# The Use of Fiscal Levers to Foster Green Communities: US and EU Strategies

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#### **Abstract**

The use of fiscal leverage is crucial for promoting green communities and achieving the Sustainable Development Goals (SDGs). The paper examines the role of environmental taxation in fostering sustainable practices and combating climate change by integrating fiscal measures with human and environmental rights. The emergence of circular taxation has replaced the linear model, favouring recycling and waste reduction. Finally, the fiscal policies of the United States and the European Union, with the Inflation Reduction Act and the Green Deal Industrial Plan, respectively, are analysed, highlighting the need for international cooperation for a fair and inclusive ecological transition.

#### Keywords

Tax for SDGs, Environmental Taxation, Ecological Transition, Taxation, Pollution, Green Deal Industrial Plan, Inflation Reduction Act.

### I. The Crucial Role of Environmental Taxation in Achieving the Sustainable Development Goals

The complexity of the global environmental challenges suggests that only an integrated approach, including fiscal measures, can progressively achieve the Sustainable Development Goals (SDGs)<sup>1</sup> and mitigate the effects of climate change.

Tax revenues are the most sustainable source of revenue for governments and play a crucial role in financing the Sustainable Development Goals, strengthening a country's ability to withstand external shocks.<sup>2</sup>

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We refer to the 17 goals to be achieved by 2030 (Sustainable Development Goals – SDGs), defined in the document 'Agenda 2030 for Sustainable Development', approved on 25 September 2015 at the 70th General Assembly of the United Nations (UN Resolution A/RES/70/1 'Transforming Our World: The 2030 Agenda for Sustainable Development'; E. Giovannini and A. Riccaboni, *Agenda 2030: A Journey through the Sustainable Development Goals* (Roma: Flavia Belladonna, Alleanza Italiana per lo Sviluppo Sostenibile – ASviS, 2021).

<sup>2</sup> United Nations Development Programme (UNDP), *Tax for Sustainable Development Goals Initiative. Annual Report 2023* (New York: UNDP, 2024).

In this sense, politics and taxation must work together to protect the environment as a common good, focusing on the relationship between the rights of the individual and the rights of nature.

This approach is in line with a unitary conception of the environment, understood both in an objective sense, as a legal good, and in a subjective sense, as a fundamental human right.<sup>3</sup>

The definition of the environment as an intangible legal asset, as a right of all living beings, with unitary value and deserving of priority protection, referred to in numerous constitutional court pronouncements, has facilitated its inclusion within our Constitution.<sup>4</sup>

This necessitated the establishment of new, more specific regulatory frameworks and the identification of economic resources needed to guarantee their protection and achieve the sustainability objectives set. Additionally, it has led to the implementation of governmental ecoincentives aimed at rewarding and encouraging environmentally virtuous behaviour.<sup>5</sup>

At present, sustainability is a new paradigm guiding States and individuals, public policies and private lifestyles, production systems, companies and workers, including when it comes to identifying actions to be taken or improved.<sup>6</sup>

- <sup>3</sup> On the relationship between environmental protection and the protection of the person and their dignity, see P. Perlingieri, 'Persona, ambiente e sviluppo', in M. Pennasilico ed, *Contratto e ambiente. L'analisi "ecologica" del diritto contrattuale* (Napoli: Edizioni Scientifiche Italiane, 2016); P. Perlingieri, *Il diritto civile nella legalità costituzionale secondo il sistema italo-europeo delle fonti. Attività e responsabilità* (Napoli: Edizioni Scientifiche Italiane, 4<sup>th</sup> ed, 2020), IV; G. Rossi ed, *Diritto dell'ambiente* (Torino: Giappichelli, 2021); V. Ficari, 'Le modifiche costituzionali e l'ambiente come valore costituzionale: la prima pietra di una "fiscalità" ambientale, zone economiche speciali (Zes) e possibili zone economiche ambientali (Zea)' *Rivista trimestrale di diritto tributario*, 4, 855-866 (2022).
- <sup>4</sup> It was a constitutional change that unfolded quietly, much like the revision of Arts 9 and 41 of the Constitution. This can however unequivocally represent the radical paradigm shift brought about by transitions, which inevitably also manifests itself at both the constitutional and normative levels. On this point, see B. Boschetti, 'Legal (Transformative) Eco-design for the "Net-zero Age" and Its Economy' *Istituzioni del federalismo*, IV, 821-850 (2022); C. Casonato, 'Diritto e altre forme di sapere. Una breve introduzione al costituzionalismo ambientale' *Diritto pubblico comparato ed europeo*, 1-6 (2023); F. De Leonardis, 'L'ambiente tra i principi fondamentali della Costituzione' 3 *federalismi.it*, 1-3 (2004); D. Amirante, 'L'ambiente preso sul serio. Il percorso accidentato del costituzionalismo ambientale' *Diritto pubblico comparato ed europeo*, 19-20 (2019). In case law, *ex multis* Corte costituzionale 11 July 1989 no 391; Corte costituzionale 16 March 1990 no 127; Corte costituzionale 3 October 1990 no 430.
- <sup>5</sup> On this point, see T. Ronchetti and M. Medugno, 'Dal Decreto fiscale alla Legge di bilancio 2020: una spinta alla sostenibilità' *Ambiente & sviluppo*, I, 37-54 (2020).
- <sup>6</sup> For an in-depth discussion on sustainability as a new paradigm guiding public policies, see M. Magatti, *Cambio di paradigma*, uscire dalla crisi pensando al futuro (Milano: Feltrinelli, 2017); M. Libertini, 'Per una ripresa della cultura della

Undoubtedly, among these, greater civic and social participation,<sup>7</sup> together with innovation in the way of living and inhabiting the planet, combating waste and ensuring a fairer distribution of resources, will be able to guarantee well-being for present and future generations.

In this context, therefore, the role of law in sustainable development should also be profoundly innovated. This should be done through a taxation system that acts as a lever of reward for all taxpayers.

Tax law is thus a candidate to make an important contribution to the transition of economic systems towards more sustainable models and, in general, towards the achievement of all those objectives necessary to address the planet's major environmental emergencies, as indicated by the international community, so that these challenges can also be opportunities for economic and social growth.<sup>8</sup>

In addition to its traditional function of allocating public expenditure through the taxation schemes typical of each State, the tax system has the capacity to influence the decisions of citizens and businesses by modulating the intensity of taxation according to their specific activities and characteristics.<sup>9</sup>

In fact, taxation choices fall mainly under the competence and discretion of the national legislator, who makes them uniformly available throughout the State.<sup>10</sup>

programmazione. A proposito di PNRR e di problemi di tutela dell'ambiente' 5 federalismi.it (2023).

- <sup>7</sup> On the concept of active citizenship, see G. Arena, 'Comunicare per co-amministrare' *Amministrare*, 337-345 (1997); Id, *Cittadini attivi* (Bari-Roma: Laterza, 2006); Id, 'Amministrazione e società. Il nuovo cittadino' *Rivista trimestrale di diritto pubblico*, I, 43-55 (2017).
- <sup>8</sup> On the role of tax law in the ecological transition, see A. Uricchio and T. Calculli, 'La rigenerazione urbana entro e oltre il contesto della transizione ecologica: la sfida della fiscalità locale' *Diritto e pratica tributaria*, 5 (2023).
- <sup>9</sup> On the role of taxation in modulating the decisions of citizens and businesses, see A.F. Uricchio and G. Selicato eds, *Green deal e prospettive di riforma della tassazione ambientale (Atti della II Summer School in Circular Economy and Environmental Taxation, Bari 17 24 settembre 2021)* (Bari: Cacucci, 2022).
- <sup>10</sup> In the reform of Title V of legge costituzionale 18 October 2001 no 3, it is expressly stated that the 'protection of the environment and the ecosystem' is one of the matters of exclusive State competence pursuant to Art 117, para 2, letter s) of the Constitution, while, in a concurrent capacity, the Regions are assigned the functions inherent to the 'valorization of the environmental and cultural heritage'. In this way, the State ensures a consistent level of environmental protection across the entire national territory, setting a limit to the authority that the Regions and Autonomous Provinces have in other matters of their competence. This prevents them from undermining or lowering the environmental protection levels established by the State; M. Cecchetti, 'La materia "Tutela dell'ambiente e dell'ecosistema" nella giurisprudenza costituzionale: lo stato dell'arte e i nodi ancora irrisolti' 7 federalismi.it, 1-32 (2009). On this point, even Corte costituzionale 10 April 2015 no 58 emphasises how the State's unitary action is necessary and justified to 'guarantee adequate and non-reducible levels of environmental protection throughout the national territory'.

This ambition also concerns the institutions of the European Union, which in driving the change, aim to harmonize the environmental policies of the various Member States. In this regard, it should be noted that in fiscal matters, since taxation constitutes a direct expression of a State's sovereignty, the law has more difficulty overcoming the exclusively national dimension compared to other sectors. On the other hand, the globalization of the economy stimulates the harmonization of regulatory regimes of individual States, including those related to taxation.

Indeed, environmental taxation in European countries appears heterogeneous and fragmented, lacking organic provisions.<sup>11</sup> This renders definitional efforts and classifications futile, creating difficulties that in some cases even affect the very nature of taxes (taxes, levies, contributions).

In this heterogeneous context, the concept of the environment as a common good shared by normative and interpretative sources of all ranks<sup>12</sup> should inspire governments of local, national, and international institutions to promote environmental policies. Within the latter, environmental taxation is believed to be one of the most suitable and effective for achieving a sustainable environment, but above all for ensuring a fair distribution of development opportunities.

Climate change therefore constitutes an emergency that institutions must also address fiscally, adopting all possible instruments, both regulatory and taxation.<sup>13</sup>

In 2022, the United Nations Development Programme (UNDP) launched an initiative called 'Tax for SDGs', with the aim of helping each country improve domestic resource mobilization and make progress towards the SDGs.<sup>14</sup>

Tax for SDGs sees taxation not only as a useful tool for revenue collection but also as a policy instrument to encourage sustainable growth

<sup>&</sup>lt;sup>11</sup> On this point, see A. Comelli, 'European Profiles of Environmental Taxation' *Diritto e pratica tributaria*, VI, 2264-2282 (2023).

<sup>&</sup>lt;sup>12</sup> For an in-depth study on the subject, see S. Grassi, 'La tutela dell'ambiente nelle fonti internazionali, europee ed interne' 13 *federalismi.it*, 1-46 (2023).

<sup>&</sup>lt;sup>13</sup> In this sense, see M. Sadowsky, *Fiscal Policies to Mitigate Climate Change* (Cambridge: Intersentia, 2023); O. Blanchard, C. Gollier and J. Tirole, 'The Portfolio of Economic Policies Needed to Fight Climate Change' *Annual Reviews of Economics*, 689-722 (2023), available at https://www.annualreviews.org/content/journals/10.1146/annurev-economics-051520-015113.

<sup>&</sup>lt;sup>14</sup> On the Tax for SDGs initiative, see T. Beloe and A. Khan, 'How Do Taxes Drive the Sustainable Development Goals?' *Global Issues*, available at https://www.globalissues.org/news/2024/05/07/36667; G. Lafortune et al, *Europe Sustainable Development Report 2023/24* (Paris: SDSN, SDSN Europe and Dublin: Dublin University Press, 5<sup>th</sup> ed, 2024); UN Resolution A/RES/70/1, n 1 above.

strategies and influence the behaviour of citizens and businesses towards desired outcomes.

In 2023, this initiative made significant progress, with no fewer than 22 National Commitment Plans (CEPs) being signed. Through CEPs, governments are supported and tax administrations strengthened in tackling and combating tax avoidance, tax evasion, and any illicit financial flows.

Tax for SDGs supports governments in aligning their tax policies with the SDGs, including developing countries in international discussions on taxation.

Developing countries need more funding and effective policy solutions, which depend on the capacity of their tax administrations to generate revenue and align their tax policies with those of more developed countries.

The initiative facilitates the alignment and harmonization of tax policies globally, with a focus on achieving the same SDG targets, delivering tangible results.

Tax for SDGs also includes a joint initiative, OECD/UNDP Tax Inspectors Without Borders (TIWB), which involves sending experts to tax administrations in developing countries to provide assistance and international cooperation in ongoing audit cases and tax issues.

The success of the Tax for SDGs initiative testifies to collaborative efforts between nations, international organizations, academia and civil society, including through the establishment of strategic partnerships that strengthen taxpayers' confidence.<sup>15</sup>

## II. From Linear to Circular Taxation: A New Paradigm for Sustainability

Regulatory interventions in the field of taxation, aimed at increasing revenue through new contributions or the raising of existing rates, generate resources to be used in the perverse spiral of ever-increasing debt. In this system, linear taxation, dominated by the principle of tax neutrality, fearful and preoccupied with influencing the decisions,

<sup>&</sup>lt;sup>15</sup> United Nations Development Programme (UNDP) Administrator Achim Steiner said: The success of the Tax for SDGs initiative is a testament to the collaborative efforts between nations, international organizations, academia and civil society. Together, we have exchanged best practices, knowledge and lessons learned, creating a community dedicated to enacting real change'.

<sup>&</sup>lt;sup>16</sup> For an in-depth discussion on the impact of tax regulatory interventions on public debt, see F. Gallo, 'Etica fiscale e fisco etico' *Neçtepa* (2015); F. Gallo, 'La funzione del tributo ovvero l'etica delle tasse' *Rivista trimestrale di diritto pubblico*, II, 399-411 (2009).

preferences and behaviour of taxpayers and businesses, thus loses sight of extra-fiscal purposes, attributing relevance only to those of revenue and providing the State with resources to spend, without regard to the merits of the uses.

We thus end up, too many times, with 'spending for spending'<sup>17</sup> and, thus, also waste. In essence: more revenue, more spending, more debt.

Linear taxation then becomes exponential finance by virtue of which the tax burden grows, public spending grows, and public debt grows.

However, environmental taxes, as such, while maintaining their fiscal purpose of generating revenue, should also pursue extra-fiscal objectives aimed at promoting environmentally friendly behaviour or production processes and discouraging polluting production or consumption of limited resources.<sup>18</sup>

Building on this premise, linear taxation has slowly given way to a new model of so-called circular taxation that emphasizes the greater sensitivity of tax authorities to the environment, taxing waste, favouring recycling, limiting unproductive public spending, and thus relaunching development without destroying wealth.<sup>19</sup>

The move to the circular taxation model thus allows for the promotional dimension of taxation to be fully appreciated.<sup>20</sup>

The abandonment of a linear economy and the radical change in our development model require enormous efforts on the part of society, businesses, and institutions – efforts that are increasingly recognized by contemporary lawmakers. This is in fact a real cultural change, one that is unlikely to take place spontaneously and, above all, within a time frame commensurate with the current urgency.

In this scenario, it is evident how tax measures are fundamental to the affirmation of the circular taxation model, which includes both taxes aimed at discouraging unsustainable behaviour and incentives aimed at

<sup>&</sup>lt;sup>17</sup> In this sense, see A.F. Uricchio, 'I tributi ambientali e la fiscalità circolare' *Diritto e pratica tributaria*, I, 1860-1861 (2017).

<sup>&</sup>lt;sup>18</sup> Among the new taxes proposed as disincentives are those targeting land waste caused by uncontrolled construction, promoting the responsible use of natural resources and the regeneration of heritage. These measures have been under discussion since 3 October 2023 in the VIII Environment, Territory and Public Works Commission of the Italian Parliament. The related bill (DDL), entitled 'Provisions for the containment of soil consumption and urban regeneration', was presented to the Chamber of Deputies on 26 May 2023.

<sup>&</sup>lt;sup>19</sup> The circular taxation model is where the circuit 'tax-public expenditure-interest pursued by it' moves in a circle. See A. Perrone, 'Il diritto alla rigenerazione dei brownfields in una prospettiva di fiscalità circolare', in M. Passalacqua and B. Pozzo eds, *Diritto e rigenerazione dei brownfields* (Torino: Giappichelli, 2019).

<sup>&</sup>lt;sup>20</sup> On this point, see A.F. Uricchio, G. Selicato and M. Aulenta eds, *La dimensione* promozionale del fisco (Bari: Cacucci, 2015); A. Zatti, 'Per una riforma ecologica del fisco italiano: strumenti, prospettive e incognite' (2021), available at www.eccoclimate.org.

promoting sustainable practices.<sup>21</sup> In addition, this approach also includes the application of reduced rates to production that guarantees long-lasting product life cycles or that limits or eliminates waste production, thereby reducing the use of scarce resources and improving product life cycles. One of the principles underlying the circular economy is precisely that all waste becomes an input for new production process.

### III. The Evolution of Fiscal Policies for the Ecological Transition and the Strengthening of the Fiscal Social Contract

Every State globally is making a fundamental contribution to combating climate change, with the goal of achieving climate neutrality by 2050 through initiatives that involve a change in the economic and production systems in accordance with the targets identified in the Paris Climate Agreement.<sup>22</sup>

In particular, one of the fiscal policies that the European Union has put in place to support the ecological transition is to shift taxation from labour to pollution.

In this sense, the tax strategy has developed through two complementary perspectives. The first is direct 'regulation', which consists of identifying products that do not conform to specific and clear environmental standards. For example, in the case of vehicles, the production of heat engines could be banned in favour of electric motors by setting up special bans. The second, on the other hand, is the indirect approach, the 'fiscal lever', where lawmakers guide taxpayers towards environmentally responsible behaviour. This is achieved by using taxes as a deterrent and by offering tax benefits as an incentive.<sup>23</sup>

Over time, the first perspective has proven necessary, but not sufficient. In fact, it has proven more profitable to correct the externalities generated by pollution by indirectly influencing the choices of economic operators.

<sup>&</sup>lt;sup>21</sup> For an in-depth discussion on circular taxation, see A.F. Uricchio, 'La costruzione della società ecologica: il Green New Deal e la fiscalità circolare' *Rivista di diritto agroalimentare*, I, 149-174 (2021).

<sup>&</sup>lt;sup>22</sup> The concept of 'carbon neutrality' was first introduced in 2015 in the international Paris Climate Agreement. Each State makes Nationally Determined Contributions (NDCs) through non-binding national plans that highlight the policies and measures that governments will implement to combat climate change in order to meet the targets set by the Paris Agreement.

<sup>&</sup>lt;sup>23</sup> In this sense, see G. Mercuri, 'Strategie europee per mitigare il cambiamento climatico: dalla tassazione del lavoro a quella dell'inquinamento' *Rivista di diritto tributario* (Pisa: Pacini Giuridica, 2023).

At the same time, however, there is a need to limit the promotional use of the 'tax lever' when it leads to the granting of aid incompatible with the Treaty or results in harmful tax competition.

In this context, the European Union has committed to implementing its environmental policy by reinforcing the 'polluter pays principle'. In the fiscal field, this entails 'taxing' or 'de-taxing' certain products to influence the market and favour the reduction of CO<sub>2</sub>.

Environmentally oriented tax relief has been particularly effective in intercepting social consensus, as shifting from the perspective compensatory 'polluter pays' principle<sup>24</sup> to the 'polluter pays less' principle has a greater impact on public opinion.

We are therefore moving towards overcoming the now evanescent 'polluter pays' principle in favour of the more evolved principle of 'he who values, benefits'. This innovation could lead to more harmonious protection policies.<sup>25</sup>

Taxation must balance the value of environmental protection with that of economic development. This balance is only achieved when economic activity aligns with the principles of sustainability, presenting those objective and subjective characteristics that the law considers adequate to demonstrate sufficient respect for these principles.

However, this balancing act alone is insufficient to address the complex problem of ecological transition.

The term 'ecological transition' implies a radical rethinking of modes of production and consumption, through the rationalization of the use of resources and raw materials, the adoption of reuse and recycling rather than waste and disposal, the promotion of the sharing economy, and the gradual replacement of fossil fuels with clean and renewable energies.

Such a strategy inevitably requires substantial resources on the part of States to manage the disruptions it may initially generate, but these should be significantly reduced in the long run as the environmental and economic benefits materialize.

<sup>&</sup>lt;sup>24</sup> For a more in-depth analysis, see A. Buccisano, 'Principio chi inquina paga, capacità contributiva e tributi ambientali', in G. Moschella and A.M. Citrigno eds, *Tutela dell'ambiente e principio "chi inquina paga*" (Milano: Giuffrè, 2014), 113; S.A. Parente, 'Strumenti fiscalità ambientale e solidarietà intergenerazionale' *Quaderni del Dipartimento Ionico*, 13, 254-276 (2020); U. Salanitro, 'Il principio "chi inquina paga": "responsibility" e "liability" *Giornale di diritto amministrativo*, I, 33-38 (2020); Corte dei Conti Europea, 'Relazione speciale. Il principio "chi inquina paga" non è uniformemente applicato nelle diverse politiche e misure dell'UE' *eca.europa.eu*, 12 (2021).

<sup>&</sup>lt;sup>25</sup> On this point, see G. Selicato, 'Fiscalità ambientale in Europa', in P. Adriano ed, *La fiscalità ambientale in Europa e per l'Europa* (Bari: Cacucci, 2016), 83-133; A. Uricchio and G. Selicato, 'La fiscalità dello sviluppo sostenibile', in A. Buonfrate and A. Uricchio, *Trattato breve di diritto dello sviluppo sostenibile* (Padova: Cedam, 2023), XXI, 933-975.

Therefore, the reinforcement of tax concessions, such as exemptions, reductions, etc, in favour of companies that reduce CO<sub>2</sub> emissions is certainly welcome. However, these measures should be seen as 'complementary' rather than 'exclusive' instruments with respect to linear taxation.

Various forms of tax exemptions or reductions are often considered 'tax expenditures' necessitating the identification of adequate resources through new revenue streams, forms of borrowing, or the reduction of other expenditure items.

The impact of tax relief on Member States' budgets, coupled with the planned investments for implementing the Green Deal Industrial Plan,<sup>26</sup> probably prompted the European Union to develop a plan to secure the necessary revenues to also cope with the potential inconveniences associated with the ecological transition.

This includes, for example, the revenues generated by emissions trading (ETS)<sup>27</sup> and the carbon border exchange mechanism (CBAM),<sup>28</sup> which aim to prevent the risk of 'carbon leakage' of emissions to third countries, thereby ensuring that global targets are met for 'carbon-intensive' commodities such as aluminium, hydrogen, electricity, iron, steel, and cement.

The main challenge of such initiatives is to strike a balance between intervention through tax measures and the resulting market implications.

In fact, the increase in product taxation could affect the increase in consumer prices, creating greater difficulties for the most vulnerable and

<sup>26</sup> The Plan was presented by the European Commission on 1 February 2023 (COM(2023) 62 final) and aims to counteract the attractiveness measures envisaged by third countries, primarily the United States, with the Inflation Reduction Act (IRA).

<sup>27</sup> The European Emissions Trading System (ETS) aims to ensure that imported goods are charged for their carbon emissions. The EU ETS, with the aim of reducing air pollution, implements the 'polluter pays' principle by requiring stakeholders to obtain a permit for each tonne of CO<sub>2</sub> emitted. On this subject, see R. Alfano, 'L'Emission Trading Scheme: applicazione del principio "chi inquina paga", positività e negatività rispetto al prelievo ambientale' *Innovazione e diritto*, V, 1-18 (2009).

<sup>28</sup> The Border Carbon Adjustment Mechanism (CBAM), established by European Parliament and Council Regulation 2023/956/EU, enacted on 10 May 2023, is part of the European Green Deal. Specifically, it falls within the 'Fit for 55', a broad package of measures proposed by the Commission to guide the European Union towards a 55% reduction in greenhouse gas emissions by 2030, with a view to achieving climate neutrality in all sectors of the economy by 2050. The CBAM can be seen as a system equivalent to the EU ETS but is specifically designed for third-country producers. In this sense, see E. Ceroni, 'The Carbon Border Adjustment Mechanism (CBAM): A Qualitative Leap in Environmental Taxation for a World in Ecological Transition', in O. Trofymchuk and B. Rivza eds, *Proceedings of 23<sup>rd</sup> International Multidisciplinary Scientific GeoConference SGEM 2023* (Vienna: SGEM World Science, 2023); P. Dè Capitani Di Vimercate, 'L'Emissions Trading Scheme: aspetti contabili e fiscali' *Diritto e pratica tributaria*, 15 (2010); A.E. Caterini, 'A Bottom-up Financial Strategy for a Sustainable Society' *The Italian Law Journal*, 57-65 (2023).

low-income households and, therefore, risking generating forms of 'energy poverty'.<sup>29</sup>

From this perspective, the European Green Deal emphasizes that climate change is so momentous that it calls for appropriate fiscal reforms to 'improve resilience to climate shocks' in deference to a principle of equity in society and the ecological transition.<sup>30</sup>

In this scenario, public resources remain essential, not only to promote industry sectors and foster scientific and technological innovation for the ecological transition 'at home', but also to ensure that the transition is fair, inclusive, and sustainable.

Environmental taxation should aspire to achieve a twofold result in the long run: after generating substantial budgetary revenues, there should be a gradual decrease of these, in line with the adjustment of taxpayers' behaviour to the environmental policy objectives pursued. In this sense, therefore, the erosion of the tax base is a positive indicator of the proper functioning of the measure.

Environmental taxation includes the concept of the 'fiscal social contract,<sup>31</sup> on the basis of which the government uses the financial resources collected through taxes to pursue environmental policy objectives.

The social contract of taxation consists of an implicit agreement between a government and its citizens concerning the collection and allocation of public funds. This relationship, based on the principle of mutual accountability, is a fundamental pillar of modern democratic societies, in which citizens pay taxes and, in return, the government provides public goods and services.

In return for taxes, which serve as a financial resource for the government to provide essential services, citizens expect these public funds to be used efficiently and effectively, according to principles of fairness, equity, and transparency.

This ensures that the fiscal social contract remains strong and that citizens continue to trust the government.

<sup>&</sup>lt;sup>29</sup> Opinion of the European Economic and Social Committee on 'Combating Energy Poverty and Increasing EU Resilience: The Economic and Social Challenges' (2023/C 146/02); C. Franchini, *L'intervento pubblico di contrasto alla povertà* (Napoli: Editoriale Scientifica, 2021), 33.

Scientifica, 2021), 33.

30 G. Perotto, 'Il Green Deal europeo e il sistema delle risorse proprie', in C. Beaucillon and B. Pirker eds, *The EU and Climate Change* (European Papers, 2022), 385-398, available at www.europeanpapers.eu.

<sup>&</sup>lt;sup>31</sup> On the so-called fiscal social contract, see 'Call for Input: "The Fiscal Social Contract and the Human Rights Economy" Thematic Report to the United Nations General Assembly', issued by the Independent Expert on the effects of foreign debt; L. Vicente, 'The Social Enterprise: A New Form of Enterprise? 70 *The American Journal of Comparative Law*, i155-i184 (2022).

Governments are responsible for fiscal decisions, which must be taken with maximum transparency and as far as possible by involving citizens in the decision-making process.

In turn, citizens have a responsibility to honestly fulfil their tax obligations to society and it is crucial that they recognize their role in the social tax contract by paying their fair share of taxes.

Distorting forms such as tax evasion or tax avoidance weaken the fiscal social contract because they deprive the government of the resources it needs to provide public services.

### IV. Competition and Cooperation: Environmental Taxation in the European Union and the United States

The green transition thus puts Europe on the brink between sustainable competitiveness and competitive sustainability.

The Green Deal Industrial Plan for the Net-Zero Age<sup>32</sup> is, however, 'time-bound', with its urgency driven primarily by the pressing need for ecological transition and climate neutrality. In fact, the greatest impetus for further acceleration comes from the powerful investment and financial support plans approved bymany foreign countries, such as the US Inflation Reduction Act (IRA), which aims to finance industryand technologies for the green transition.<sup>33</sup>

Indeed, the measures adopted by the US Government have raised considerable concerns in Europe, mainly due to their protectionist nature. There are fears that the incentives may penalize European industry to the benefit of American industry, even encouraging European companies to relocate to the United States. The tax component in fact stimulatesmobility from one territory to another<sup>34</sup> also through evasion and avoidance phenomena geared towards profiteering shifting.<sup>35</sup>

In this context, defining a unified European response is not easy, given the diversity of interests between the various countries. There are two main reasons for this divergence: the first concerns the difference in tax aid

<sup>&</sup>lt;sup>32</sup> Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, 'A Green Deal Industrial Plan for the Net-Zero Age' COM(2023) 62 final, Brussels, 1 February 2023.

<sup>&</sup>lt;sup>33</sup> On this point, see H.Y. Lee, 'The U.S. Inflation Reduction Act (IRA) of 2022: Issues and Implications' *IFANSFOCUS*, available at www.ifans.go.kr.

<sup>&</sup>lt;sup>34</sup> Å. Di Pietro, 'La nuova fiscalità dell'Unione Europea e la crisi finanziaria degli Stati post nazionali', in M.C. Fregni et al eds, *Studi in memoria di Francesco Tesauro* (Padova: Cedam, 2023), I, 351-371.

<sup>&</sup>lt;sup>35</sup> A.E. La Scala, 'Giustizia fiscale e tutela dei diritti umani nell'era dell'economia globalizzata', ibid 277-313.

granted by the European Commission to individual Member States; the second is related to the volume of European exports to the United States in sectors that could be affected by the new American incentives.<sup>36</sup>

Despite these differences, the European Commission managed to formulate a relatively consistent position. Commission President Ursula Von der Leyen assured that Europe would respond to the US aid plan in a coordinated and calibrated manner, while avoiding subsidy competition, which is not in the interest of either side. Both the US and Europe agreed on the need to create a common alternative to the Chinese monopoly.<sup>37</sup>

At the regulatory level, the first European reaction to the Inflation Reduction Act was the Commission's presentation of the Green Deal Industrial Plan in January 2023. In fact, as is clear, the US intervention accelerated the Green Deal Industrial Plan.

The European Union therefore needs an industrial plan that can ensure that the future of the net-zero economy has a European style and, above all, can be accomplished in Europe, in cooperation, but also in competition, with foreign partners.<sup>38</sup> However, the European Union has instrumental constraints stemming from the complex architecture of its economic and industrial policies.

The adoption of the IRA by the United States certainly put a strain on EU-US relations, justifying the adoption of internal counter-measures.<sup>39</sup> The Industrial Plan, as President Von der Leyen herself made clear, is not only a response to the IRA, but also part of the development of new international partnerships.<sup>40</sup>

The IRA is a budget adjustment measure that covers a broad spectrum of public policy areas. Its central objective is, as the name implies, to bring down inflation and, to this end, it also intervenes with a strong push for domestic 'green' energy production. It is a package of tax relief and support

<sup>&</sup>lt;sup>36</sup> On the European reaction to the IRA, see L. Ciotti, 'L'Unione Europea di fronte all'Inflaction Reduction Act americano' *Osservatorio sui conti pubblici italiani (OCPI)*, 1-9 (2023), available at https://osservatoriocpi.unicatt.it.

<sup>&</sup>lt;sup>37</sup> See European Commission, 'Joint Statement by President Biden and President Von der Leyen' (10 March 2023).

<sup>&</sup>lt;sup>38</sup> On the regulatory competition resulting from the Green Deal at a global level, see E. Chiti, 'Managing the Ecological Transition of the EU: The European Green Deal as a Regulatory Process' 59 *Common Market Law Review*, 19-47 (2022); Id, 'Introduction to the Symposium: Managing the Ecological Transition of the European Union' *Rivista quadrimestrale di diritto dell'ambiente*, I, 9-13 (2021).

<sup>&</sup>lt;sup>39</sup> European Council Conclusions of 9 February 2023, EUCO 1/23; D. Kleimann et al, 'How Europe Should Respond to the US Inflation Reduction Act' 4 *Policy Contribution*, 1-26 (2023), available at www.bruegel.org.

<sup>&</sup>lt;sup>40</sup> See European Commission, 'Speech by President Von der Leyen at the College of Europe in Bruges' (4 December 2022).

measures counterbalanced by tighter fiscal leverage and austerity measures in other sectors.<sup>41</sup>

However, it does not just contain 'climate' measures.<sup>42</sup> The IRA can be considered the largest economic investment made by the US in energy security and combating climate change.

As far as the European Union is concerned, the key development in terms of economic and financial support is the fact that the Green Deal Industrial Plan for the Net-Zero Age focuses on industrial capacity and not, as in the past, only on research and innovation in renewable technologies and infrastructure.<sup>43</sup>

This calls for a different approach to State aid, requiring more flexibility, faster access and use, as well as a common European funding base to avoid fragmentation of aid levels within the single market.<sup>44</sup> In fact, for example, incentives for renewables fall under the competence of individual Member States.

State aid plays a decisive role in shaping the future direction of European integration, significantly influencing the tax system.<sup>45</sup>

In the IRA, unlike the European Green Deal – where for structural reasons this would not be possible, as taxation powers are in the hands of the Member States, with limited powers in the hands of the European Union – the main instruments of environmental and climate leverage are of a fiscal nature, in the dual form of credits and deductions.<sup>46</sup>

- <sup>41</sup> For an analysis of the IRA and its political and economic implications, see C. Benoit, 'The Inflation Reduction Act Sparks Trade Disputes: What Next?' 6(4) *American Affairs*, 68-80 (2022).
- <sup>42</sup> On this topic, see J.L. Ramseur, 'Inflation Reduction Act of 2022 (IRA): Provisions Related to Climate Change' *Congressional Research Service (CRS Report)*, 1-29 (2023).
- <sup>43</sup> For a comparison between the Green Deal Industrial Plan and the Inflation Reduction Act, see B.L. Boschetti, 'Il Piano per la net-zero age e l'Inflation Reduction Act: UE v. USA?' *Giornale di diritto amministrativo*, V, 589 (2023).
- 44 The State aid system has gradually evolved from a market competition control mechanism to an active aid policy. Undoubtedly, aid regulations have integrated the idea that public spending is indispensable for the achievement of certain social and economic objectives, against which aid rules support and guide spending decisions aimed at public interests of European significance. Aid control is not designed to promote solidarity between States. However, criteria such as a Member State's GDP, its unemployment rate and other similar indicators are used for the distribution of funds, reducing the risk of imbalances between States based on their spending capacity. On this point, see A. Biondi, 'Regolamento RRF e aiuti di Stato' 5 *federalismi.it*, 1-6 (2023); G. Luchena, 'La programmazione europea nello scenario globale' *Euro-Balkan Law and Economic Review*, I, 247-283 (2023); T. Jaeger, 'The Future of State Aid' 2 *European State Aid Law Quarterly*, 117-119 (2022).
- <sup>45</sup> C. Fava, Aiuti di Stato in materia tributaria ed economia sociale di mercato in Europa (Padova: Cedam, 2024), 22-29.
- <sup>46</sup> On this point, see M.T. Monteduro, 'Cambiamenti climatici e politiche fiscali: impatti sociali ed effetti economici del pacchetto europeo "Fit for 55" *Rivista di diritto finanziario e scienza delle finanze*, IV, 447 (2021).

These characteristics raise a number of critical issues.

Precisely because it focuses on fiscal measures, the effects of the IRA are expected to remain largely unpredictable, at least in terms of its impact on the federal budget, its environmental outcomes, and, most importantly, its ability to attract European companies, disrupt the European market, and influence a 'Made in Europe' ecological transition. Additionally, there are concerns about the possible destabilizing effects on international trade under the control of the World Trade Organization (WTO).

The brief outline above allows us to outline some differences between the European and US approaches.

While the European Union can rely mainly on funds financed through public debt to achieve the ecological and energy transition, the IRA does not put any funds on the table, let alone financed through public debt, even though a possible lower fiscal leverage would still have to be financed through debt.<sup>47</sup>

From this point of view, it is not so much the amount of resources made available in one form or another that is important. Even with the difficulties associated with the complex European architecture, as competence belongs to the Member States, there are no significant gaps. Rather, it lies in the fact that the diversity of the instruments used produces substantial effects, in terms of operational efficiency, timeliness, and effectiveness.

By their very nature, US incentives, linked to tax ID numbers and investment costs, are able to act faster, with a greater degree of predictability, and can lower manufacturing costs in Net-Zero sectors.<sup>48</sup>

Many of the European support programmes for the Net-Zero economy, on the other hand, envisage lengthy authorization procedures and uncertainties related to both recognition and ex-post controls. These programmes often prioritize new technologies over the massive expansion of industrial production.

The European Commission is well aware of this, especially when, while imposing compliance with European standards, it decides to introduce more flexibility in State aid rules and the use of tax credits.

<sup>48</sup> For an in-depth study on US taxation, see G. Iannaccone and L. Perin, *Stati Uniti d'America: diritto e fiscalità d'impresa* (Milano: Ipsoa, 2<sup>nd</sup> ed, 2024).

<sup>&</sup>lt;sup>47</sup> For further discussion, see J. Jansen, P. Jäger and N. Redeker, 'For Climate, Profits, or Resilience? Why, Where and How the EU Should Respond to the Inflation Reduction Act' *Hertie School, Jacques Delors Centre*, available at https://www.delorscentre.eu/en/publications/ira-europe-response.

It is clear that a strong European industrial policy responds to the Commission's interests to have new policy instruments and to increasingly catalyse decisions at the European level.<sup>49</sup>

In this emergency context, therefore, the Commission has seen its powers vis-à-vis national governments strengthened, both in terms of economic and fiscal governance. This shift has occurred despite numerous calls for prioritizing competition and the competitiveness of the single market as a lever to 'make' and 'finance' the ecological transition, as outlined in the European Green Deal Industrial Plan.<sup>50</sup>

In conclusion, while fiscal leverage is certainly a necessary building block towards the goal of climate neutrality, from a purely economic point of view, international cooperation remains the first best response to climate change.

Fiscal leverage complements legal systems to promote sustainable development models and seek solutions to environmental damage, with growing awareness of the importance of taking a unified approach to issues that transcend the boundaries of individual jurisdictions.

The national dimension of environmental taxation may prove to be inadequate for a variety of reasons, but above all because of the gravity of the climate crisis, which makes it urgent to adopt a cohesive, global approach to combating global warming.<sup>51</sup>

Environmental taxation, as a pillar of a new taxation system, can act on two fronts: a 'negative' one by taxing the causes of waste and pollution,<sup>52</sup>

<sup>49</sup> The ecological transition is becoming increasingly influential in the European legal context, challenging the traditional balance between economic needs and social values that underpinned the creation of the single market. In this regard, as highlighted in the European Commission's document, 'Towards a Sustainable Europe by 2030', dated 30 January 2019, in order to bring about a significant change, 'a comprehensive approach' is needed that takes into account the 'interrelationships between the various challenges and opportunities related to sustainability' and encourages 'coherence between the different areas, sectors and levels of intervention in the decision-making process'.

<sup>50</sup> On competition, see S. Marino, 'La valorizzazione dello sviluppo sostenibile nella politica di concorrenza dell'Unione Europea' *Il diritto dell'Unione europea*, 3/4, 641-670 (2022)

<sup>51</sup> In this regard, see F. Acerbis and M. Lio, 'La fiscalità fattore di sostenibilità ESG: Good Tax Governance e ruolo delle funzioni fiscali delle imprese' *Il fisco*, XII, 1155-1163 (2023).

<sup>52</sup> In order to regulate ecological taxes, it is essential to consider the so-called environmental costs generated by human activities that exploit natural resources. The difficulty in economically evaluating the use and exploitation of these resources often leads to considering these costs as externalities. Those who use natural resources cause environmental damage without bearing the costs, which instead fall on the community as 'social costs'. Therefore, environmental protection and market equilibrium could be achieved through regulatory instruments that attribute social environmental costs (negative externalities) to those who benefit from them. On pollution as an externality and taxation on the polluter, see R. Perrone Capano, 'L'imposizione e l'ambiente', in A. Amatucci ed, *Trattato di diritto tributario* (Padova: Cedam, 1994), I, 449-514.

and a 'positive' one by granting tax breaks to encourage product and process innovation in favour of sustainable development.

#### V. Conclusions

The role of environmental taxation is essential in achieving the Sustainable Development Goals (SDGs) and combating climate change.

Indeed, tax revenues are a key resource for governments and can be used not only to finance public expenditure but also to promote environmental sustainability. When taxation is oriented to environmental protection, it becomes a tool to safeguard the common good, balancing the rights of the individual with the needs of nature. This approach is reflected in the integration of the concept of the environment that emerges from numerous international regulatory sources, making it necessary to rethink tax legislation to ensure adequate resources for sustainability.

Sustainability therefore guides public policies and individual behaviour also in terms of solidarity,<sup>53</sup> calling for a new vision of taxation, which not only aims at raising revenue, but incentivizes ecologically virtuous behaviour, reducing negative externalities. The transition from linear taxation, which focuses exclusively on revenue collection, to circular taxation, which promotes recycling and limits unproductive public spending, represents a significant cultural shift. This new economic paradigm redefines waste as a resource.

The main challenge is to strike a balance between promoting effective tax policies and managing their implications for the market and citizens.

In this context, comparing the strategies adopted by the European Union and the United States reveals distinct but converging approaches that reflect their respective specificities and priorities.

The European Union's strategy, through the Green Deal and environmental taxation policies, is to harmonize policies among Member States, promoting a circular economy and incentivizing sustainable behaviours that can help reduce pollution by shifting the tax burden from production activities to emissions and the consumption of limited resources.<sup>54</sup>

However, the heterogeneity of environmental tax policies across European countries and the lack of a uniform regulatory framework limit and hinder the effectiveness of such measures.

<sup>&</sup>lt;sup>53</sup> E. Caterini, 'Sustainability and Civil Law' *The Italian Law Journal*, 4, 2, 289-314 (2018).

<sup>&</sup>lt;sup>54</sup> For an analysis of the EU tax strategy, see A.F. Uricchio, 'Le prospettive di riforma della fiscalità ambientale in ambito UE nell'ottica della transizione ecologica e della fiscalità circolare' *Rivista di diritto tributario internazionale*, I, 15-36 (2022).

The US, on the other hand, with the Inflation Reduction Act (IRA), adopted an approach combining tax incentives for green technologies with protectionist measures, raising concerns in Europe about potential market distortions and unfair competition. The IRA, while not exclusively focused on the environment, has had a significant impact on green energy production and the technology industry, stimulating an ambitious green transition agenda.

The European Union's response to these measures, through the Green Deal Industrial Plan, demonstrates its willingness to maintain sustainable competitiveness and to stimulate green industrial production within the single market.<sup>55</sup>

In this context, international cooperation emerges as an indispensable element, and environmental taxation must be integrated into a global strategy that unites the initiatives and policies of various states.

The very Tax for SDGs initiative, which exceeded initial expectations, underlines the global recognition of the impact of environmental taxation, which is indicative of a shift in thinking towards the adoption of financial mechanisms, such as taxation, that need to be shaped more carefully to better serve the interests of people and the planet.

It is essential that fiscal policies are supported by a collective commitment to a fair and inclusive transition.

Amid multiple crises (socio-economic, health and environmental), applying a human-rights-based approach to government policies involves protecting the environment as a common good, prioritizing respect for and protection of the fundamental human rights recognized by international conventions.

The UNDP, committed to supporting governments in assessing the synergies between tax and budget in the context of a global fiscal policy for the SDGs, demonstrates the growing collective willingness of many developing countries to systematically align capital with sustainable development.

Climate change is a global challenge that requires global responses,<sup>56</sup> and environmental taxation must be part of a broader strategy that promotes innovation, sustainability, and social equity. Only through

<sup>56</sup> For an overview of the topic, see S. Manzocchi and F. Saraceno, 'Il nuovo atlante. Come gli shock globali stanno cambiando l'economia' *Rivista di politica economica*, II, 5-10 (2022).

<sup>&</sup>lt;sup>55</sup> On this topic, see C. Scheinert, 'EU's Response to the US Inflation Reduction Act (IRA)' European Parliament, available at https://www.europarl.europa.eu/thinktank/en/document/IPOL\_IDA(2023)740087; P. Lenain, 'Inflation Reduction Act vs. Green Deal: Transatlantic Divergence on the Energy Transition' Council on Economic Policies (CEP), available at https://www.cepweb.org/inflation-reduction-act-vs-green-deal-transatlantic-divergences-on-the-energy-transition/.

shared and coordinated effort will it be possible to achieve the climate neutrality goals and ensure a sustainable future for generations to come.

In conclusion, although environmental fiscal measures can provide important levers to steer economic and behavioural choices, it is international cooperation and the adoption of a systemic approach that will ultimately ensure success in the fight against climate change.