with environmental protection. Similarly, the Treaty of Amsterdam of 1997, introducing the so-called integration principle, imposed Institutions on the Community institutions to weigh and balance environmental interests within all other policies to be pursued¹⁶.

These two references are sufficient to understand how the environmental protection interest was gradually acquiring a pivotal role in the European Community policies, becoming a fundamental principle. The importance of the issue inevitably had repercussions on the procurement sector, as can be verified by analysing several legal rulings, but also by examining the debate that has arisen at an institutional level¹⁷.

From this point of view, the European Commission, adopting a purely interpretative approach - due to the absence of specific references to environmental protection in the regulations in force at the time - has tried to

Framework for Theory Development, in 7 *Eur. J. Purch. Supply Mang.*, 2001, p. 69: «the set of purchasing policies held, action taken, and relationships formed in response to concerns associated with the natural environment».

¹⁵ O. H. KASSIM, *I criteri di sostenibilità energetica e ambientale negli appalti pubblici. L'emersione dell'istituto degli "appalti verdi" nel panorama europeo e nazionale*, cit., p. 3.

¹⁶ For further details, M.C. CAVALLARO, *Il principio di integrazione come strumento di tutela dell'ambiente*, in *Riv. Ital. Dir. Pubbl. Comunitario*, 2, 2007, pp. 467-483.

¹⁷ O. H. KASSIM, *I criteri di sostenibilità energetica e ambientale negli appalti pubblici. L'emersione dell'istituto degli "appalti verdi" nel panorama europeo e nazionale*, cit., p. 4 ff.; F. SCHIZZEROTTO, *I principali provvedimenti europei ed italiani in materia di Green Public Procurement*, in *Rivista giuridica dell'ambiente*, 6, 2004, vol. 19, pp. 967-973.

reconcile environmental application with the regulations governing public contracts by adopting several Communications. An example is the Green Paper *Public Procurement in the European Union: Exploring the Way Forward*¹⁸ of 1996, followed, as early as 1998, by the Communication known as the White Paper on Public Procurement in the European Union¹⁹.

The latter document, in chapter 4 entitled «Complementing and achieving synergy with other Community policies», dedicates a specific paragraph to environmental protection, aware that it «is increasingly becoming an important component of any modern economic policy». According to the Commission, «Community law and, in particular, the directives on public procurement offer numerous possibilities for taking environmental protection into account in public purchasing»²⁰, while being aware that the objective of public procurement remained essentially economic.

The issue of reconciling market dynamics and environmental protection in the procurement sector was subsequently taken up in the Communications of the European Commission no. 263 of June 8, 1999

¹⁸ COM (96) 583 of 27 November 1996.

¹⁹ COM (98) 143 of 11 March 1998.

²⁰ COM (1998) 143 def., pp. 27 f.: «In general, any administration which so wishes can, in defining the goods or services which it intends to purchase, choose the products and services which correspond with its pre-occupations for the protection of the environment. The measures taken must, of course, comply with the rules and principles of the Treaty, particularly that of nondiscrimination. • The rules of the public procurement directives allow, in certain instances, the exclusion of candidates who are in breach of national environmental legislation. • Purchasing organisations can draw up technical specifications concerning the characteristics of works, supplies and services, which are the object of public procurement, which take account of environmental values. They can from now on encourage the development of a positive approach by companies to the environment, in accepting tenders offering products, which meet the requirements, defined in the specifications. • The directives allow the inclusion of the objective of protection of the environment in the criteria of selection of candidates in so far as these criteria are aimed at testing their economic, financial and technical capacity. • As regards the award of contracts, environmental elements can serve to identify "the most economically advantageous offer", in cases where these elements imply an economic advantage for the purchasing entity, attributable to the product or service which is the object of the procurement. In evaluating tenders, a purchasing organisation can, for example, take account of costs of maintenance, treatment of waste or recycling. • A contracting authority can require the supplier, whose tender has been accepted, that the deliverable, which is the object of the contract, be provided with due regard to certain constraints aimed at safeguarding the environment. These conditions of execution must be known in advance by all the tenderers».

(*Internal Market and Environment*); no. 576 of September 20, 2000 (*Reconciling Needs and Responsibilities. The integration of environmental issues into economic policy*); May 15, 2001, no. 264 (*Sustainable development in Europe for a better world: A European Union strategy for sustainable development*); July 4, 2001, no. 274 (*Community law on public procurement and the possibilities for integrating environmental considerations into public procurement*); and, finally, in the Sixth Community Environment Action Program, adopted with Decision no. 1600/2002/EC of the European Parliament and the Council of July 22, 2002 (*Our future, our choice*). Although these are soft law acts, they clearly show a desire to include ecological criteria among the components to be considered in the contractor's selection process²¹.

The Commission reiterates that Community procurement law was primarily intended to contribute to the completion of the internal market. By doing so, it created the competitive conditions that allow the non-discriminatory award of public procurements and a better use of public money. Therefore, contracting entities may well define the procurement content in the way they consider most appropriate to meet environmental requirements if this does not result in unlawful restrictions of competition or discrimination against certain competitors on a national basis.

Through the inclusion of environmental requirements, the objectives of greater environmental protection could be directly pursued, while at the same time aiming to steer other buyers towards more sustainable products and services. This observation seems to be corroborated by the most recent Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 11 December 2019, which states, precisely, that «public authorities, including EU institutions, should set an example by ensuring that their procurement is based on green criteria». Moreover, it is evident how a green request can act as an incentive for companies to invest in production conversion, leading to a market transformation²².

²¹ F. FRACCHIA, S. VERNILE, *I contratti pubblici come strumento dello sviluppo ambientale*, in *Rivista Quadrimestrale Di Diritto Dell'Ambiente*, 2, 2020, p. 8; S. VILLAMENA, *Appalti pubblici e clausole ecologiche. Nuove conquiste per la "competitività non di prezzo" anche alla luce della recente disciplina europea*, in *Il diritto dell'economia*, 2, 2015, pp. 355-388, emphasizes that there was a certain reluctance to include ecological clauses in contracts. There was a fear of incurring accounting liability, since these were soft law acts.

²² In a similar sense, Interpretative Communication of the Commission, cited above,

In introducing evaluation criteria suitable for awarding higher scores to companies that pay more attention to environmental value, the European institutions have highlighted the importance of having environmental certifications or the use of production processes with reduced polluting impact. However, as these standards could have a negative impact on the cost-effectiveness of the order, the principles of proportionality and adequacy were maintained.

The incidence of such diverse components in public contracts has led to the need for the EU Court of Justice to rule on the possibility for contracting authorities to introduce ecological criteria in public contracts already under Directives 92/50/EC and 93/38/EC.

The first ruling on green procurement is judgment C-318/94²³, in which the Court stated that the contracting authority's powers included the possibility of taking into account criteria linked to environmental protection.

In its well-known judgment of September 17 2002, case C-513/99, *Concordia Bus Finland Oy Ab. vs. Helsingin Kaupunki HKL Bussilikenne*, the Court recognised the possibility of introducing ecological criteria in public procedures. These criteria, however, had to be linked to the subject of the contract, bearing in mind the nature, purpose and characteristics of the contract. Secondly, the Court highlighted that this possibility was granted in compliance with Community principles, with reference to the principle of non-discrimination. Finally, environmental clauses should not provide the authorities with unconditional freedom of choice and should have been expressly mentioned in the tender specifications or in the call for tenders²⁴.

in OJEC of November 28, 2001, C 333, 12 ff.: «given the considerable purchasing power of contracting authorities, the latter are called upon to assume the responsibility of acting as a driving force in the process of ecological management and in the reorientation of consumption towards more ecological products».

²³ Judgment of the Court of Justice of the European Communities Commission v. Germany.

²⁴ The case relates to an invitation to tender for the supply of buses for local public transport in Helsinki. The contracting authority, by providing for additional points to be awarded to tenderers with specific environmental requirements, had caused a reaction from a company claiming that it could not win the tender because of these requirements. The Court stated that the award criteria do not need to be of purely economic nature, in accordance with the principle of integration in Article 6 of the EC Treaty. The legality of the assessment of environmental and social criteria was subordinated to the condition that they were relevant to the subject matter of the contract, published in advance, adequately publicised and in compliance with the fundamental principles of Community law, such as the free movement of goods, freedom of establishment and freedom to provide services, equal treatment, non-

The subsequent EVN AG decision²⁵, confirming the approach taken in the Concordia Bus ruling, recognised that the administration can include ecological *standards* among the qualitative criteria for assessing the tender. The breakthrough in case law consists in the specification that «contracting authorities may not only choose freely the contract award criteria, but also determine the weighting of these criteria, provided that this weighting allows a summary evaluation of the criteria used to identify the most economically advantageous tender».

The case law undertaken has the virtue of reconciling environmental protection and competition by balancing the different interests at stake. Without any binding legislative sources specifically dedicated to environmental protection in the field of procurement, it was made clear that integrating and enhancing environmental variables in procurement procedures did not automatically lead to the prevalence of this interest to the detriment of other Community policies²⁶.

The increasing focus on green procurement, highlighted by the multiple Communications from the Commission and case law referred to above, has led to the adoption of mature green procurement achievements by binding acts. In particular, two Directives were issued (2004/17/EC and 2004/18/EC). The first one, concerning the coordination of the procurement procedures of entities supplying water and energy and entities providing

discrimination, transparency and proportionality. For further details, M. BROCCIA, *Criteri ecologici nell'aggiudicazione degli appalti*, in *Urbanistica e Appalti*, 2003, p. 168; M. LOTTINI, *Appalti comunitari: sulla ammissibilità di criteri di aggiudicazione non prettamente economici*, in *Foro amm.* CDS, 2002, p. 1936.

²⁵ In the «EVN AG» judgment of December 4, 2003, the Court addressed the question of the relevance of environmental criteria in the choice of the economically most advantageous tender. According to the Court, contracting authorities were not only free to choose the contract award criteria, but also to determine the weighting of these criteria. The weighting applied must, however, allow a summary assessment of the criteria adopted to identify the economically most advantageous tender and should not have led to unreasonable discrimination between all the participants in the tender procedure. On these issues, D.U. GALETTA, *Vizi procedurali e vizi sostanziali al vaglio della Corte di giustizia*, in *Riv. it. dir. pub. com.*, 2004, p. 317; G. GARZIA, *Bandi di gara per appalti pubblici e ammissibilità delle clausole c.d. ecologiche*, in *Foro Amm.*, 2003, p. 3515; V. DE FALCO, *L'utilizzo di fonti di energia rinnovabili come criterio di valutazione dell'offerta economicamente più vantaggiosa*, in *Dir. pub. comp. eur.*, 3-4, 2004, p. 889.

²⁶ G. QUINTO, *Le variabili ambientali nella disciplina degli appalti pubblici*, in *ambientediritto.it*, 1, 2020, p. 7. On these issues, F. GAVERINI, *Attività contrattuale della p.a. e protezione dell'ambiente: gli appalti verdi*, in *Rivista giuridica dell'edilizia*, 5-6, 2009, pp. 153-169.

transport and postal services; and the second one, concerning the coordination of the procedures for the award of public works, supply and service contracts. These directives introduced the possibility for contracting authorities to include non-economic criteria in tender procedures²⁷.

Among these, environmental criteria have been expressly provided for, in the forms and within the limits defined by the case law of the Court of Justice and the Commission documents. With these directives, the European legislator has clarified that contracting authorities can contribute to the protection of the environment and the promotion of sustainable development and, at the same time, obtain the best value for money for their procurement²⁸.

The application of environmental criteria was linked to the object of the contract, given that the requirements had to be relevant to it; subjected to express mention in the notice of invitation to tender or in the specifications²⁹; and made possible only in accordance with the fundamental principles of Community law, such as the free movement of goods, freedom of establishment and freedom to provide services, equal treatment, non-discrimination, transparency and proportionality; finally, the prohibition of unconditional freedom of choice for the contracting authority remains as valid today as it was then³⁰.

²⁷ For further analysis of these directives, G. MORBIDELLI, M. ZAPPOLATO, *Appalti pubblici*, in M. P. CAMI, G. GRECO (eds), *Trattato di diritto amministrativo europeo*, Giuffrè, Milano 1998, pp. 426-428; F. LAURIA, *I pubblici appalti: disciplina comunitaria e giurisprudenza italiana*, Giuffrè, Milano 1998; D. SPINELLI, *Aggiudicazione degli appalti più verde con le direttive 2004/17/CE e 2004/18/CE*, in *Ambiente & Sicurezza*, 17, 2004, pp. 23-25; F. SPAGNUOLO, *Il Green Public Procurement e la minimizzazione dell'impatto ambientale nelle politiche di acquisto della Pubblica amministrazione*, in *Rivista Italiana di diritto pubblico comunitario*, 2, 2006, pp. 401-407.

²⁸ Recital 12 Directive 2004/17/EC.

²⁹ Recital 55: To ensure compliance with the principle of equal treatment in the award of procurement contracts, it is appropriate to lay down an obligation – established by case law - to ensure the necessary transparency to enable all tenderers to be reasonably informed of the criteria and arrangements which will be applied to identify the most economically advantageous tender. It is therefore the responsibility of contracting entities to indicate the criteria for the award of the contract and the relative weighting given to each of those criteria in sufficient time for tenderers to be aware of them when preparing their tenders. Article 38 Conditions for performance of contracts. Contracting entities may lay down special conditions relating to the performance of a contract, provided that these are compatible with Community law and are indicated in the notice used as a means of calling for competition or in the specifications. The conditions governing the performance of a contract may, in particular, concern social and environmental considerations.

³⁰ B. FENNI, *Il Green Public Procurement come strumento di sviluppo sostenibile*,

Subsequently, the relevance of GPP has been reaffirmed in several guidance documents of the European Commission: Communication COM (2008) 397 *A European Strategy for Sustainable Consumption and Production*; Communication COM (2008) 400 *Public Procurement for a Better Environment*; finally, Communication COM (2010) 2020 *Europe 2020 Strategy*.

This latter strategy shows an awareness of the significant contribution that public administrations can provide to the achievement of the objectives set out in the text, thanks to their purchasing power which can encourage innovation, induce respect for the environment and the fight against climate change, reduce energy consumption, increase employment, improve public health and social conditions, and promote equality and inclusion.

The Green Paper *On the modernization of EU public procurement policy - Towards a more efficient European Procurement Market*³¹, taking up the forward-looking objectives set out in the Europe 2020 Strategy, identified two methods to use public procurement in line with the policy objectives.

The first method, related to “how to buy”, consists in «providing contracting authorities with the wherewithal to take into account those objectives under procedural public procurement rules». The second method, concerning “what to buy”, imposes «mandatory requirements on contracting authorities» or provide for «incentives to steer their decisions as to which goods and services should be procured»³².

A further step in the recognition of the relevance of environmental profiles in public procurement was taken in 2014: Directive 2014/23/EU on the award of concession contracts; Directive 2014/24/EU on public procurement, repealing 2004/18; and, finally, Directive 2014/25/EU on procurement procedures of entities operating in the water, energy, transport and postal services sectors, thus repealing Directive 2004/17/EC³³.

in *AmbienteDiritto.it*, 2014.

³¹ Communication COM (2011), 15, of 27 January 2011.

³² O. H. KASSIM, *I criteri di sostenibilità energetica e ambientale negli appalti pubblici. L'emersione dell'istituto degli "appalti verdi" nel panorama europeo e nazionale*, cit., p. 9.

³³ F. DE LEONARDIS, *Norme di gestione ambientale*, in *L'Amministrativista*, Bussola of 27.04.2020, §2. For an analysis of the directives H. C. CASAVOLA, *Le nuove direttive sugli appalti pubblici e le concessioni*, in *Giornale di Diritto Amministrativo*, 2014, pp. 1135-1141; F. DI CRISTINA, *Le nuove direttive sugli appalti pubblici e le concessioni*, in *Giornale di Diritto Amministrativo*, 12, 2014, pp. 1160-1167; D. MARESCA, *La modificazione sostanziale dei contratti di concessione di lunga durata durante l'esecuzione: commento alla*

Recital 2 of Directive 2014/24/EC is crucial to understand the objectives of the regulatory intervention, stating that «Public procurement plays a key role in the Europe 2020 strategy... as one of the market-based instruments to be used to achieve smart, sustainable and inclusive growth while ensuring the most efficient use of public funds». The reform thus pursues several objectives: a more efficient use of public funds, through the simplification and flexibility of procedures; a greater opening of markets at European level, facilitating the participation of small and medium-sized enterprises and cross-border tender; the promotion of innovation and eco-innovation, to be understood as «any form of innovation that reduces negative impacts on the environment, increases resistance to environmental pressures and enables a more efficient and responsible use of natural resources»; finally, social and environmental protection³⁴.

It is evident from the content of the three directives that public procurement plays a key role in the sustainable growth of Europe³⁵, in accordance with the principle of integrating environmental protection into all activities³⁶.

For this reason, Member States may impose and enforce measures necessary for the protection of health, human and animal life or the preservation of plants and other environmental measures with a view to

direttiva europea 2014/23/UE, in *Il diritto del commercio internazionale*, vol.28, 3, 2014, pp. 749-763; R. CARANTA, D. C. DRAGOS, *La minirivoluzione del diritto europeo dei contratti pubblici*, in *Urbanistica e appalti*, 5, 2014, pp. 493-504; M. RICCHI, *La nuova Direttiva comunitaria sulle concessioni e l'impatto sul Codice dei contratti pubblici*, in *Urbanistica e appalti*, 7, 2014, pp. 741-757; V. FERRARO, *La disciplina della concessione nel diritto europeo: i principi giurisprudenziali e la sistemazione realizzata con la direttiva 2014/23/UE*, in *Riv.It. Dir. Pubbl. Comunitario*, 3-4, 2014, pp. 835-866; M. URBANI, *Le nuove direttive sugli appalti pubblici e le concessioni*, in *Giornale di diritto amministrativo*, 12, 2014, pp. 1158-1159; S. VILLAMENA, *Direttive Europe e Appalti: qualità, innovazione e semplificazione*, in *Cooperative e enti non profit*, 1, 2015, pp. 35-44; P. PIRAS, *Gli appalti pubblici tra trasparenza e innovazione*, in *Urbanistica e Appalti*, 2015; E. FOLLIERI, *I principi generali delle Direttive comunitarie 2014/24/UE e 2014/25/UE*, in *giustamm.it*, 2, 2015, pp. 129-135.

³⁴ B. FENNI, *Il Green Public Procurement come strumento di sviluppo sostenibile*, cit., p. 14.

³⁵ In recitals 2, 47 and 123 of the Procurement Directive 2014/24; in recital 4 of the Special Sectors Directive 2014/25; in recital 3 of the Concessions Directive 2014/23.

³⁶ Recital 91 of the Procurement Directive 2014/24 requires that environmental protection requirements should be integrated «into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development».

sustainable development, provided that these measures comply with EU law³⁷.

The stated objectives correspond to important innovations compared to the previous legal framework, starting with the technical specifications, where contracting authorities are given the possibility to require special labelling.

In addition, it is possible to require the implementation of certain environmental management systems during the procurement execution phase, or to set ecologically sustainable execution conditions.

But the most important innovation is represented by the replacement of the “lowest price” award criterion with the “lowest cost” one. This change allows tenders to be evaluated not only on the basis of the purchase price but also on the basis of the costs of environmental externalities arising from the life cycle of the object of the contract («Life Cycle Costing» or LCA).

The «life cycle» definition is found in Article 2(1)(20) of Directive 2014/24/EU: it includes «all consecutive and/or interlinked stages, including research and development to be carried out, production, trading and its conditions, transport, use and maintenance, throughout the existence of the product or the works or the provision of the service, from raw material acquisition or generation of resources to disposal, clearance and end of service or utilization».

The wider concept of «cost» comes from Recital 96 and Article 67 of the Directive, which states that life-cycle costing «includes all costs over the life cycle of works, supplies or services. This means internal costs, such as research to be carried out, development, production, transport, use, maintenance and end-of-life disposal costs but can also include costs imputed to environmental externalities».

The most economically advantageous tender from the point of view of the contracting authority shall be identified «on the basis of the price or cost, using a cost-effectiveness approach, such as life-cycle costing [...] and may include the best price-quality ratio, which shall be assessed on the basis of criteria, including qualitative, environmental and/or social aspects, linked

³⁷ In recital 41 of the procurement directive 2014/24: «Nothing in this Directive should prevent the imposition or enforcement of measures necessary to protect public policy, public morality, public security, health, human and animal life, the preservation of plant life or other environmental measures, in particular with a view to sustainable development, provided that those measures are in conformity with the TFEU»; in recital 59 of the Concessions Directive 2014/23; in recital 56 of the Special Sectors Directive 2014/25/EU.

to the subject of the public procurement in question».

Therefore, the regulation enhances the environmental application including the new concept of «cost». Finally, Recital 37 entrusts each Member State and the contracting authorities themselves with the task of taking «relevant measures to ensure compliance with obligations in the fields of environmental, social and labour law» established by European and national law, collective agreements or international agreements or measures, provided that they comply with EU law. The fulfilment of these obligations shall be assessed during the selection and award procedure and the verification of the anomalous tender. Compliance with these obligations shall also be verified where a subcontracting contract has been concluded. The purpose of this provision is to prevent the contracting authority from subcontracting to companies, including those from third countries, which are characterised by lower labour costs, less social protection and lower protection standards than those imposed at European level³⁸.

In addition to the three directives previously mentioned, Directive No. 33 of 23 April 2009 on road transport vehicles is of great importance. Article 1 of this Directive «requires contracting authorities... to take into account lifetime energy and environmental impacts, including energy consumption and emissions of CO₂ and of certain pollutants, when purchasing road transport vehicles with the objectives of promoting and stimulating the market for clean and energy-efficient vehicles».

By reason of this provision, administrations are obliged, and not merely entitled, to purchase green, clean and energy-efficient vehicles, under penalty of cancellation of the award.

Besides vehicles, the European legislator explicitly encouraged the use of mandatory green procurement in specific sector legislation, stating that this legislation should set «mandatory objectives and targets according to the particular policies and conditions prevailing in the relevant sector and to promote the development and use of European approaches to life-cycle costing as a further underpinning for the use of public procurement in favour of sustainable growth»³⁹.

At this point, it seems appropriate to check Italy's sensitivity to environmental issues arising from procurement legislation.

³⁸ B. FENNI, *Il Green Public Procurement come strumento di sviluppo sostenibile*, cit., p. 19.

³⁹ See recital 95 of the Procurement Directive 2014/24 and recital 100 of the Utilities Directive 2014/25.

4. Italian legislation on green public procurement from the 1990s to the present

In Italy, the issue received insufficient attention in the 1990s, as evidenced by the fragmented environmental provisions in public administration contracts. Among these, Article 19, paragraph 4 of the so-called Ronchi Decree (D.Lgs. no. 22 of 5 February 1997) introduced certain obligations for the Public Administration to purchase and consume certain goods, such as recycled paper and retreaded tyres; article 5, paragraph 1, of Ministerial Decree of March 27, 1998, concerning «sustainable mobility in urban areas», required public administrations to use low-emission vehicles with the objective of reaching 50% of them in 2003.

CIPE resolution no. 57 of 2002, dedicated to the «Environmental action strategy for sustainable development in Italy», is considered a wider-ranging provision. Article 1, paragraph 2, qualifies the protection and enhancement of the environment as «transversal factors of all sectoral policies, related programming and consequent interventions», stating for the first time the importance of the sustainable development concept.

Subsequently, Ministerial Decree no. 203 of 2003 constitutes the first expression of the *Green Public Procurement* discipline. The decree at issue aimed to create trade in environmentally friendly materials, despite the limitation represented by the scope of application. It only dealt with the disposal of the product, neglecting the other phases of the life cycle.

The legal framework changed considerably with D. Lgs no. 163 of 2006, in which the focus on green procurement emerges in eight articles (Articles 2, 40, 42, 44, 68, 69, 83, 93).

It is the result of the implementation of the aforementioned Directives 2004/17/EC and 2004/18/EC and is characterised by a *green* interest not limited to the planning stage.

Article 2(2) of the 2006 Contracts Code sets out the principles of economy, effectiveness, promptness and fairness, free competition, equal treatment, non-discrimination, transparency, proportionality and publicity⁴⁰. At the same time, it is provided that the principle of cost-effectiveness may be subordinated, to the extent, expressly permitted by the rules in force and by the code, to criteria, provided for in the call for tenders, inspired by social requirements, as well as the protection of health and environment and the

⁴⁰ Art. 2, D. Lgs. 163/2006.

promotion of sustainable development.

In this regard, the Ministry of the Environment has drawn up an interpretative document entitled «Green purchasing for the public administration: the state of the art, regulatory developments and methodological indications», where it has clarified that «it is legitimate to prioritize the need to safeguard the environment and human health, to promote sustainable development and to protect social needs, even at the expense of not always guaranteeing a convenient relationship between the results obtained and the resources used, provided that this is done in compliance with transparency, *par condicio* and competition».

From the explanatory text it emerges that the environmental protection requirements cannot negatively affect the principles of proportionality, transparency, equal conditions and non-discrimination; on the other hand, as regards the principle of economy, the public administration is obliged to respect it provided that it does not impede the pursuit of other public objectives, including environmental protection⁴¹.

Under Article 81 of Legislative Decree 163/2006, the criteria of the most economically advantageous offer and the lowest price play an equal role and can be used as alternatives⁴².

⁴¹ B. FENNI, *Il Green Public Procurement come strumento di sviluppo sostenibile*, cit., p. 8.

⁴² For an analysis of award criteria: P. DE NICTOLIS - R. DE NICTOLIS, *Il criterio del prezzo più basso e il criterio dell'offerta economicamente più vantaggiosa*, in M.A. SANDULLI, R. DENICTOLIS, R. GAROFOLI (eds), *Trattato sui contratti pubblici*, vol. III, Giuffré, Milano 2008, p. 2118 ff.; F. SAIITA, *Appalti e contratti pubblici: Commentario sistematico*, Cedam, Padova 2016; C. LAMBERTI, S. VILLAMENA, *Nuove direttive appalti: "sistemi di selezione" e "criteri di aggiudicazione"*, in *Urbanistica e appalti*, 2015, p. 873 ff.; C. DE MASI, *Criteri di aggiudicazione e offerte anomale*, in *Riv. trim. appalti*, 2016, p. 212 ff.; D. SENZANI, *Discrezionalità della pubblica amministrazione ed offerta economicamente più vantaggiosa*, in *Riv. Trim. degli appalti*, 2013, p. 900 ff.; M. PIGNATTI, *Le metodologie per la determinazione dell'offerta economicamente più vantaggiosa, nota a Cons. Stato, Ad. Plen., 10 gennaio 2013, n. 1*, in *Foro amm, CDS*, 2013, p. 1526 ff.; L. TORCHIA, *La nuova direttiva europea in materia di appalti servizi e forniture nei settori ordinari*, in *Dir. amm.*, 2015, pp. 291 ff.; A. PAJNO, *La nuova disciplina dei contratti pubblici tra esigenze di semplificazione, rilancio dell'economia e contrasto alla corruzione*, in *Riv. it. dir. pubbl. comunitario*, 2015, pp. 1127 ff. For further information about these criteria under the D. Lgs. n. 163/2006: F. MASTROVITI, *Commento agli articoli 81, 82 e 83*, in G.F. FERRARI, G. MORBIDELLI (eds), *Commentario al codice dei contratti pubblici*, Giuffré, Milano 2013, p. 1101 ff.; P. PIVA, *Criteri di aggiudicazione*, in R. VILLATA, M. BERTOLISSI, V. DOMENICHELLI, G. SALA (eds), *I contratti pubblici di lavori, servizi e forniture*, Cedam, Padova 2014, I, pp. 779 ff.; G. FONDERICO, *La selezione delle offerte e la verifica*

Whichever criterion is chosen, since the principle of economy relates both to the stage of the contract award and to its performance, the balancing of that principle with the requirements of environmental protection must concern both stages. In other words, the provision of Article 2(2) refers not only to the public phase of the contract award but also to the private phase of its performance⁴³.

The importance of this provision can be justified by the fact that, in national law, the economic sphere, shaped in order to save public administration money, has been overcome.

To do so, however, a provision expressly stipulating that the principle of economy must be flexible on other interests, including environmental ones, to be accepted is necessary.

In the same direction, Article 1(1126) of Law No 296 of 27 December 2006 provided for the implementation and monitoring of an «Action Plan for the environmental sustainability of consumption in the public administration sector», drawn up by the Ministry for the Environment and the Protection of Land and Sea, in agreement with the Ministers for the Economy and Finance and for Economic Development, and with the regions and autonomous provinces of Trento and Bolzano.

The Plan provides for the adoption of measures aimed at integrating environmental sustainability requirements concerning procurement procedures for goods and services of the competent administrations, based on the following criteria: a) reduction in the use of natural resources; b) replacement of non-renewable energy sources with renewable ones; c) reduction of waste production; d) reduction of polluting emissions; e) reduction of environmental risks.

dell'anormalità, in M. CLARICH (ed), *Commentario al codice dei contratti pubblici*, Giappichelli, Torino 2010, pp. 451 ff.; M. AMEDEI, M. COZZIO (eds), *Appalti di servizi e criteri ambientali. Aspetti giuridici e tecnici*, Tangram, Trento 2013, pp. 17 ff.; R. C. CONTESSA, *L'offerta economicamente più vantaggiosa: brevi note su un istituto ancora in cerca di equilibri*, in www.giustizia-amministrativa.it, 2010; R. DIPACE, *Le procedure di scelta del contraente e i criteri di aggiudicazione*, in C. FRANCHINI (ed), *I contratti di appalto pubblico*, Giappichelli, Torino 2010, pp. 647 ff.; M. LIPARI, *L'offerta economicamente più vantaggiosa*, in *Urb. e App.*, 1, 2007, pp. 7 ff.; F. COCCOLI, *Criteri di selezione delle offerte e verifica delle offerte anormalmente basse*, in M. SANINO (ed), *Commento al codice dei contratti pubblici relativi a lavori, servizi e forniture*, Giappichelli, Torino 2008, pp. 339 ff.

⁴³ G. FIDONE, *Gli appalti verdi all'alba delle nuove direttive: verso modelli più flessibili orientati a scelte eco-efficienti*, in *Riv. Ital. Dir. Pubbl. Comunitario*, 5, 2012, p. 838.

This provision was drawn up in accordance with the invitation by the European Commission, in Communication 2003/302, «to draw up and make available to the public appropriate action plans for the integration of environmental requirements in public procurement».

The process described led to Interministerial Decree 135/2008, updated by Ministerial Decree 10 April 2013, containing the National GPP Action Plan (GPP NAP).

In its original version, the plan was intended to be a non-binding act that would be reviewed every three years. The revision, which took place with Ministerial Decree of 10 April 2013, specified the procedure for the establishment of the so-called minimum environmental criteria (MEC)⁴⁴.

According to art. 3 of the Ministerial Decree of 10 April 2013, they represent environmental requirements for the different stages of the public procurement procedure, which are defined by decree of the Minister of the Environment. The minimum environmental criteria have been well defined as the «technical indications» of the GPP NAP and consist of «measures aimed at integrating the environmental sustainability requirements into the purchasing procedures for goods and services of the administrations in charge». They are qualified as minimums because they represent basic criteria for environmental protection, which are able to withstand market changes and certainly are admissible. For this reason, contracting authorities can impose even stricter environmental requirements.

The provision about the role of public authorities, which are obliged to identify their own needs and to draw up a specific internal program for the implementation of green procurement actions, is very interesting.

Although they were initially non-binding, the relevance of the environmental criteria was twofold. Firstly, as already mentioned, contracting authorities could benefit from MEC as guiding parameters for the rules of tender; secondly, from a judicial point of view, they represented a parameter for verifying the legitimacy of the discretionary choices made by the contracting authority in the selection of tenderers, in the definition of the object of the contract and in the definition of particular performance conditions.

Law no. 221 of 28 December 2015 (the so-called Environmental Annex to the 2014 Stability Law), through the introduction of Article 68-bis in Legislative Decree no. 163/2006, made the application of minimum

⁴⁴ For further information F. DE LEONARDIS, *Norme di gestione ambientale*, cit., §3.

environmental criteria mandatory⁴⁵.

In addition, several facilities and bonus measures have been introduced for those with environmental certification, and new environmentally conscious parameters have been introduced to assess the economically most advantageous tender.

D.Lgs. 50/2016, implementing Directives 2014/23/EU, 2014/24/EU and 2014/25/EU⁴⁶, in Article 30, paragraph 1, provides that «the principle of cost-effectiveness may be derogated, within the limits in which it is expressly allowed for in current legislation and in this Code, by criteria, provided in the call for competition, inspired to social needs, as well as to the safeguard of health, environment, cultural heritage and the promotion of sustainable development, also under an energy standpoint»⁴⁷.

This provision was already established by the previous procurement code of 2006; the new element, instead, consists of the varied system of legal provisions in the new code referred to environmental protection. As a result, the statutory reserve is no longer considered a limitation, but rather an incentive to include environmental clauses in public procurement contracts. For instance, for certain contracts where the economically most advantageous offer is considered, it is reasonable to include environmental clauses which, if contradictory, will prevail over the economic efficiency principle⁴⁸.

According to Article 4, «public contracts concerning works, services

⁴⁵ The Minister of the Environment and Protection of Land and Sea's decree of 11 October 2017 established the minimum environmental criteria to be complied with in the field of construction. ANAC, after receiving reports from several economic operators, has drawn up Guidelines with the aim of reconciling the principle of *favor participationis*, with reference to micro, small and medium-sized enterprises, with the environmental protection principle. These are the ANAC Guidelines «Application of the Minimum Environmental Criteria referred to in the Decree of the Minister for the Environment and the Protection of Land and Sea of 11 October 2017 (Minimum Environmental Criteria for the award of design services and works for the new construction, renovation and maintenance of public buildings)».

⁴⁶ For some considerations about this implementation, E. PROIETTI, *L'adozione delle nuove direttive sui contratti pubblici in Italia*, in *giustamm.it*, 2, 2016.

⁴⁷ *Commento all'art.30*, in F. CARINGELLA, M. PROTTO (eds), *Il nuovo Codice dei contratti pubblici*, in *italiappalti.it*, 6 September 2016; M. C. ROSSI TAFURI, I. SORRENTINO, *Commento sub. art.30*, in M. CORRADINO, S. STICCHI DAMIANI (eds), *I nuovi appalti pubblici. Commento al d.lgs 18 aprile 2016, n. 50*, Giuffrè, Milano 2017, pp. 76 ff.

⁴⁸ S. VILLAMENA, *Codice dei contratti pubblici 2006. Nuovo lessico ambientale, clausole ecologiche, sostenibilità, economicità*, in *Rivista Giuridica dell'Edilizia*, 3, 2017, p. 101.

and supplies, as well as active contracts, which are excluded, in whole or in part, from the objective scope of this Code, shall be awarded in compliance with the principles of economy, effectiveness, impartiality, equal treatment, transparency, proportionality, publicity, environmental protection and energy efficiency».

Environmental protection is therefore one of the key principles to be observed in public procurement and concerns contracts that are not governed by the Code⁴⁹.

Besides the principles, the Public Contracts Code includes specific provisions for environmental profiles to play a relevant role in the procedures at issue. Considering Article 95(6) on contract award criteria, which clarifies that «the most economically advantageous tender identified on the basis of the best value for money shall be evaluated on the basis of objective criteria, such as qualitative, environmental or social aspects, linked to the subject-matter of the contract», expressly includes among these criteria: «a) environmental features, containment of energy consumption and environmental resources by the work or product; b) the possession of a label of ecological quality of the European Union (Ecolabel EU) in relation to the goods or services object of the contract, in a measure equal to or exceeding 30% of the value of the supplies or provisions object of the same contract; c) the cost of use and maintenance, also in relation to the consumption of energy and natural resource, pollutant emissions and to the total costs, including external costs and costs of mitigation of climate change impacts, referred to the entire life cycle of the work, good or service, with the strategic objective of a more efficient use of resources and of a circular economy able to promote the environment and employment; d) the compensation of greenhouse gas emissions associated to the organization's activities».

If the evaluation criterion is the most economically advantageous tender, then paragraph 10 bis of Article 95 is also relevant, which provides that the contracting authority sets «a ceiling for the economic score within the limit of 30 per cent». In addition, the provision contained in paragraph 7 of the same Article 95, according to which «The cost element may take the form of a fixed price or cost on the basis of which economic operators will compete on qualitative criteria only», is not negligible. These are provisions that enhance the qualitative elements of the tender⁵⁰.

⁴⁹ F. FRACCHIA, S. VERNILE, *I contratti pubblici come strumento dello sviluppo ambientale*, cit., p. 12.

⁵⁰ S. VILLAMENA, *Codice dei contratti pubblici 2006*, cit., p. 105.

Paragraph 13 of the same article also provides that contracting authorities must indicate the award criteria in the tender notice, which is «the highest score on the offer concerning goods, works or services that have a lower impact on health and the environment».

Environmental protection is relevant not only if the criterion of the most economically advantageous tender is applied in the evaluation of the tender, but also if the price or cost criterion is applicable.

The cost reference, in fact, includes environmental externalities and, in any case, all the profiles connected with the product's life cycle. This is clear from Art. 95(2), which expressly refers to Art. 96 on life cycle costs of products, services and works. In this respect, it was observed that the initial and future costs of a public procurement contract are considered «in a dynamic dimension», as the subsequent effects are also evaluated⁵¹.

However, it should be considered that some difficulties may arise, both for contracting authorities and for bidders, as regards the establishment of the data that must be included in the tender to identify costs, with a consequent prejudice to the principle of proportionality.

In addition, it was observed that the costs and data that companies have to provide would be so complex that only larger companies could provide them. This would preclude small companies from participating in tenders⁵².

Moreover, it should not be overlooked that the link between procurement and the environment, highlighted by the public procurement code, entails the risk that notices and/or tender specifications are too general or vague or not proportionate to the subject matter of the contract. Administrations benefit from the margins of discretion throughout the procedure, from the regulation in the tender notice to the awarding of the relevant scores during the tender evaluation. For this reason, an effort has been made to facilitate the application of the new rules through the Guidelines of the National Anti-Corruption Authority. ANAC has “recommended” to contracting authorities to «clearly and precisely define the award criterion, as well as the evaluation criteria, the methods and formulae for awarding scores and the method for establishing the ranking list, aimed at identifying the economically most advantageous tender». «Unclear or ambiguous wording» should be avoided, «in order to ensure transparency of activity and awareness

⁵¹ Id., p. 106.

⁵² L. DE PAULI, *I “costi del ciclo di vita” nel nuovo codice degli appalti*, in *Urbanistica e appalti*, 2016, p. 630.

of participation»⁵³.

Setting aside the legislation contained in Legislative Decree 50/2016, the provision of Article 1, paragraph 2, of Decree-Law No. 111 of 14 October 2019, contains «Urgent measures for compliance with the obligations laid down in Directive 2008/50/EC on air quality and extension of the deadline referred to in Article 48, paragraphs 11 and 13, of Decree-Law No. 189 of 17 October 2016, converted, with amendments, by Law No. 229 of 15 December 2016», converted, with amendments, by Law No. 141 of 12 December 2019 (the so-called Climate Decree).

It requires each public administration to align its activities with the achievement of the climate change and air quality improvement objectives. It is a provision addressed to the administration in all activities, including the conclusion of contracts.

5. Green Public Procurement and the National Recovery and Resilience Plan

The recent approval of the National Recovery and Resilience Plan also generates its effects on procurement. Hoping that the application issues related to the current Code of Public Contracts can be solved through the actions that will follow the approval of the Plan, it seems appropriate to concentrate on the provisions, contained in it, dedicated to procurement and, more specifically, to green public procurement.

With the emergence of the COVID-19 pandemic, the need for an economic recovery has become more and more urgent in order to avoid the collapse of economic and social systems exhausted by the virus. After years of austerity, public investment has been re-evaluated as a tool for recovery⁵⁴.

⁵³ «Guidelines no. 2, implementing Legislative Decree no. 50 of 18 April 2016, concerning the “Economically most advantageous tender”» of Anac 21 September 2016, no. 1005 where certain calculation techniques are specified to apply the most economically advantageous offer criterion. On this issue, S. VILLAMENA, *Codice dei contratti pubblici 2006*, cit., p. 10 notes that «a stronger European discipline will be needed to regulate such aspects, also in the light of the cross-border value of the discipline in question. In fact, this is a requirement related not only to the subsidiarity principle, here imagined at its highest ascending level in order to avoid discriminations between Member States' systems in an environmental matter that, by definition, goes beyond national borders, but also because Article 68 of Directive 2014/24/EU specifically refers to a series of acts on common methods useful for the evaluation of ecological clauses».

⁵⁴ P. CONIO, *Il futuro verde: GPP e Piano Nazionale di Ripresa e Resilienza*, in <https://www.forumpa.it/riforma-pa/il-futuro-verde-gpp-e-piano-nazionale-di-ripresa-e-resilienza/>, 2021.

For this purpose, resources from the European Next Generation EU (NGEU) package will be used. Out of a total of EUR 50.6 billion (at current prices), EUR 13.5 billion have been assigned to Italy.

The NGEU is divided into two main tools: the Recovery and Resilience Facility (RRF) and the Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU).

The National Recovery and Resilience Plan (NRRP) is the Italian “chapter” of the broader European Plan of EUR 672.5 billion: it aims to increase GDP, employment, launch fundamental reforms quickly and break the gap between the South and the rest of Italy. It represents an investment for the future and for the younger generations, where our country's future and modernisation are at stake. According to the Government's intentions, the NRRP is a broad and ambitious block of investments and reforms capable of unleashing the growth potential of our economy, generating a strong upturn in employment, improving the quality of work and services to citizens and territorial cohesion, and encouraging the ecological transition.

The recovery action is linked to three key strategic priorities for our country, all conformed to the European level: digitalisation and innovation, ecological transition and social inclusion.

The Plan's missions derive from EU Regulation 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility. This Regulation establishes six main areas of intervention, the so-called pillars on which the individual National Plans must focus: green transition, digital transformation, smart, sustainable and inclusive growth, social and territorial cohesion, health and economic, social and institutional resilience, policies for new generations, children and young people.

The Italian Plan approved on 26 April 2021, in accordance with these pillars, provides for six Missions: 1) Digitalisation, Innovation, Competitiveness, Culture; 2) Green Revolution and Ecological Transition; 3) Infrastructure for Sustainable Mobility; 4) Education and Research; 5) Inclusion and Cohesion; 6) Health.

It is easy to understand that the ecological transition represents support in guiding public investments to achieve public interest goals that have been overlooked for too long. Similarly, GPP can play a strategic role in achieving the objectives of the Recovery and Resilience Plan. GPP is, in fact, a response to an approach that allows contracting authorities to take proper account of environmental criteria at every stage of the procurement process, promoting

the circular economy⁵⁵, the optimal allocation of resources and the development of innovation.

In this respect, the National Recovery and Resilience Plan provides for the adoption of minimum environmental criteria for cultural events⁵⁶.

The *ratio* of the provision is to improve the environmental sustainability of cultural events such as exhibitions, festivals, cultural events, music events financed, promoted or organised by public authorities. Also in this case, the systematic and homogeneous application of these criteria will lead to the diffusion of more sustainable technologies and products, encouraging the evolution of the operating model of market operators.

Secondly, the NRRP establishes that the Ministry for Ecological Transition will develop a specific action plan in order to support contracting authorities in applying the minimum environmental criteria set by law to tendering procedures, to overcome delays in authorisation procedures and tenders, specifically referring to the construction of new waste processing plants⁵⁷.

The Plan also includes interventions defined as «enabling reforms» for the «promotion of competition», aimed at «simplifying and rationalising legislation». Among these reforms, «the simplification of rules on public procurement and concessions is an essential objective for the efficient implementation of infrastructure and for the revival of construction activity: they represent essential aspects for the recovery due to the spread of the COVID-19 infection. This simplification should cover not only the awarding phase, but also the planning, programming and design phase»⁵⁸.

In order to achieve the desired simplification, the Plan distinguishes two types of measures: urgent measures and ordinary measures⁵⁹.

⁵⁵ For an analysis of the different aspects of the concept, F. DE LEONARDIS, *Economia circolare: saggio sui suoi tre diversi aspetti giuridici. Verso uno stato circolare?*, in *Diritto Amministrativo*, 1, 2017, pp. 163-207.

⁵⁶ National Recovery and Resilience Plan, Updated text sent to the Senate on Monday 26 April 2021 at 1.57 pm, p. 110.

⁵⁷ National Recovery and Resilience Plan, Updated text sent to the Senate on Monday 26 April 2021 at 1.57 pm, p. 122.

⁵⁸ National Recovery and Resilience Plan, Updated text sent to the Senate on Monday 26 April 2021 at 1.57 pm, p. 65.

⁵⁹ M. BONI, *Piano nazionale di ripresa e resilienza (PNRR): interventi in materia di public procurement*, in <http://www.news4market.it/2021/06/11/piano-nazionale-di-ripresa-e-resilienza-pnrr-interventi-in-materia-di-public-procurement/>, 11.06.2021; V. MAGNANO SAN LIO, *Riforme di contesto ed abilitanti previste dal PNRR per la “promozione della concorrenza” e, in particolare, per la “semplificazione dei contratti pubblici”*, in

The «urgent measures» include those relating to: anti-mafia verifications and legal compliance protocols; fast-track service conferences; limitation of liability for fiscal damage to cases in which the production of the damage is voluntarily intended by the person who has acted, excluding damage caused by omission or inertia; the creation of a technical advisory board; identification of a maximum time limit for the awarding of contracts, with a reduction of the time between notice publication and award; identification of measures for the containment of contract execution times, depending on the type of contract.

Concerning the implementation procedures, the Plan provides for the introduction of a special regulation on public contracts through a decree-law, aimed at reinforcing the simplifications already launched by Decree-Law no. 76/2020, as well as extending their effectiveness until 2023.

The Plan also identified further urgent measures, «which do not require a legislative measure». These measures concern: the start of the work of the Steering Committee for the public contracts coordination already founded by the Presidency of the Council in application of Article 212 of Legislative Decree 50/2016; the reduction in the number and qualification of contracting stations; the «enhancement of the database of all contracts held by the National Anti-Corruption Authority»; the «Simplification and digitalisation of the purchasing entities' procedures and interoperability of related data».

Finally, as regards the “ordinary measures”, the Plan acknowledges the various implementation difficulties caused by the «complexity of the current public procurement code».

The problems encountered have led to envisaging the transposition of the rules of the three EU directives (2014/23, 24 and 25), with an integration only for *non-self-executing* parts, and organising them «in a new discipline that is simpler than the current one, reducing as much as possible the rules that go beyond those required by European legislation, also on the basis of a comparison with the regulations adopted in other EU Member States»⁶⁰. In particular, the Plan establishes that the disciplines adopted in Germany and the United Kingdom will be taken into account for their relevance in terms of simplification, and that action will be taken through an enabling law, whose draft law will be submitted to Parliament by 2021. The legislative decrees

<https://www.scuderimottaeassociati.it/>, 17 May 2021.

⁶⁰ National Recovery and Resilience Plan, Updated text sent to the Senate on Monday 26 April 2021 at 1.57pm, p. 66.

will be adopted in the nine months after the approval of the enabling law. The most important principles and directive criteria of the enabling act are already identified in the Plan itself, and among these the «provision of measures in order to ensure energy and environmental sustainability and the protection of health and labour in the awarding of contracts» has been included.

In accordance with the provisions of the Plan, the President of the Council of Ministers and the Minister of Sustainable Infrastructure and Mobility presented the draft law containing «Enabling Act to the Government on public procurement». The report states that «the reference regulations reform became necessary not only to adapt the public contracts sector to the evolution of the relative case law, but also to solve the implementation problems encountered since the Code of Legislative Decree no. 50 of 18 April 2016 came into force»⁶¹. Among the objectives, there is that of «encouraging the implementation, through procedural simplification, of investments in green and digital technologies, as well as in innovation and research, in order to achieve the Sustainable Development Goals adopted by the United Nations General Assembly on 25 September 2015, to increase the eco sustainability of public investments and economic activities in accordance with the criteria set out in Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020, and also providing for measures to ensure compliance with energy and environmental responsibility criteria in the public procurement and concession contracts award, in particular through the definition of minimum environmental criteria (paragraph 2, point d)»⁶².

⁶¹ Draft Law presented by the President of the Council of Ministers (Draghi) and by the Minister of Sustainable Infrastructures and Mobility (Giovannini) communicated to the Presidency on 21 July 2021 concerning «Enabling Act to the Government on Public Procurement», p. 3.

⁶² Draft Law presented by the President of the Council of Ministers (Draghi) and by the Minister of Sustainable Infrastructures and Mobility (Giovannini) communicated to the Presidency on 21 July 2021 concerning «Enabling Act to the Government on Public Procurement», pp. 5 and 14.

Incentives for renewable sources and protection of investors' legitimate expectations

Marisa Meli (University of Catania)

Abstract: *The paper aims to analyse the new energy market that has been created in the European economic area, with specific attention to the “internal” profile. Even if we limit our gaze to national borders, this is not a simple operation as it is all part of a more general transformation of the entire economic system, which requires the construction of new institutional, financial, and legal frameworks that should be innovative and efficient. From a financial point of view, the question is about allocating substantial public resources or encouraging private investments, through appropriate economic regulation tools.*

Contents: 1. Decarbonisation of the economy and climate neutrality: the key role of renewable energies - 2. The new renewable energy market - 3. The support of regulatory instruments: the economic incentives - 4. The experience of «Conto Energia» - 5. Contingencies and changes during the progress of incentive schemes. Is there a legitimate expectation of investors that has to be protected? The positions of the Constitutional Court and of the Court of Justice - 6. A reconsideration of the issue - 7. Incentive mechanisms for distributed generation, referring to energy communities - 8. The “premium rate” in the first experimental intervention - 9. Implementation of the European directive and the new frame of reference – 10. Final considerations

1. Decarbonisation of the economy and climate neutrality: the key role of renewable energies

The transition towards climate neutrality requires several changes across the entire spectrum of policy decisions and a collective effort from the different sectors of the economy and society.

It is noticeable that the entire planetary economic system is structured according to operating mechanisms which are antithetical to current priorities. Reversing this course is not a simple operation at all. It requires a gradual process and commitments on several fronts. Without any doubt, the increasing use of renewable sources, i.e. the implementation of non-fossil sources¹ for energy purposes, which have been used as a priority so far, represents a key role in guaranteeing the construction of a new model.

¹ As specified in the European directives on renewables, these are wind, solar (solar

Promoting the production of electricity from renewable sources has been on the European agenda for some time, considering both soft law and law provisions.

Undoubtedly, it has had a decisive start with the *Clean Energy for all Europeans* package, which also includes Directive (EU) 2018/2001 (RED II)².

Thanks to RED II, the European Union has achieved the aim of maintaining a global leadership role with regards to renewable energy sources, while keeping to the commitments arising from the Paris Agreement.

Since then, the picture has continued to change, with the most recent developments marked by the introduction of the *European Green Deal*³ and the *European Climate Act*⁴.

The objective is increasingly clear: decouple economic growth from greenhouse gas emissions, which means decarbonising the economy through the transition towards an innovative energy system. This transition should lead to energy neutrality by 2050, albeit through gradual stages. It is important to note that the emphasis on renewable sources has not solely revolved around environmental implications.

As the Commission highlighted in «a framework strategy for a resilient Energy Union with a forward-looking climate change policy»⁵, a further boost in favour of renewables lies on the concern that the European Union imports a too high percentage of its energy needs, placing itself as the top energy-importing area, despite playing a leading role in renewable energy investments. Moreover, it holds 40% of all patents related to the exploitation of new technologies.

Those considerations, as relevant as ever, ended up being absorbed by the increasingly pressing climate crisis, which has become the driving factor of European policies.

Likewise, the domestic legislator, when transposing RED II, pursued the acceleration of the country's sustainable growth path as a specific objective. In order to achieve these results, it dictated different provisions

thermal and solar photovoltaic) and geothermal energy, ambient energy, tide, wave and other ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas, and biogas.

² European Directive on the promotion of the use of energy from renewable sources.

³ Doc. COM 2019, 640 def. *Transforming the Eu's economy for a sustainable future*.

⁴ Reg. 2021/1119 establishing the framework for achieving climate neutrality.

⁵ COM (2015) 80 def., part of the Energy Union package. In the same terms doc. COM (2016) 860 def., *Clean energy for all Europeans*.

about energy from renewable sources, in line with the European decarbonisation objectives of the energy system. (art.1, c.1, d.lgs. 199/2021)

2. The new renewable energy market

The new regulatory framework outlines a roadmap that in the end affects Article 194 Tr. itself. In fact, general objectives (somehow considered as a priority), such as the functioning of the energy market and the European Union's security of energy supply, were separated from the more specific objectives (somehow more marginal), such as energy saving, energy efficiency, the development of renewable energy and the interconnection of networks.

It is now quite evident how the relation between the first and second part of the TFUE provision has been completely reversed, and the functioning of the energy market is strongly conditioned by the given prevalence to the use of renewables. There are many implications.

The new energy market is shaped around the aim of achieving percentages that can contain (or eliminate completely) CO₂ emissions and, following this, develops in multiple directions.

Indeed, it must be kept in mind that within the achievement of the established European objectives, the differences in territorial realities and the geographical conditions must also be considered. If it is true that all countries have domestic renewable energy sources to exploit, it is equally true that not all of them have the same characteristics; therefore, it will be a matter of using the different potentials in the best way possible.

Hence, under this perspective, a new energy market - relevant especially in the European economic area⁶ - has been created.

⁶ Up to this moment, the tools used to exploit the peculiarities of each region for the benefit of the entire community have been the so-called joint projects or the so-called statistical transfers, cooperation mechanisms that actually produced results as highlighted by S. MANSERVISI, *Energie rinnovabili e pianificazione energetica sostenibile. Profili europei ed internazionali*, Jovene, Napoli 2016. To these ones, a further tool is added: a financing mechanism, which also ends up acting as an incentive for economic operators. It connects countries that contribute to financing the projects (contributing countries) with countries that agree with the construction of new projects on their territory (host countries). Contributing countries can make voluntary payments to the system, and the resources (which can also come from EU funds or private individuals) will be committed to carry out projects in other countries. In this way, the former charge these projects to their compulsory portion; the latter have the advantage of seeing works carried out on their territory, with a consequent increase of available jobs.

We will only deal here with the, so to speak, “internal” profile. Even if we limit our gaze to national borders, this is not a simple operation as it is all part of a more general transformation of the entire economic system, which requires the construction of new institutional, financial, and legal frameworks that should be innovative and efficient.

From a financial point of view, the question will be about allocating substantial public resources or encouraging private investments, through appropriate economic regulation tools⁷.

Thus, supporting systems play a decisive role, meaning that all those instruments which aim at promoting the use of energy from renewable sources by reducing costs, increasing selling prices and intervening with investment mechanisms, aid, exemptions, tax relief, and so on, comply with European rules on aid.

An equally important role is also played by the opposite mechanisms, which abolish the incentives and benefits of the non-renewable sector, thus implementing different strategies that may assure a change of direction.

3. The support of regulatory instruments: the economic incentives

The encouragement of renewable energies, through specific incentive mechanisms, is nothing new. Within our legal system, the first incentives had already appeared by the end of the 1990s, alongside the first liberalisations introduced by the *Bersani* decree aimed at encouraging the major energy producers to feed into the grid at least a share of energy produced by renewables. At that early stage, the most used incentive instrument was the so-called «Green Certificates», tradable securities, representative of production quantities.

As soon as the energy market opened, other incentive instruments began to be used. These were not solely intended for large producers. Instead, they were based on energy price and operated through a payment structure that was proportional to the amount of energy withdrawn or the price of the energy produced.

⁷ The use of such tools, does not represent a novelty, see, for everybody, M. BRESSO, *Per un'economia ecologica*, Carocci, Roma 2002; B. POZZO, *Le politiche energetiche comunitarie. Un'analisi degli incentivi allo sviluppo delle fonti rinnovabili*, Giuffré, Milano 2009; M. CLARICH, *La tutela dell'ambiente attraverso il mercato*, in *Dir. Pubbl.*, 2007, p. 219 ff.; P. RANCI (ed.), *Economia dell'energia*, Il Mulino, Bologna 2011; M. CAFAGNO, *Strumenti di mercato e tutela dell'ambiente*, in G. ROSSI (ed.), *Diritto dell'ambiente*, Giappichelli, Torino 2011, p.181.

As we shall see, these mechanisms operate differently. In some cases, the GSE guarantees the collection of produced energy at a fixed price (*feed-in tariff*), and this economic burden is then transferred to the consumer through specific tariff components on their energy bill. In other cases, the mechanism provides the disbursement of an incentive rate, proportional to the energy produced by the power plants. This can be in addition to the revenue generated from selling the produced energy on the market (*feed in premium*).

In both cases, these mechanisms achieved better results and were more effective than those based on exchanges.

On one hand, these tools offer businesses more certainty on overall costs incurred and possible revenues. However, the proper functioning of these tools requires certainty and the amount offered should remain persistent over time. The only way to assure economic operators that certainty, the basis of progressive and constant development of renewables, will be achieved is by giving stability and continuity to the political and regulatory framework.

However, the «Conto Energia» (Energy account) issue tells a different story.

4. The experience of «Conto Energia»

The Energy Account mechanism, envisaged by an EU directive (2001/77/CE) and operating in Italy since 2005, is a state incentive, set up to provide compensation for the energy produced by photovoltaic plants. It is a *feed-in tariff* mechanism, managed by the GSE and designated for photovoltaic plants with minimum power standards and other specific requirements (newly constructed facilities, etc). It allows one to receive a cash remuneration for the energy produced by photovoltaic plants for a twenty-year period (on average). It was immediately adjusted in 2007, with some novelties regarding the incentive fee modulation and the means of access. However, during the first stage, this mechanism maintained the characteristic of a “blind” incentive, which was allocated under requested requirements but without it being proportional to the amount invested, and it did not impose any maximum constraint to the feasible generation capacity.

Undoubtedly, this instrument played a relevant propulsive function by pushing enterprises to accelerate their investments and, in some ways unexpectedly, assured important growth in the sector⁸.

⁸ With several plants that at the end of 2010 exceeded 155 thousand units, with a total capacity of 3,460 MW. Thanks to this surge, Italy has become the second largest market in the world, after Germany, since 2009. See GSE, Activity Report, 2010.

Hence, it ended up burdening consumers with a very high social cost, especially because the incentives were provided without considering the sector's technological progress, which would have reduced investment costs and therefore, over time, would have allowed the installation of less expensive plants with more favourable conditions for final consumers.

These considerations were at the basis of the legislator's subsequent actions, which caused a real "earthquake" for those who operated in the sector.

At first, Legislative Decree 28, March 3 2011, in regards to the Fourth Energy Account, redefined the incentive mechanism with the objective of aligning the amount of tariffs to the cost evolution of the technologies and introduced a limit to the annual cumulative cost of the incentives.

Even more traumatically, with the Fifth Energy Account, Legislative Decree 91/2014 (known as «*spalma-incentivi*» decree), the legislator, in order to optimise the timing management of the collection and disbursement of the incentives and to guarantee a better sustainability in the supporting policies of renewable energies, provided new ways of disbursing incentive rates for the electricity produced by photovoltaic plants.

Therefore, the legislative decree implies a remodulation through three different options, each one disadvantageous in comparison to the regimes regulated by the Convention with the GSE.

In other words, the provision of excessive incentives, which was not justified by the real cost investments and the increase of consumer fees, led the legislator to revise his initial choices. It should be kept in mind that these are the years of the economic crisis, and public expenses should be reduced⁹.

Consequently, the uncertainty and variability of the reference framework caused a drastic reduction of the sector's "appeal", which, until that time, had been a great success.

From a legal point of view, the matter provoked a great dispute. The focal question was if it could be justified to intervene with further legislative tools which would affect the legitimate expectations of economic operators, who, according to the previous regulations, had decided to invest.

At an even deeper level, the matter was whether, by facing the fulfilment of public authority, which was based on balancing different and

⁹ G. COZZOLINO, *Energie rinnovabili e tutela dell'affidamento: qualche riflessione a proposito degli incentivi al fotovoltaico alla luce dei recenti sviluppi normativi*, in www.rivistaaic.it, 2012; the issue was highlighted by N. RANGONE, *Fonti rinnovabili di energia: stato della regolazione e prospettive di riforma*, in *Giur. cost.*, 2010, 2, p. 1490 ff.

conflicting public interests between them, it was possible to identify and guarantee the protection of investors' legitimate expectations. This was particularly relevant for the investors who were beneficiaries of the incentive tools.

5. Contingencies and changes during the progress of incentive schemes. Is there a legitimate expectation of investors that has to be protected? The positions of the Constitutional Court and of the Court of Justice

As previously mentioned, the matter had great importance and also concerned foreign investors, giving rise to arbitration proceedings¹⁰. According to a previous doctrinal theory which had been proposed by several parties, the incentive laws would have a reinforced constitutional protection¹¹. In that way, any subsequent amendment *in peius* would infringe article 41 of our Constitution and the therein established principle of free economic initiative, which requires stable legal relations and predictable choices¹².

According to others, in the specific matter characterised by a contractual relation with the GSE (the incentives allocation requires a Convention, established with the Energy Services Manager), the investors' protection of legitimate expectations would be guaranteed by the principle of good faith, also applicable in relations between private individuals and public administration.

In this regard, within contractual relations, if the public administration could unilaterally change the already established conditions during the process, the risk of a more expensive commitment would burden private investors, exposing them to unstable relations and causing them to miss scheduled programs (the Convention agreement still contains the clause «The GSE reserves the right to unilaterally amend the Contract in accordance with any amendments and updates to the reference legislation...»).

It is undisputed in case law that the agreement does not give rise to a relationship between equals, since the GSE is included among private entities

¹⁰ F. SCALIA, *Incentivi alle fonti rinnovabili e tutela dell'affidamento*, in *Il dir. dell'economia*, 2019, p. 229 ff.

¹¹ G. GUARINO, *Sul regime costituzionale delle leggi di incentivazione e di indirizzo* (1961), now in *Scritti di diritto pubblico dell'economia e di diritto dell'energia*, Giuffrè, Milano 1962, p. 174 ff.

¹² See V. PAMPANIN, *Legittimo affidamento e irretroattività della legge nella giurisprudenza costituzionale e amministrativa*, in *Giust. amm.*, 2021, n.11, p. 2015 ff.

that carry out public functions¹³. The central matter remains whether the need to protect the private investors' trust can limit the exercise of public functions.

As it has been said regarding this matter, there has been a wide case study, which led the administrative courts to request the intervention of both the Constitutional Court and the European Justice Court¹⁴. Both, considering the legislator's reasons, recognised the authority and responsibility of the State to reconsider its own decisions under certain conditions.

According to the Constitutional Court, as a rule, the protection of legitimate expectation and legal certainty represents a fundamental principle of the rule of law. However, this does not mean that the legislator cannot intervene, modifying unfavourably long-term dealings. It only involves a necessary supervision of these intervention means, to assure they are not unpredictable and unreasonable¹⁵.

In this specific matter, the Court excluded that the legislator overstepped its powers.

On the contrary, in the economic picture - the view of the profitability of the incentive rates for solar energy produced by photovoltaics, which was progressively even more accentuate, both regarding production costs (due to the sudden technological development of the sector), and in relation to the overall European framework - the growing economic weight of these incentives on final electricity consumers was likewise pointed out, particularly on small and medium-sized enterprises, constituting the national productive infrastructure¹⁶.

According to the Court, the intervention is reasonable and guarantees the protection of the public interest, regarding the balancing of opposite

¹³ For all, Council of State, AP n. 9/2019 and n. 18/2020, albeit referring to the different problem of the forfeiture of the right to incentives and the consequent obligation to return.

¹⁴ In particular, the question of constitutional legitimacy under consideration, was raised by the Lazio Regional Administrative Court, Section III-Ter, with no less than 66 ordinances. The question was also raised by the Lazio Regional Administrative Court in an order of September 28th, 2018.

¹⁵ Constitutional Court, 24th January 2017, n.16.

¹⁶ E. MARIANI, *Stabilità degli incentivi alle fonti rinnovabili e potere rimodulativo del Legislatore: il punto di vista della Corte costituzionale*, in www.federalismi.it, 2017; F. PAGANO, *Disposizioni di natura incentivante e meritevolezza dell'affidamento ingenerato dal legislatore*, www.rivistaaic.it, 2017; S. MANICA, M. JIMENEZ PLAZA, *I principi della certezza del diritto e di legittimo affidamento tra Corte Costituzionale, giudice amministrativo e Corte di Giustizia: il caso degli incentivi al fotovoltaico*, in www.dirittodeiservizipubblici.it, 2019.

interests. The Court also did not consider it to be unpredictable, since incentives are not required to remain static and resistant to changes over time, which characterise long-term agreements themselves.

The Court also specifies that Conventions themselves are not contracts which are exclusively intended to guarantee benefits to economic operators, to whom the contracts initial conditions should be granted for twenty years even in the face of potential technological advancements over time. The Conventions are a proper regulation instrument. They are intended to incentivise the use of specific energy sources, but must always consider other public interests, such as limiting public expenditure or containing energy bill costs, which are disadvantageous for consumers.

The European Court of Justice followed the already mentioned interpretation of the matter. Indeed, the European Court of Justice was asked¹⁷ whether member states could reduce the incentive amount established within the support schemes provided for renewable energy sources usage, in accordance with the objectives of the European directives, or if this was prevented by European Union law.

The Court considered the *«spalma-incentivi»* decree modifications to be complying with the principles of legal certainty and legitimate expectations.

Furthermore, the Court highlighted that the “swing” of the whole sector could be predictable, and a cautious and prudent economic operator should have considered that the regime of incentives could be modified or even abolished by national authorities that must consider the evolution of the whole framework. From this perspective, the unilateral changes of the Convention’s legal terms had no relevance, since they were public law contracts, in which the power to unilaterally amend is strictly connected to the sector evolution norms.

6. A reconsideration of the issue

While the arguments of the national and supranational court might seem comprehensible, considering the historical context in which the support scheme modifications intervened, it does not mean that the matter should not be reconsidered under a more general view.

¹⁷ Judgement 15th April 2021, proceedings C798/18 and C-799/18.

Indeed, the argument suggesting that a prudent economic operator should have foreseen the future eventual “swing” of the incentive mechanisms seems to be very weak.

On the contrary, individuals who invest based on provisions finalised to remunerate those investments rely on the seriousness of the commitment taken by public powers and the maintenance of the relative predictions. In the same way, the importance of the sector and the development of employed technologies cannot justify a reduction in support measures that would damage economic operators, who have already borne all the costs.

From a different perspective, it is clear that the public administration power is justified in correcting their initial approval, based on wrong economic evaluations which cannot be passed on to the beneficiaries.

In particular, these reconsiderations end up negatively affecting not only private interests but also public ones in the fulfilment of the incentive mechanisms which were reserved, namely, to encourage the use of renewables.

Therefore, the issue must be reconsidered, bearing in mind that nowadays a more decisive objective guarantees the speeding up of the sustainable growth of the country, in accordance with the European decarbonisation objectives of the energy system.

Moreover, RED II has expressly incorporated the principle of incentive stability «in order to support Member States’ ambitious contributions to the Union target, a financial framework aiming to facilitate investments in renewable energy projects in those Member States should be established, including through the use of financial instruments» (Recital to regulation 12) in addition, «policies supporting renewable energy should be predictable and stable and should avoid frequent or retroactive changes. Policy unpredictability and instability have a direct impact on capital financing costs, on the costs of project development and therefore on the overall cost of deploying renewable energy in the Union».

Therefore, the matter will be reconsidered, with particular attention to incentive mechanisms related to distributed generation.

7. Incentive mechanisms for distributed generation, referring to energy communities

One of the main changes introduced by RED II is the increasing use of distributed generation, through the new schemes of collective self-consumption and energy communities. In short, it is about sharing

mechanisms of self-consumption and the usage of energy communities, which have proven successful in many countries, including those in Europe¹⁸. These sharing mechanisms span from small-sized systems benefitting entire buildings to more extensive projects involving entire communities.

These innovative instruments make sure that final customers become actual players of the energy transition by actively contributing to decarbonisation. The new distributed generation system revolves around the new *Prosumer*¹⁹ position, an individual who is at the same time both a producer and a consumer.

Therefore, within the new organisational system, citizens cease to be the weak part of a relationship (i.e a contractual relationship with the companies that operate in the energy distribution sector), and instead, become active in the management of their own needs.

It looks as though the third industrial revolution prophesied by Rifkin is taking shape. It is characterised, in this specific matter, by the shift from a centralised system to a «distributive and collaborative regime system», through actions that can encourage change²⁰.

In this new context, energy communities have a particular relevance.

They give rise to a real legal entity that citizens, public administrations, and local businesses can join (under certain conditions established by the legislator).

This new legal entity, besides producing energy for its own consumption, must pursue the objective of providing environmental, economic, and social benefits, at the community level, to its stakeholders, members or local areas in which it operates, rather than merely pursuing financial gains.

Thus, communities may give rise to social welfare projects, for example, sustaining urban regeneration programs, development of green areas, or other projects. In any case, among the specific functions assigned to the communities by the European directive, there is the fight against energy poverty, which is a particularly relevant matter.

Regarding the realisation of these new configurations, the European legislator underlines the importance of support measures.

¹⁸ See MANSERVISI, *Energie rinnovabili*, cit., p.140 ff.

¹⁹ As it is known the expression may be referable to A. TOFFLER, *The Third Wave*, and in the Italian version *La terza ondata*, Sperling & Kupfer, Milano 1987.

²⁰ J. RIFKIN, *La terza rivoluzione industriale*, Mondadori, Milano 2011.

Moreover, with a difference: while in the previous directives on renewables the national support schemes had an “internal” connotation, since each Member State could discretionarily decide what, how, and when to incentivise, RED II states that renewable self-consumers «receive remuneration, including, where applicable, through support schemes, for the self-generated renewable electricity that they feed into the grid», in the same way, it states that renewable energy communities, in accordance with the dispositions of the Treaty on State aid, are subjected to support schemes, implying their necessity as regulation tools, in order to facilitate the energy transition towards a distributed generation model.

8. The “premium rate” in the first experimental intervention

As it is known, article 42bis of decree-law «*milleproroghe*» (converted into law 8/2020, 28 February 2020), temporarily applied RED II, with reference to articles 21 and 22, in order to allow the “experimentation” of the new configurations of collective self-consumption and energy communities²¹.

The legislative action was followed by the implementation measures, from which the first experiences began.

From our standpoint, article 42bis, paragraph 7, to incentivise the configuration of renewable self-consumption, referred to a future provision of the Economic Development Minister to identify the appropriate measures. It specified that the new incentives, which cannot be combined with other incentive mechanisms, but only with tax deductions effective on renewable energy plants, would not represent an additional cost for the State and would replace the current “exchange on site” system.

In September 2020, the Ministry of Economy and Finance decree intervened, identifying the incentive tariff for remunerating renewable source plants included in the experimental configurations of collective self-consumption and renewable energy communities.

This tariff, which has always been disbursed by the GSE after the stipulation of a special agreement aimed at rewarding instantaneous self-consumption and the use of storage systems, was set at 110 and 100 E/MWh (higher for energy communities, because of the greater breadth and social utility that characterises this configuration), for a fairly long period of use (20

²¹ For a commentary on this interim implementation, refer to my *Self-Consumption of Renewable Energy and New Forms of Energy Sharing*, in *NLCC*, 3, 2020, p. 630 ff.

years), consistent with the useful life of the plants, mainly, at least in this first experimental phase, photovoltaics).

It is important to highlight here that the incentive tariff, even with its peculiarities, re-proposed the same old incentive mechanism already experienced with the Energy Account, which was thought to be a very generous action but lacked predictability. The new incentive tariff, indeed, has the same inflexibility and certainly cannot prevent future “reconsidering” interventions by the legislator. This is confirmed by the outline of the Agreement, which keeps the wording for which «The GSE reserves the right to unilaterally amend the Contract in accordance with any amendments and updates to the reference legislation, without prejudice to the Operator's right to withdraw from this contractual relationship...».

Once again, this mechanism does not protect the parties who benefit from it affecting their reliance and trust. This is even more evident if one considers the possibility, for new configurations, of assigning the credit accrued with the GSE (by virtue of art. 4.1 - «assignment and retrocession of credits» - in the contract attached sub. 5) of the GSE Technical Regulations).

In fact, on one hand this could probably constitute a concrete negotiating opportunity for the financing subjects, i.e. those who intend to acquire the entire share of the incentive, in exchange for the implants/accumulator's installation, or other services in any case related to the functioning of the CER. On the other hand, the persistent uncertainty regarding the stability of the incentive, ends up precluding this possibility. Who would stipulate an agreement knowing, upstream, that the balance of the negotiations could suddenly change due to an update of the conditions? From this point of view, providing the right to withdrawal as a protection tool means very little, since it does not allow the recovery of already lost opportunities.

9. Implementation of the European directive and the new frame of reference

It appears as if the legislator was more aware about the issues during the (final) implementation of RED II (Legislative Decree no. 199/2021).

It is uncertain, because, as usual, the new regulation refers to a future ministerial decree to identify the incentive measures. However, this has not yet been issued. Therefore, we are not yet able to know the actual evolution of the matter and the choices that the public administration will concretely make.

However, it is known that the reference framework in which the next implementing provision will be inscribed, has considerably changed.

The new legislative decree, indeed, underlines the importance of support systems to produce electricity through renewable sources, to which the entirety of Chapter II is dedicated.

In addition to this, it also gives clear indications regarding the general characteristics of incentive mechanisms (art. 5) and on those principles related to shared energy (art.8).

Referring to the incentive mechanisms, within the already known functioning schemes (tariff disbursed by the GSE, which is covered by the general charges relating to the electricity system), particularly innovative provisions are those according to which: 1) the incentive mechanism is proportionate to the cost of the measure, to guarantee the equitable remuneration (art. 5, let. c); 2) the same can be diversified, based on the dimensions and on the size of the plant, to take into account the “staircase” effect (art. 5, lett.d).

Indeed, it is evident the legislator has the intention to move in a different direction to the one that has been followed until now: moving away from undifferentiated support measures to ones that are proportionate to the effective cost of the plant and diversified depending on the power of the realised plant.

There is no doubt that this is the right attitude to have in making the principle of stability concrete; only by making incentive mechanisms more flexible will it be possible to realise a grading that considers the sector’s technological development and the transformation of the framework conditions. This would shelter the beneficiaries from subsequent and sudden corrective action.

However, not all of the introduced innovations were equally coherent. In the case of art. 8, letter f) in which, referring to the regulation of incentives for energy sharing, it has been stated that «access to the incentive is only guaranteed until the achievement of the established “power quotas”, on a five-year basis, in congruence with the achievement of the objectives referred to in art. 3».

The provision is doubtful, and its actual implementation shall be carefully monitored.

Indeed, the provision seems reasonable if what the legislator meant to say was that every five years, the opportunity of maintaining the incentives to

a certain measure should be evaluated based on the results achieved in the transition energy process.

However, considering the provision literally could lead to a different interpretation, conditioning the access to incentives at the expense of current beneficiaries.

Under these terms, the provision would end up once again undermining the principle of stability, as well as appearing completely unreasonable. Therefore, it would penalise those configurations that contributed the most to the realisation of the pre-established objectives.

As previously mentioned, only the implementing decree will clarify this and other unanswered questions on which, at this very early stage, there is no need to focus attention. Certainly, the wider general context in which it will have an impact appears to be more respectful of the principle of stability and legitimate expectation of investors.

10. Final considerations

Within this renewed context, there is still an open question concerning the latest incentive configurations of distributed generation, implemented by the transient regulation, which may be modified by new provisions that, as it has been said, are all based on a different logic.

Pending the adoption of the ministerial decree, the implementing provisions of the transient regulations will find application regardless. (art. 8, c.2). Whenever they become effective, should the legislator consider applying the new incentive mechanisms, also to new configurations, whether they are proportional and diversified? Consequentially, should the GSE unilaterally modify the already established terms of the Convention?

It is legitimate to have doubts about it. It would mean, once again, undermining the expectations for those who have relied on the promises made by public powers to encourage “pilot experiences”²².

Even if it is true, as the national and international Court have taught us, that the principle of stability of incentives cannot be considered as a dogma, it is equally true, in this specific case, that the reasonableness and predictability requirements, which could justify an amendment, are lacking in full.

²² A survey of the first renewable energy communities in Italy can be found in the volume L. DE VIDOVICH-L. TRICARICO-M. ZULIANELLO, *Community Energy Map*, FrancoAngeli, Milano 2021. See also the publication of the RSE, *Le Comunità energetiche in Italia*, Alkes, Milano 2021.

Indeed, it is unpredictable that the legislator, having partially transposed the directive in order to guarantee the experimentation of new configurations, would completely modify the operating conditions, hence shifting the cost of his own distinct evaluation onto the beneficiaries.

Neither could such an intervention be justified by reason of general interest. Despite the current scenario where energy bills burden customers and small enterprises with significantly higher costs than before, this situation is not at all related to system charges²³.

Modifying the measure of the incentive, and disappointing those who have already experienced collective self-consumption and renewable energy communities, would go against the very own configurations that were supposed to contribute to the system's decarbonisation and the reduction of Italy's energy import.

²³ It should be considered that the legislator also considered this problem, providing (art. 15) from 2022 that, a portion of the annual revenues deriving from the CO2 emissions trading system, must be allocated to cover the costs of incentives for renewable sources.

Green finance as a driver for ecological transition

Antonio Las Casas (University of Catania)

Abstract: *This paper investigates the model of green bonds as a legal tool designed to offer to private actors on financial markets legal and economic incentives to pursue the protection of environment as a socially desirable goal. The risk of greenwashing that green finance typically entails has prompted different regulatory approaches throughout the world. Whilst the US system still mainly relies on private governance tools, the European Union has recently enacted a more effective regulation based on a harmonized taxonomy of sustainable investments and on detailed duties of disclosure upon participants to financial markets. The comparative analysis of those regulatory approaches offers the opportunity to assess whether and to what extent private law tools succeed in aligning private benefits with social benefits to achieve sustainable development goals.*

Contents: 1. Private and social benefits of green finance - 2. The need for a regulatory framework - 3. Regulatory models - 4. Private law remedies and social goals.

1. Private and social benefits of green finance.

According to a widely shared opinion, public finance alone is deemed insufficient to provide the economic resources needed to foster the transition of structures of production and consumption towards ecological and sustainable models. Therefore, as a number of international and supranational documents contend, resorting to financial markets appears to be the more viable option in collecting the resources needed to support and encourage ecological transition¹.

The practical outcome of those ideas was the development of “green

¹ See UNITED NATIONS, *Transforming our World: the 2030 Agenda for sustainable development*, 2015, <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>; UNITED NATIONS, *Addis Ababa Action Agenda of the Third International Conference on Financing for Development*, 2015 https://sustainabledevelopment.un.org/content/documents/2051AAAA_Outcome.pdf; UNITED NATIONS, Paris Agreement, 2015; EUROPEAN COMMISSION, Action Plan: Financing Sustainable Growth, COM(2018) 97 final; OECD, *Green bonds: mobilizing bond markets for a low-carbon transition*, Oecd Publishing, Paris, 2017, p. 22 ff., https://read.oecd-ilibrary.org/environment/mobilising-bond-markets-for-a-low-carbon-transition_9789264272323-en#page24.

finance”, “social finance” or “impact” finance and in particular, the widespread diffusion of specific “environment-oriented” financial instruments commonly labeled as “green bonds”². The definition of a bond as “green” essentially means that the proceeds of its issuance are to be used for the development of specific projects aimed at the improvement or protection of the “environment”³.

The analysis of how those instruments are implemented and regulated in different legal systems offers the opportunity to investigate how economic incentives and private law models operate as a means for entrusting private actors with the task of pursuing “social goals” as regards the protection of the environment⁴.

From a comparative law perspective, green bonds and, more generally, sustainable finance have undergone different regulatory approaches. Whilst the US system still relies on private governance and soft law models, the EU has recently adopted a more stringent regulatory framework. A comparative analysis of those regulatory approaches offers the opportunity to assess if and how legal regulation manages to align private goals and social (environmental) goals to achieve the desired level of environmental protection and improvement.

In the last decade the green bond market has experienced constant growth due to the engagement of several private issuers, such as banks,

² See generally, as regards Italian scholarship, D. LENZI, *La finanza d'impatto e i green e social bonds. Fattispecie e disciplina tra norme speciali e principi generali*, in *Banca Impresa Società*, XL, 1, 2021, pp. 115-156.

³ See OECD, *Green bonds: mobilizing bond markets for a low-carbon transition*, cit., p. 23 ff.: «Green bonds are debt instruments used to finance green projects that deliver environmental benefits. A green bond is differentiated from a regular bond by its commitment to use the funds raised to finance or refinance “green” projects, assets or business activities»; for a critical assessment of the model of green bonds see D. LENZI, *La finanza d'impatto e i green e social bonds*, cit., p. 115 ff.; T. ASHRAF, *Bond, green bond: a licence to tackle climate change*, in *Butterworths Journal of International Banking and Financial Law*, 4, 2016, pp. 228-229; B. FASKE, *Turning Billions into (Green) Trillions: Tracking the Growth and Development of the Green Bond Market in China, France, India, and the United States*, in *Tulane Environmental Law Journal*, 31(2), 2018, pp. 293-325; S. K. PARK, *Investors as Regulators: Green Bonds and the Governance Challenges of the Sustainable Finance Revolution*, in *Stanford Journal of International Law*, 54(1), 2018, pp. 1-48; J. MATHEW, *Shades of green in financing: a discussion on green bonds and green loans*, in *Butterworths Journal of International Banking and Financial Law*, 5, 2018, pp. 311-314.

⁴ On private environmental governance as a ‘second-best alternative’ to public regulation see v. M.P. VANDENBERGH, J.M. GILLIGAN, *Beyond Gridlock*, in *Columbia Journal of Environmental Law*, 40(2), 2015, pp. 217-304.

pension funds and private corporations. This growth has also been induced by reputational concerns and the increasing importance of the idea of “corporate social responsibility”⁵.

In strict legal terms, since the green bond is still a bond, the basic structure of the transaction between issuer and investor amounts to a loan whereby the capital lent by the investor is paid for through interest payments made by the borrower. However, the specific character of the investment loan as oriented towards “environmental goals” reveals a peculiar encroachment of “private” and “social” gains expected from the transaction.

The social gains expected from such a bond loan are quite straightforward to perceive because they are directly linked to the environmental value of the project that the proceeds are intended to finance. In economic terms, though, such sustainability-oriented investment is typically expected to produce further and diversified gains for both businesses and financial markets as a whole, as well as for the individual economic actors involved in each bond issuance.

On the one hand, a “green” investment contributes to the reduction of systemic environment-related risks that in the medium-long term may have disruptive effects on costs and revenues of production and may significantly reduce the value of assets. In addition, the use of financial proceeds to improve the ecological sustainability of production processes reduces the so-called “transition risk”, namely the possibility of a future increase in costs due to the obligation to comply with stricter environmental standards imposed by the law. Therefore, a re-orientation of production and investments towards sustainability is in fact consistent with some current basic needs of firms and the economic system in general⁶.

⁵ See B. FASKE, *Turning Billions into (Green) Trillions*, cit., p. 297 ff.; K. M. TALBOT, *What Does Green Really Mean: How Increased Transparency and Standardization Can Grow the Green Bond Market*, in *Villanova Environmental Law Journal*, 28(1), 2017, pp. 127-146; on corporate social responsibility recently for an Italian perspective, M. LIBERTINI, *Economia sociale di mercato e responsabilità sociale dell'impresa*, in *Orizzonti del diritto commerciale*, 1, 2013, pp. 1-27; C. ANGELICI, *Divagazioni sulla “responsabilità sociale” d'impresa*, in *Rivista delle Società*, 1, 2018, pp. 3-19; as regards the European approach, G. RIOLFO, *La “visione” europea di impresa “sostenibile”: mito o realtà?*, in *Contratto e Impresa/Europa*, 3, 2021, pp. 533-562.

⁶ See N. LINCIANO *et al.*, *La finanza per lo sviluppo sostenibile. Tendenze, questioni in corso e prospettive alla luce dell'evoluzione del quadro regolamentare dell'Unione europea*, Consob, Roma, 2021, pp. 53 ff.; in general, on the relationship between sustainability factors and investment strategies of institutional investors, see G. STRAMPELLI,

On the other hand, green projects financed with the use of the proceeds usually generate in the meantime also individual economic gains, as, for instance, cost savings and increased efficiency stemming from the renovation of assets or energy production processes, as well as the revenue generated by the construction of a sustainable building. Therefore, the environmental sustainability of an investment project generally couples private economic gains with the production of reputational benefits for each actor involved.

Finally, some surveys show that investors are usually willing to pay a “green premium” (greenium) on the financial instrument because the green character of the bond induces them to accept a lower interest rate compared to a “non-green” instrument⁷. This means, first, that the green character of the bond amounts to an “added value” that may allow issuers to borrow money at a lower cost, and, second, that the actual achievement of the green project should be deemed as part of the benefits that the investor is legally entitled to receive from the transaction⁸.

2. The need for a regulatory framework

Since the system of green bonds entrusts private actors and the market mechanism with the task of pursuing environmental goals, they must be ascribed to “economic” or “market” models according to the usual taxonomy

Gli investitori istituzionali salveranno il mondo? Note a margine dell'ultima lettera annuale di BlackRock, in *Rivista delle società*, 1, 2020, pp. 51-71.

⁷ R. PRECLAW, A. BAKSHI, *The cost of being green*, Barclays Bank plc, London, 2015, https://www.environmental-finance.com/assets/files/US_Credit_Focus_The_Cost_of_Being_Green.pdf; for a deeper analysis on the formation of the price of *green bonds* and on the so-called *green bond premium* see E. AGLIARDI, R. AGLIARDI, *Financing environmentally-sustainable projects with green bonds*, in *Environment and Development Economics*, 24, 2019, pp. 608–623; O. D. ZERBIB, *The effect of pro-environmental preferences on bond prices: Evidence from green bonds*, in *Journal of Banking and Finance*, 98, 2019, pp. 39-60; T. EHLERS, F. PACKER, *Green bond finance and certification*, in *BIS Quarterly Review*, 2017, pp. 89-104, p. 95 ff.

⁸ From the perspective of civil law systems (in particular, Roman law systems according to R. David's taxonomy) this conclusion may be expressed in terms of a specific configuration of the “cause” of the contract, in that the cause should involve the achievement of both economic (receiving the agreed interest rate) and non-economic interests (the social benefit coming from the green project), see e.g. with reference to the Italian system LENZI, *La finanza d'impatto e i green e social bonds*, cit., p. 124; R. ROLLI, *L'impatto dei fattori ESG sull'impresa. Modelli di governance e nuove responsabilità*, Il Mulino, Bologna, 2020, p. 172.

of legal models for the protection of the environment⁹. Those models typically employ private law tools and economic incentives to align private and social gains in order to instrumentalize the utilitarian attitude of economic actors and the market to achieve social objectives. In other words, in the case of green bonds, issuers and investors would play a “regulative” role, in which they would push financial markets towards the achievement of an increased environmental sustainability of industrial processes.

From a regulatory perspective, two issues relating to the legal structure of the green bond model appear to be critical. The first issue concerns what is “green”, which requires defining what projects or activities actually foster the protection of the environment so as to deserve a “green label”. Furthermore, it necessitates specifying how and to what extent the proceeds should contribute to the project so that the financial instrument may legitimately qualify as green. Indeed, in absence of any regulation, investors would be affected by a typical informational asymmetry and would bear the full cost for the assessment of the green nature of the project and the actual connection between the use of the proceeds and the achievement of the project (once it is qualified as green).

The second issue concerns the risk that eventually the environmental benefit that justifies the green label may not be achieved. Whilst the first problem may be described as an informational asymmetry issue, the risk of non-performance of the environmental project raises a typical principal-agent problem, since the beneficiary of the proceeds could have incentives to behave opportunistically and deviate the resources from the environmental project declared. Such risk requires assessing what legal mechanisms or remedies could in fact bind the issuer to pursue the environmental objective communicated.

Those two problems (informational asymmetry and principal-agent) illustrate the risk of “greenwashing” – an opportunistic use and exploitation of the green label – which typically affects green finance, since the actors involved might be tempted to capture the advantages attached to the green label (such as the so-called “greenium”, reputational gains and, possibly, a favorable tax regime) without bearing the costs of effective measures

⁹ V. U. MATTEI, *I modelli nella tutela dell’ambiente*, in *Rivista di diritto civile*, 1985, pp. 389-427; M. MELI, *Il principio comunitario “chi inquina paga”*, Giuffrè, Milano 1996; EAD., *Oltre il principio chi inquina paga: verso un’economia circolare*, in *Rivista critica del diritto privato*, 35(1), 2017, pp. 63-80; M. CLARICH, *La tutela dell’ambiente attraverso il mercato*, in *Diritto Pubblico*, 1, 2007, pp. 219-239.

beneficial to the environment¹⁰.

3. Regulatory models

Unlike other “economic models” for the protection of the environment¹¹, green bonds – though often invoked by international organizations – owe their initial fortune to the autonomous and unregulated initiative of market actors¹². Without a regulatory framework, the green character of a bond would essentially depend on the “green” label assigned by issuers and explained through their representations and commitments as to the environmental value of the project and the use of proceeds¹³. Such an initial approach would fundamentally rely on the trustworthiness of issuers and would in fact shift the burden of assessing the actual environmental benefit of the transaction onto investors, leaving their informational asymmetry untouched.

In order to increase the trust of potential investors in those new financial instruments, market actors built a system based on private governance and self-imposed standards intended to perform some basic regulatory functions. Private actors – typically associations of issuers, brokers, and other stakeholders – developed voluntary certification systems of the green character of financial instruments, based on several tools, such as standards decided by a certification entity¹⁴, the publication of so-called “second party opinions” on behalf of external auditors¹⁵, and the inclusion of

¹⁰ On *greenwashing* from an economic perspective see F. BERNINI, F. LA ROSA, *A Conceptual Framework for the Greenwashing Strategy Research*, in *University of Catania Law Review*, 1, 2024, p. 5 ff. (highlighting the implications of environmental misdisclosure in terms of costs and benefit for businesses).

¹¹ Such as, for instance, the well-known emission trading system, see V. JACOMETTI, *Lo scambio di quote di emissione*, Giuffrè, Milano, 2010; B. POZZO, *La nuova direttiva sullo scambio di quote di emissione*, Giuffrè, Milano, 2003; EAD., *Il nuovo sistema di emission trading comunitario*, Giuffrè, Milano, 2010.

¹² See PARK, *Investors as Regulators*, cit., pp. 17-36.

¹³ On the meaning of “labeled green bond” and its distinction from the “unlabeled green bond” see PRECLAW, BAKSHI, *The cost of being green*, cit., p. 6.

¹⁴ Such as the *International Capital Market Association* which publishes the *Green Bond Principles* (see *infra*) and the *Climate Bond Initiative* (which certifies the green character of bonds according to its standards).

¹⁵ One of the most relevant providers of “second party opinions” is CICERO (*Centre for International Climate and Environmental Research Oslo*) which applies three different “shades of green” (based upon the expected environmental performance: dark green, medium green, light green) to qualify each bond submitted to its evaluation.

the bond in indices measuring the performance of green instruments as compared to non-green financial investments¹⁶. Within such a scenario, the “Green Bond Principles” developed by the International Capital Market Association offer today a significant example of a private and soft law regulatory framework intended to guide market actors in assessing the green character of bonds¹⁷. The GBP define green bonds as «any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects [...] and which are aligned with the four core components of the GBP». The distinctive feature of the GBP is that they do not take any specific «position on which green technologies, standards, claims and declarations are optimal for environmentally sustainable benefits», but rather provide issuers with some «voluntary process guidelines» that should assure a certain degree of «transparency and disclosure» to allow investors and other stakeholders to understand «the characteristics of any given Green Bond»¹⁸.

Therefore, those four “core components” do not refer to the content and features of projects and investments, as substantive bases for the qualification of the issuance as “green”. They instead provide some requirements of transparency and disclosure regarding four key aspects of the issuance procedure (*Use of Proceeds; Process for Project Evaluation and Selection; Management of Proceeds; Reporting*) and, in addition, recommend the involvement of external auditors to certify the compliance of the procedure with the requirements of the GBP. This approach has not prevented some issuances to be labeled as green according to the GBP even though their actual aptitude to determine beneficial effects for the environment had raised significant controversies¹⁹.

¹⁶ For a detailed analysis of such private governance systems see PARK, *Investors as Regulators*, cit., pp. 17-36; EHLERS, PACKER, *Green bond finance and certification*, cit., pp. 92 ff.

¹⁷ See INTERNATIONAL CAPITAL MARKET ASSOCIATION, *Green Bond Principles*, 2021, <https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Green-Bond-Principles-June-2021-140621.pdf>.

¹⁸ See INTERNATIONAL CAPITAL MARKET ASSOCIATION, *Green Bond Principles*, cit., p. 3-5.

¹⁹ On controversial cases (green bond issuances that complied with the GBP though raising significant doubts as to their actual environmental value), see PARK, *Investors as Regulators*, cit., p. 46; P. CRIPP, *Of Repsol and reputation*, in *Environmental finance*, 2017, <https://www.environmental-finance.com/content/analysis/green-bond-comment-june-of-repsol-and-reputation.html>; K. MULLIN, *Time the green bond market grew up*, in *Environmental finance*, 2017, <https://www.environmental-finance.com/content/analysis/>

Some important national systems, such as the Chinese and Indian ones, have adopted formal legal rules that provide specific requirements and constraints applying to issuances of bonds defined as “green”²⁰.

However, the most significant advancement in the regulation of green finance occurred in the EU system in 2019 and 2020, with the adoption of two European regulations²¹ specifically aimed at preventing “greenwashing” and fostering the development of sustainable finance markets²². Those

[time-the-green-bond-market-grew-up.html](#); BANKTRACK, *Open Letter on the 2015 update of the green bond principles*, 2015, in https://www.banktrack.org/ems_files/download/150430_open_letter_to_green_bond_principles_pdf/150430_open_letter_to_green_bond_principles.pdf, p. 2; E. K. WANG, *Financing green: reforming green bond regulation in the United States*, in *Brooklyn Journal of Corporate, Financial & Commercial Law*, 12(2), 2018, pp. 467-491, pp. 482-486; S. BREEN, C. CAMPBELL, *Legal Considerations for a Skyrocketing Green Bond Market*, in *Natural Resources and Environment*, 31, 3, 2017, pp. 16-20.

²⁰ As regards the Chinese system, see the *Guidelines on Green Bonds* adopted by the Chinese central Bank in 2015 (*People’s Bank of China Announcement* (2015) n. 39), *Guidelines on Green Bond Issuance* adopted by the *National Development and Reform Commission* (2015), and the *Guiding Opinions for Supporting the Green Bonds* adopted by *China Securities Regulatory Commission* in 2017; see B. FASKE, *Turning Billions into (Green) Trillions: Tracking the Growth and Development of the Green Bond Market in China, France, India, and the United States*, in *Tulane Environmental Law Journal*, 31(2), 2018, pp. 293-325, p. 303; PARK, *Investors as Regulators*, cit., p. 41; H. ZHANG, *Regulating Green Bonds in the People’s Republic of China: Definitional Divergence and Implications for Policy making*, ADBI Working Paper, n. 1072, 2020 <https://www.adb.org/publications/regulating-green-bonds-prc-definitional-divergence-implications>; on the Guidelines adopted by the *Security and Exchange Board of India* see FASKE, *Turning Billions into (Green) Trillions*, cit., p. 313.

²¹ 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 and 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.

²² See recital n. 11 of REGULATION (EU) 2020/852 «Making available financial products which pursue environmentally sustainable objectives is an effective way of channelling private investments into sustainable activities. Requirements for marketing financial products or corporate bonds as environmentally sustainable investments, including requirements set by Member States and the Union to allow financial market participants and issuers to use national labels, aim to enhance investor confidence and awareness of the environmental impact of those financial products or corporate bonds, to create visibility and to address concerns about “greenwashing”. In the context of this Regulation, greenwashing refers to the practice of gaining an unfair competitive advantage by marketing a financial product as environmentally friendly, when in fact basic environmental standards have not been met».

regulations pursue the goals expounded in the “Action Plan on sustainable growth” of 2018²³ and have the ambition to set up a European “green bond standard” premised on a harmonized taxonomy of green investments and on the provision of specific legal duties – mainly duties of disclosure – upon issuers and financial intermediaries.

In particular, Regulation 2020/852 (“Taxonomy Regulation”) defines a harmonized taxonomy of “environmentally sustainable” investments according to EU law²⁴ and details their technical requirements, on the basis of the net benefit that the underlying project confers to the achievement of one of the “environmental objectives” set out in art. 9 of the Regulation (climate change mitigation; climate change adaptation; sustainable use and protection of water and marine resources; transition to a circular economy; pollution prevention and control; protection and restoration of biodiversity and ecosystems)²⁵. It also provides specific and harmonized duties of disclosure upon issuers, intermediaries, and advisors, regarding how and to what extent the investments support environmentally sustainable activities that contribute to the achievement of one or more environmental objectives²⁶.

In the global scenario, the EU legal initiative signals a relevant

²³ EUROPEAN COMMISSION, *Action Plan: Financing Sustainable Growth*, COM(2018) 97 final.

²⁴ See recital n. 14 of Regulation 2020/852: «To address existing obstacles to the functioning of the internal market and to prevent the emergence of such obstacles in the future, Member States and the Union should be required to use a common concept of environmentally sustainable investment when introducing requirements at national and Union level regarding financial market participants or issuers for the purpose of labelling financial products or corporate bonds that are marketed as environmentally sustainable».

²⁵ See recital n. 34 of Regulation 2020/852: «For each environmental objective, uniform criteria for determining whether economic activities contribute substantially to that objective should be laid down. One element of the uniform criteria should be to avoid significant harm to any of the environmental objectives set out in this Regulation. This is in order to avoid that investments qualify as environmentally sustainable in cases where the economic activities benefitting from those investments cause harm to the environment to an extent that outweighs their contribution to an environmental objective».

²⁶ See recital n. 13 of Regulation 2020/852: «If financial market participants do not provide any explanation to investors about how the activities in which they invest contribute to environmental objectives, or if financial market participants use different concepts in their explanations of what an environmentally sustainable economic activity is, investors will find it disproportionately burdensome to check and compare different financial products», and see D. BUSCH, *Sustainability Disclosure in the EU Financial Sector*, European Banking Institute Working Paper Series, n. 70, 2021 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3650407.

advancement in the approach to regulating environmentally sustainable finance. The new and stringent standards provided for by the EU legal sources sharply distinguish the European context from the model of procedural private governance and soft law. This denotes the adoption of a different regulatory approach that directly sets out the essential features that allow projects – and the underlying investments – to be qualified as green²⁷. However, since the EU regulatory model is built around duties of disclosures and the provision of substantive requirements that should cut the cost of assessing the actual green character of investments, it appears to be essentially directed to the problem of informational asymmetry of investors.

On the one hand, this change of regulatory perspective marks an advance in the legal treatment of green finance as regards the prevention of the risk of greenwashing. However, on the other hand, this approach may not be sufficient enough to address the second issue sketched above, namely the “principal-agent” problem that is likely to affect green bond transactions. In other words, once the green character of a given bond has been ascertained (with regard to the environmental value of the project and to the actual contribution that the use of proceeds is expected to give to it), there remains the risk that the environmental objective may in fact not be achieved (or not exactly achieved) due to a negligent or fraudulent use of the proceeds, inconsistent with the representations and commitments of the issuer.

4. Private law remedies and social goals

From a legal perspective, the placement of those transactions within the realm of contract should imply the availability of contractual remedies aimed at assuring the actual fulfilment of the interests pursued through the agreement. Given the peculiar characterization of those bonds as “environmentally sustainable”, it is reasonable to believe that the interests pursued by the investor include both the remuneration of the capital borrowed by the issuer and the further benefit arising from the contribution given to the achievement of the “environmental objective”²⁸. While the former interest

²⁷ On the aptitude of such EU approach to determine actual harmonization of Member States’ regulations and on the possibility of a global impact of the European standards (as a “Brussel effect” on sustainable finance) see D. BUSCH, *Sustainability Disclosure in the EU Financial Sector*, cit., pp. 32-42.

²⁸ From a civil law perspective such inclusion of the achievement of the environmental objective within the scope of contractual interests can be expressed as a peculiar arrangement of the “cause” of the contract, see D. LENZI, *La finanza d’impatto e i green e social bonds*, cit., p. 124 and 135 ff.

lies exclusively on the private economic sphere of the investor, the latter, though framed within a private contractual scheme, also shows a social relevance that represents the very reason why those financial instruments are typically promoted as “market models” for the protection of the environment as a socially beneficial goal.

However, the typical structure of those financial instruments usually excludes the achievement of the environmental objective from the scope of the contractual obligation existing upon the issuer and treats it as a mere pre-contractual representation. The contractual scheme, often by virtue of explicit disclaimers, limits the scope of the contractual obligation to the payment of the agreed interest rate and typically excludes that a defect or failure of the performance of the environmental objective amounts to breach of contract²⁹. Therefore, any such nonperformance or defective performance of the environmental objective would only allow investors to seek compensatory remedies grounded on misrepresentations or infringement of duties of disclosure to the market³⁰.

Contractual practices and some national rules (for instance in the Chinese system) in certain cases provide “self-executing” remedies that operate a modification of the economic terms of the bargain agreed upon by the parties. Contractual clauses or legal rules may provide for instance an automatic increase of the interest rate in case of failure of the environmental objective or the enforcement of a put option that obliges the issuer to buy the

²⁹ As regards the US market see P. LUDVIGSEN, *Advanced topics in green bonds: risk*, in *Environmental finance*, 2015, <https://www.environmental-finance.com/content/analysis/advanced-topics-in-green-bonds-risks.html>; WANG, *Financing green: reforming green bond regulation in the United States*, cit., pp. 485 ff.; S. BREEN, C. CAMPBELL, *Legal Considerations for a Skyrocketing Green Bond Market*, cit., p. 20; the central role of contractual provisions as to the binding force of the environmental objective is stressed by LENZI, *La finanza d'impatto e i green e social bonds*, cit., pp. 154 ff.

³⁰ As regards the US system see S. BREEN, C. CAMPBELL, *Legal Considerations for a Skyrocketing Green Bond Market*, cit., p. 20; K. CZERNIECKI, S. SAUNDERS, *Green Bonds: An Introduction and Legal Considerations*, in *Bloomberg Law*, 2016, <https://news.bloomberglaw.com/environment-and-energy/green-bonds-an-introduction-and-legal-considerations>; on specific duties of disclosure for “ethical” or “socially responsible” financial products in the Italian system see D. LENZI, *La finanza d'impatto e i green e social bonds*, cit., pp. 142 ff.; for the legal bases of a liability for inaccurate information of the environmental sustainability of a financial product in the Italian system see R. ROLLI, *L'impatto dei fattori ESG sull'impresa*, cit., pp. 186 ff.; with reference to the Portuguese system see M. M. BARBOSA, *Green bonds: riscos e responsabilidade*, in *Boletim de Ciencias Economicas*, 62, 2019, pp. 77-120.

bond back when an external audit concludes that the use of the proceeds has not adequately advanced the achievement of the environmental objective³¹.

It is true that all remedies that impose an economic burden on the issuer in case of failure of the environmental objective perform a deterrent function since they determine economic incentives that increase the likelihood that the environmental benefit is in fact achieved. However, the green bond model raises some more radical concerns as to whether private law models are actually suited to channel the behavior of economic actors towards the production of social benefits and to perform a socially beneficial regulatory function. Such an “instrumentalization” of private law models and remedies – that attempts to use them as incentives to produce social benefits – appears to be problematic for the fundamental reason that they are in fact structurally oriented towards the private economic sphere and are equipped to give legal relevance to costs and benefits mainly from a private economic perspective.

As regards green bonds, this problem emerges if one looks at the structural misalignment between the social character of the benefit that they are expected to produce (improvement of the environment) and the ability of private law tools and remedies to catch and protect only private and (mainly) economic interests. While the regulatory function of green bonds concerns society as a whole and the protection of collective interests, the private law tools (contract, liability for false information, compensatory remedies) that this model employs would treat the failure to perform the environmental objective as a mere “private wrong” and would only give redress to investors’ private economic interests. So, even though green bonds describe the social (environmental) benefit that they are expected to produce, so making it legally relevant as a pre-contractual representation or, hypothetically, as a contractual obligation, this benefit, from a private law perspective, would be given consideration only in its private and economic dimension. A court could thus,

³¹ The Chinese system regulates the enforcement of a put option as a legal consequence of the failure of the environmental objective and this model is often applied by contractual practice throughout the world, see A. OCHE, *Comparative Analysis of Green Bond Regimes*, in *Journal of Sustainable Development Law and Policy*, 11, 2020, pp. 160-184, p. 179; on contractual practice in the US system see S. BREEN, C. CAMPBELL, *Legal Considerations for a Skyrocketing Green Bond Market*, cit., p. 20; K. CZERNIECKI, S. SAUNDERS, *Green Bonds: An Introduction and Legal Considerations*, cit.; in Italy, Sustainability-linked bonds issued by ENEL Group provide for the increase of the interest rate in case of nonperformance of the environmental objective, see D. LENZI, *La finanza d’impatto e i green e social bonds*, cit., p. 128.

for instance, award the reputational damage suffered by the investor or the damage arising from the diminution of the value of the bond in the secondary market, once it is proven defective as to the environmental performance. But, since there is no necessary correlation between the actual production of the environmental benefit and the economic value of the bond (as long as the issuer keeps on paying the agreed interests), the mere failure of the environmental objective could be insufficient to cause any recoverable (economic) damage upon the investor.

This conclusion applies to the US context, where the constitutional “standing” requires plaintiffs to prove a specific and redressable injury for their action to be cognizable to a court, because such injury would be absent as long as the issuer continues to pay interests and the bond maintains its value on the secondary market³². But the same also applies to the European scenario, where the recent regulations, though capable of grounding new forms of civil liability for incorrect information to the market, leave the structural features of national private law models untouched³³.

The technical requirements for “environmentally sustainable investments” and the related duties of disclosure set out in EU law, do in fact represent a distinctive feature of the European approach and provide possible legal bases for the imposition of liability upon issuers and intermediaries for economic losses suffered by investors because of an incorrect disclosure of the sustainability factors of financial instruments³⁴. Yet, even under European rules a recoverable economic loss would be absent when the defects of sustainability of the instrument or an incorrect disclosure of its environmentally related aspects do not affect the profitability of the bond or its value in the secondary market³⁵.

A possible legal basis for the inclusion of the environmental benefit within the scope of recoverable damages might result, though, within some European national systems, from the notion of “non-pecuniary loss”. In the Italian system, for instance, the failure of the environmental objective might amount to a recoverable non-pecuniary loss of investors under art. 2059 civil

³² See S. BREEN, C. CAMPBELL, *Legal Considerations for a Skyrocketing Green Bond Market*, cit., p. 20.

³³ D. BUSCH, *Sustainability Disclosure in the EU Financial Sector*, cit., pp. 38 ff.

³⁴ See, as regards the Italian system, R. ROLLI, *L’impatto dei fattori ESG sull’impresa*, cit., pp. 174 ff.; LENZI, *La finanza d’impatto e i green e social bonds*, cit., pp. 151 ff.

³⁵ See D. BUSCH, *Sustainability Disclosure in the EU Financial Sector*, cit., pp. 38 ff.

code and art. 2 of the Constitution, as currently interpreted by Courts and many scholarly opinions³⁶.

In any case, any compensatory remedy would produce economic effects in terms of costs and benefits on the individuals involved in the transaction, but it would not add anything to the actual achievement of the environmental objective underlying the bond. Even the possible inclusion of the interest in the production of the environmental objective within the scope of recoverable damage (as a non-pecuniary loss) would only benefit the investor as an individual and would not produce any factual advance in the achievement of the social objective.

In the end, the actual achievement of the environmental objective underlying the bond would only rest on the scope of the contractual obligation lying on the issuer and on the related availability of specific performance, rather than damages, as a remedy for disappointed investors. But this aspect, even under the recent European regulation, depends entirely on the agreed terms of the transaction and, therefore, ultimately on the willingness of issuers to take on an explicit contractual obligation as to the actual accomplishment of the environmental objective underlying the bond³⁷.

The assumed regulatory function of sustainable finance – as a legal model that gives private economic actors economic incentives to pursue social objectives - would then need a further effort to devise some remedies for a stronger “corporate social responsibility”. These remedies would drive economic actors to the actual production of the intended social benefit, such as injunctions for specific performance or other orders to adopt specific measures directly contributing to the environmental objective declared to the market³⁸. After all, those remedies are typical in the field of environmental liability but, as regards financial instruments specifically oriented to the production of social benefits for the environment, they still appear to need further substantial development.

³⁶ See R. ROLLI, *L'impatto dei fattori ESG sull'impresa*, cit., p. 197 ff.

³⁷ D. LENZI, *La finanza d'impatto e i green e social bonds*, cit., pp. 154 ff.

³⁸ See D. BUSCH, *Sustainability Disclosure in the EU Financial Sector*, cit., p. 39.

EDITORS:

Marisa Meli, Antonio Las Casas

AUTHORS:

Francesca Bernini, Fabio La Rosa, Paolo Di Caro, Carlo Orecchia, Antonio Guidara, Francesca D'Angelo, Francesca Leotta, Ida Angela Nicotra, Chiara Sagone, Marisa Meli, Antonio Las Casas



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