

DEBATE/DISCUSSION: THE CIRCULAR ECONOMY FROM A LEGAL PERSPECTIVE. THE TAX SYSTEM AND LABOUR REGULATION IN THE CONTEXT OF ENVIRONMENTAL SUSTAINABILITY / LA ECONOMÍA CIRCULAR EN PERSPECTIVA JURÍDICA. SISTEMA TRIBUTARIO Y REGULACIÓN LABORAL ANTE LA SOSTENIBILIDAD AMBIENTAL

Editorial: Taxation System and Circular Economy: History of an Imperfect Symbiosis

Editorial: Sistema tributario y economía circular: historia de una simbiosis imperfecta

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ABSTRACT

This article seeks to contextualise the discussion on the circular economy to which the following pages contribute, from a legal perspective. The circular economy, as defined in Spanish Law 7/2022 of 8 April on waste and contaminated soils for a circular economy, is an “economic system in which the value of products, materials and other resources in the economy is maintained for as long as possible, enhancing their efficient use in production and consumption, thereby reducing the environmental impact of their use and minimising waste [...]” The transition from the current linear model to the one described in this legislation is essential, yet it also gives rise to consequences that may affect social sustainability. These must therefore be addressed primarily through two areas of law: the legal framework governing public revenue and expenditure and labour law. It is therefore vital to examine how both legal disciplines contribute to a just transition towards the circular economy.

KEYWORDS: financial law; tax system; environmental taxation; environmental sustainability; waste; recycling; tax incentives; circular economy.

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RESUMEN

Este trabajo tiene como objetivo contextualizar el debate sobre economía circular en perspectiva jurídica del que forman parte estas páginas. La economía circular, tal como la define la Ley 7/2022, de 8 de abril, de residuos y suelos contaminados para una economía circular, es un «sistema económico en el que el valor de los productos, materiales y demás recursos de la economía dura el mayor tiempo posible, potenciando su uso eficiente en la producción y el consumo, reduciendo de este modo el impacto medioambiental de su uso, y reduciendo al mínimo los residuos [...]». La transición del actual modelo lineal al que describe esta norma es imprescindible, pero también genera consecuencias que pueden afectar a la sostenibilidad social y que deben ser abordadas principalmente desde dos ámbitos del derecho: el que regula el ingreso y el gasto y el derecho del trabajo. Por tanto, debatir sobre la forma en la que ambas disciplinas contribuyen a la transición justa a la economía circular es imprescindible.

KEYWORDS: derecho financiero; sistema tributario; tributación ambiental; sostenibilidad ambiental; residuos; reciclaje; incentivos tributarios; economía circular.

1. Introduction

The links between the taxation system and the circular economy have grown increasingly strong in recent years, with relative success if we assess the effectiveness of tax regulations in achieving the objectives associated with the subject under study. Scientific publications, references in popular science and even legislative initiatives on the matter are easy to find. However, in my view, the prevailing approach exhibits clear shortcomings, which I will endeavour to explain over the following pages. To this end, I consider it necessary to address two issues: first, the historical development of the subject, in order to clarify when and under what conditions the taxation system and the circular economy began to be linked; and second, the strengths and weaknesses of the relationship between the two.

Before proceeding, it is useful to recall that the concept of the circular economy, as is well known, refers to a model of production and consumption based on sharing, renting, reusing, repairing, refurbishing and recycling existing materials and products as many times as possible, in order to create added value. In doing so, product life cycles are extended and waste is reduced to a minimum, so that when a product reaches the end of its life, its materials are retained within the economy wherever possible. This model stands in contrast to the traditional linear economy, which is based primarily on the “take, make, dispose” approach and relies on large quantities of cheap, readily available materials and energy. Tax incentives and the circular economy from a historical perspective.

The use of tax incentives to address issues arising from insufficient environmental protection is not a new phenomenon.¹ On the contrary, its origins date back some time, with more intensive study in Spain beginning in the 1990s. During that dec-

ade, authors such as Carbajo Vasco, Dopazo Fragío, Falcón y Tella, Herrera Molina, Vicente-Arche Domingo, Magadán Díaz, Botella García-Lastra and Autrand began publishing the results of their research into the interactions between environmental policy and taxation.

The latter, arguably the least well known of them all, was, at the time of writing his text, a “technician at the Commission of the European Community”, and devoted a section of his work to the “Rediscovery of the fiscal tool”. In it, he posed the question of why there was “this trend in favour of applying fiscal policy”. And although he himself refers to it as a “rediscovery”, he goes on to acknowledge that “the potential application of economic and fiscal tools in the environmental field is a new feature of current debates”, which is explained:

undoubtedly, by the perception that the effectiveness of regulatory action tends to be stifled by the proliferation and constant amendment of various rules. It is also attributable to the uncertainty surrounding the use of pollution rights. Proponents of taxation argue that it enables action to be taken through price mechanisms: by increasing the cost of polluting products or lowering that of clean alternatives, it would allow behavioural change to be encouraged. It is, therefore, a mode of intervention that is both universal and decentralised, and is regarded as more effective than regulatory approaches.

And although he does not question the effectiveness of taxation, he believes that other avenues in the fight for environmental protection should have been exhausted beforehand: “Let us consider for a moment the significant delays in reducing pollution in the areas of urban transport or waste management, where Europe has yet to make all the progress it is capable of.” It is worth recalling that this was a paper published over thirty years ago, and we can probably agree that much remains to be done, beyond the fiscal sphere.

Borrero Moro also completed his doctoral thesis, *La tributación ambiental en España* (Environmental Taxation in Spain), during the final decade of the twentieth century. In my view, it constitutes an essential point of departure for understanding the development of environmental taxation in the country. In it, he defended the constitutional legitimacy of fiscal measures aimed directly at achieving constitutional objectives by incentivising behaviours more consistent with the idea of justice enshrined in the Constitution. As the author stated:

The duty to contribute is a constitutional instrument founded on the concept of justice that inspires the Spanish Constitution and is directed towards the achievement of material equality. It therefore seeks to realise the goals of justice that give substance to this notion, among which is the protection of the environment (Article 45 of the Spanish Constitution). These goals contribute to shaping the idea of constitutional justice. Consequently, they form part of the concept of justice that informs the duty to contribute, particularly when this duty is directed towards their fulfilment.

Moreover, as Borrero Moro also anticipated, it is possible to “design fiscal measures based on principles arising from constitutional mandates other than the principle of economic capacity”.

Shortly thereafter, Professor Vaquera García defended what was likewise his doctoral thesis, *Problemática tributaria de la protección ambiental* (Tax Issues in Environmental Protection) (1998)², which complements the perspective provided by Borrero Moro. It is particularly valuable not only for the ideas it introduces but also because, when read in conjunction with his more recent monograph, *De la tributación ambiental a las medidas financieras incentivadoras de la economía circular* (From Environmental Taxation to Financial Measures to Promote the Circular Economy), it enables us to trace the evolution of the phenomenon to which this article is dedicated.³

Over the following two decades, the body of academic work on environmental taxation continued to grow, although attention gradually shifted from general analyses of the constitutionality and effectiveness of environmentally motivated tax measures to the study of more specific issues. Thus, studies began to emerge on, for example, the taxation of energy, water and waste, and interest also grew in environmental taxation across all levels of government. At the same time, a series of publications began to focus on the link between environmental taxation and specific sectors of activity particularly prone to generating environmental damage, including tourism, housing and transport.

In the past decade, the core of research into the intersection between public revenues and the environment has shifted towards the concept of the circular economy, with particular emphasis on issues relating to waste. In this area, the research teams formed around the projects led by Professor Patón García, Grau Ruiz and myself have made notable contributions, as have several individual researchers.

A bibliometric analysis of this topic points to 2013 and 2014 as the years when references to the circular economy began to appear with increasing frequency. However, in the field of taxation, the starting point is somewhat later, specifically around 2017, with 2019 marking the publication of some of the most significant works on the subject.⁴ I refer, for example, to the article by B. García Carretero, “Environmental Waste Taxation in the New Circular Economy Framework”,⁵ to S. Sastre’s paper “Fiscal Instruments for the Circular Economy in Spain”⁶ and especially to the monograph by Professor M. M. Soto Moya, *Objetivos de desarrollo sostenible y Economía Circular. Desafíos en el ámbito fiscal*⁷ (Sustainable Development Goals and the Circular Economy: Challenges in the Fiscal Sphere).

From what has been presented so far – and particularly from a reading of the works cited – several conclusions can be drawn. The first is that there is a clear and growing interest in the circular economy among tax law scholars, building on the engagement with environmental taxation that emerged in the late twentieth century. This is, of course, a consequence of increasing public concern in Spain about environmental degradation, climate change and the search for solutions to the problems arising

from these issues. It also stems, naturally, from the expansion of public policies that address these challenges, and from the fact that scientific policy has prioritised projects in this area.

However – and this is the second conclusion – despite the proliferation of publications whose titles feature terms such as circular economy, environment and waste, along with others such as taxation and fiscal policy, the conclusions that can be drawn in terms of public policy design are not as robust or effective as they ought to be. There are several reasons for this. The first, quite logically, relates to the complexity of the subject matter. The second lies in the insufficient development of a culture of public policy evaluation, which prevents us from having the necessary tools to properly assess the decisions that are translated into regulatory frameworks and which we, as researchers, seek to analyse. A third reason concerns us more directly as a scholarly community: we have reached a point where it appears obligatory to write repeatedly about the most topical subjects – which currently include, in addition to the circular economy, digitalisation and the integration of artificial intelligence into all areas of economic, social and political life – but we do so from an excessively narrow perspective. We assume that the analytical tools which, until recently, enabled progress in the study of taxation remain sufficient – yet they no longer are. Within the academic environment, there coexists a deeply rooted belief that we belong to a fully autonomous discipline, marked by an excessive preoccupation with questions whose understanding demands a cross-disciplinary approach, extensive training and, ultimately, a radical shift in the way we approach the problems we seek to examine in depth.

The third conclusion, a logical consequence of the previous two, is that it is necessary to redirect the course of research and begin offering society not only a coherent theoretical framework but also applied science. By this, I mean that we must not forget that our work is meaningless if it does not serve to advance the search for solutions to the problems and challenges we face. On the basis of this premise, the following section will attempt to outline the lines of research on which, in my view, we should concentrate if we wish our work to contribute to the development of social innovations aimed at social transformation. Let me recall here that social innovations are intentional solutions to social problems which also result in a transformation of society, in the sense given to the term “transformation” by K. Polanyi in *The Great Transformation*.

Before concluding this section, I would like to devote a few lines to the subtitle chosen for this work: “History of an Imperfect Symbiosis”.⁸ In biology, and according to the dictionary of the Spanish Royal Academy (RAE), symbiosis is defined as the association of animal or plant individuals of different species, especially when the symbionts derive mutual benefit from living together. Has the discipline concerned with studying public revenue in relation to the environment – and more recently, the circular economy – truly benefited from this association? And conversely? The answer may be inferred from the fact that I have included the adjective “imperfect” in the title. It is evident that both parts of the equation have benefited from one an-

other, but it is equally evident that much remains to be done – and, above all, that one of the two sides (in this case, taxation) has benefited more than the other. By this I do not mean to suggest that those of us who are, or have been, engaged in research in this field have acted dishonestly (at least not in the majority of cases), but rather that, as I have already mentioned – and as I will elaborate further in the next section – taxation has been used by those with the authority to legislate as a kind of cure-all, intended to compensate for the absence of a firm and sustained commitment to environmental protection, sustainable development, economic circularity and so on. Indeed, bold declarations often prevail over substantive commitments, for reasons linked both to fear of the political repercussions of necessarily difficult decisions and to economic considerations.

2. Incentives that fail to fulfil their purpose

In 2020, in the foreword to the book *De la tributación ambiental a las medidas financieras incentivadoras de la Economía Circular* (From Environmental Taxation to Financial Measures to Promote the Circular Economy), I referred to the need to:

[...] having had sufficient time since environmental taxation first began to be discussed, reflect on the issue and examine the financial measures incentivising the circular economy in light of how the former have evolved. All the decisions taken have had consequences, and although the concept of the circular economy is presented as the definitive solution to the unsustainability of the linear economic model, it is important to learn from past experience: to retain everything that has proven effective, eliminate what has shown itself to be unfit for purpose and advance the circular economy with a clear awareness of both successes and failures.⁹

More than four years have now passed since that observation, and we have still not made sufficient progress in evaluating public policies related to this issue – although several important initiatives have been undertaken that warrant attention.

At the level of the European Union, in 2018 the Commission adopted its Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a monitoring framework for the circular economy (COM [2018] 29 final).¹⁰ Five years later, in 2023, the Commission adopted a Communication on a revised monitoring framework for the circular economy (COM [2023] 306 final),¹¹ which:

[...] presents a revised monitoring framework that captures the circular economy focus areas and the interlinkages between circularity, climate neutrality and the zero pollution ambition. This revised monitoring framework reflects the priorities of the circular economy in the context of the European Green Deal, the 8th Environment Action Programme, the 2030 Agenda for Sustainable Development and the EU's objectives on supply security and resilience.

As stated in the document, the aim of the new monitoring framework is to offer a comprehensive overview by measuring the direct and indirect benefits of increased circularity. To that end, eleven indicators are used, grouped under the following five dimensions:

1. production and consumption,
2. waste management,
3. secondary raw materials,
4. competitiveness and innovation, and
5. global sustainability and resilience.

The Communication introduces several new indicators, among which the following are particularly noteworthy:

- Material footprint: measures the overall use of materials and reflects the amount of materials embedded in global consumption, including imported goods.
- Resource productivity: measures the amount of GDP from materials use and demonstrates the efficiency in using materials in the production of goods and services.
- Consumption footprint: compares consumption to the planetary boundaries for 16 impact categories based on a life-cycle assessment and according to the five main areas of consumption (food, mobility, housing, households goods and appliances).
- GHG emissions from production activities: measures the GHG emissions produced by production sectors (therefore excluding emissions from households) and reflects the contribution of the circular economy to climate neutrality.
- Material dependency: measures the share of imported materials on overall material use, describing how much the EU depends on imports of materials and reflects the contribution of the circular economy to security of supply of materials and energy and to the EU's open strategic autonomy.

These indicators are complemented by, and aligned with, other EU monitoring tools such as the monitoring framework of the 8th Environment Action Programme, the Zero Pollution Monitoring and Outlook Report, the EU indicators for the Sustainable Development Goals and the Resilience Dashboard.

In my view, it is particularly important to bear in mind that most of the indicators mentioned are based on official statistics provided by Eurostat, which are therefore drawn from existing data and “meet the criteria of relevance, acceptability, credibility, ease of use and robustness”. If, then, we have access to statistics classified as “high quality”, available not only to all EU Member States (through the European Statistical System) but also to the research community,

why is it so often concluded that there is a lack of evaluation and decision-making based on such data? If I myself can access Eurostat databases and draw conclusions from them, where does the problem lie? The following pages will attempt to explain this.

The first thing we must acknowledge is that having sufficient data is not the same as using it. The problem is not (or should not be) a lack of willingness to adopt fair and effective regulations, but rather something that anyone who has held public office – or any attentive observer – can readily deduce: the legislative process involves so many stakeholders that the original objectives and the measures required to achieve them are frequently diluted or distorted. This is not about promoting technocracy over democracy, but rather about recognising that too often the common good is subordinated to an accumulation of individual interests – when in fact it should be understood as referring to the needs and interests of the community as a whole, and should take precedence over the particular interests of individuals.

In some cases, initiatives are influenced from the outset by fear – fear of provoking opposition from specific social, political or economic groups. Or simply by fear of losing votes due to the unpopularity of certain measures. The existence of lobbyists is nothing new, and their influence in Spain is growing. Let us recall that in 2016, the National Commission for Markets and Competition (CNMC) established a Public Register of Interest Groups,¹² based on the concept of “interest group” set out in the Resolution of the President dated 26 February 2016 on good practice in the CNMC’s relations with external stakeholders:

[...] natural or legal persons working on their own behalf or on behalf of others who, in relation to the activities of the National Commission for Markets and Competition (CNMC) and, in particular, in shaping its opinion, act in defence of their own interests, those of third parties or organisations, or even of other general interests.

Although it has not yet appeared in the above-mentioned register, a very recent initiative has been launched: CRECEMOS (Renewable Fuels and Circular Economy in Spain for Sustainable Mobility), a multi-sectoral association bringing together a large part of the mobility value chain. It represents 25 leading companies in energy, raw materials, industry, transport and retail. It is also supported by ASAJA (the Young Farmers’ Agricultural Association), representing the primary sector, and the University of Zaragoza. Its members include companies such as Mercadona, Alsa, Repsol, Airbus, Acteco, Enso, Estrella Galicia, Fertinagro, Grupo Corral, Lipisa, Logista, Oleofat, Saica Natur, Scania, Sesé, Técnicas Reunidas, Toyota, Vertex Bioenergy and Wärtsilä. Its goal is to promote the circular economy in Spain and the use of renewable fuels “as an existing option that is complementary to other alternatives to decarbonise all transport segments”.¹³

All the entities in the association are committed to the European Union's goal of achieving climate neutrality by 2050, and they argue that renewable fuels are "one of the main options for rapidly reducing transport emissions, particularly in aviation, maritime transport and heavy goods transport".

At the European level, lobbying is even more firmly embedded – and the circular economy is no exception. Take EUROPEN, the European Organisation for Packaging and the Environment, which defines itself as an organisation committed to climate neutrality by 2050, the protection of natural resources, the acceleration of circularity and the strengthening of EU competitiveness. On its website, EUROPEN describes its participation in stakeholder dialogues across a wide range of policy areas, shaping not only the future of packaging but also of European sustainability more broadly.¹⁴ Among these discussions, taxation naturally features. In a July 2020 document entitled *Views of the Packaging Supply Chain on Fiscal Measures Related to Packaging Materials and Applications*, it was noted that several EU Member States had introduced or were considering the introduction of tax regimes on specific packaging materials and applications. The document also referred to the debate within the European Council on the introduction of a tax on non-recycled plastic packaging waste, as part of negotiations on the EU's Multiannual Financial Framework (MFF) for the 2021–2027 period. It was observed that this levy could lead to new national fiscal regimes (as indeed has happened). In this context, while the lobbyist explicitly expressed support for the political objectives set out in the European Green Deal – particularly the goal of ensuring that all packaging is reusable or recyclable by 2030 – it also expressed clear concern about the possible introduction of new or additional fiscal measures on packaging, due to the significant public investments required to meet those objectives. Private investment by supply chain actors was also highlighted. In light of all the above, EUROPEN concluded that the introduction of new fiscal measures could not be considered the most effective instrument for promoting the innovation and investment necessary to meet the policy objectives of the Green Deal.

In the document *Views of the Packaging Supply Chain on Fiscal Measures Related to Packaging Materials and Applications*, EUROPEN warned of the introduction of levies on certain packaging materials and formats by various EU Member States, as well as of the ongoing debate within the European Council regarding the potential introduction of a tax on non-recycled plastic packaging waste. As might be expected, the organisations represented by EUROPEN feared that the implementation of such an initiative could lead to the emergence of new national-level tax regimes. Thus, while reaffirming their commitment to the political objectives set out in the European Green Deal – namely, ensuring that all packaging is reusable or recyclable by 2030 – they expressed concern over the possible introduction of new or additional fiscal measures on packaging. In their view, fiscal measures are not the most effective tool for stimulating the innovation and investment required to meet the Green Deal's targets – particularly

in the absence of parallel investment in the packaging supply chain: “In the absence of earmarking revenues, there is no guarantee that the resources collected through such fiscal instruments will be reinvested into better collection, sorting and recycling infrastructures needed to increase the amount of packaging that is effectively recycled.” For this reason, the signatory organisations called for an investment budget equal to the projected revenue in order to support packaging circularity, including improvements to recycling technologies and national waste management infrastructures. Their proposal suggested that this could be achieved through the establishment of a dedicated and supplementary budget line within the MFF or via the Next Generation EU fund.

However, recognising that the adoption of fiscal measures was likely unavoidable, they insisted that such measures be designed in a manner that does not undermine the industry’s capacity to continue investing in packaging solutions, recycling technologies and more sustainable waste management systems. To this end, they argued that the costs borne by packaging users as a result of existing legislation must be considered, as well as the financial commitments associated with voluntary pledges made across the entire packaging value chain. EUROOPEN also emphasised that packaging users were already subject to fees under Extended Producer Responsibility (EPR) schemes, and that these were expected to increase significantly – particularly in light of the EU’s new legal requirements on waste designed to promote packaging recycling (EPR fee modulation based on eco-design criteria).

As we can see, when one scratches beneath the surface, lobbyists whose names evoke environmental protection and who claim that circularity is embedded in their DNA often reveal that one of their core concerns – underlying all others – is the protection of revenue. This may well recall Friedman’s well-known theory, which, in essence, holds that a company’s only responsibility is to maximise profits for its shareholders. Nonetheless, to criticise this concern without nuance may not be entirely fair, and its defence is, in fact, closely linked to the concept of a just transition, which is addressed in the following section. For now, let us retain the key argument advanced in support of this position: circularity must be promoted while safeguarding the integrity of the single market. To achieve this, fiscal measures must not be guided solely by revenue-raising objectives, but should instead aim to foster the availability of high-quality recycled materials across the EU at affordable prices, enabling their reintegration into the value chain. “In particular, they should encourage and reward the uptake of sustainable materials, for instance through a digressive scale or exemptions for recycled materials to enable packaging users to close the loop of circularity. It is also essential that such measures are non-discriminatory and avoid distortions and fragmentation of the EU Single Market.” Ultimately, what is proposed is to advance the use of tax systems as a mechanism to encourage the adoption of sustainable materials, through the implementation of rewards or incentives (such as regressive scales, exemptions, and so on).

It is therefore unsurprising that authors such as Menéndez Moreno describe the circular economy as “inextricable”¹⁵ and make statements such as the following:

The need to care for the planet is as unquestionable as the need to care for oneself. However, this does not in any way justify the erratic and irresponsible regulation that has been observed, nor the repeated distortion of certain legal principles – as occurs, for example, when a person with a lower-value vehicle pays more tax than someone with a more expensive, but eco-friendly, vehicle; or when something as unrelated to any manifestation of wealth as “visual impact” is treated as a taxable event; or again, when taxes are imposed on those who generate unavoidable waste and dispose of it in accordance with the applicable regulations, under the pretext of promoting recycling – even though the tax rules make no distinction for those who are unable to recycle such waste.¹⁶

For my part, I must nevertheless acknowledge that the commitment to the circular economy remains one of the few viable options available in the search for solutions to the accelerating environmental degradation and climate change we are increasingly experiencing. Even so, the criticisms put forward by Professor Menéndez Moreno clearly deserve careful reflection.

3. Conclusion: on the need for a just transition to the circular economy through a cross-cutting approach

In my view, one of the main challenges in analysing taxation within the circular economy – and, by extension, environmental taxation – concerns the reconsideration or reconfiguration of the principle of economic capacity. And, of course, the concept of a “just transition”.

The term “transition” refers to far-reaching social change within a company, and when the objective of such change is to move from a linear model of production and consumption to a circular one – with all that this entails – it is essential that the noun “transition” be accompanied by the adjective “just”. This concept, which originates in the International Labour Organization (ILO)’s Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies (2015),¹⁷ is difficult to define. However, as the ILO notes, it should be guided by a number of key principles: the need for broad social consensus on the objective of sustainability and the pathways to achieve it; the respect for and promotion of fundamental principles and rights at work; the integration of a gender perspective; the adoption of coherent public policies aimed at creating an enabling environment in which businesses, workers, investors and consumers can support and drive the transition; and the establishment of a just transition framework for all, with a view to promoting the creation of more decent work.

Although at first sight it may appear that the core of a just transition lies in labour regulation, in reality tax systems must also be included in any prior analysis undertaken before implementing measures in this area. Similarly, it is essential to strengthen the pursuit of justice in public spending – an indispensable element for the realisation of human dignity. While this text has focused on public revenues, it is important to underline that the transition to a circular economy – like environmental protection more broadly – is costly and often difficult to reflect adequately in public budgets. In this regard, the development of so-called green budgeting represents a key area in which progress is needed. Much work remains to be done, but it is imperative that such a crucial instrument for achieving environmental sustainability be approached through a genuinely cross-cutting and integrated perspective.

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Notes

1 In 1970, B. de Mesana R. de Salas published an article in the *Revista de Estudios Agrosociales* (no. 70) entitled “El bosque y la conservación de la naturaleza en Vizcaya” (Forests and the Conservation of Nature in Biscay). In a brief paragraph, reference is made to how the French state (among others, it is noted) encouraged forest owners to reforest their land “by granting substantial compensation per hectare reforested, along with tax exemptions for a number of years and a three-quarters reduction in real rights applied to both sales and inheritance” (p. 43). Although the article does not take environmental protection as its starting point, it does show that over fifty years ago the tax system was already beginning to be considered an effective instrument for achieving environmental objectives.

2 Cf. A. Vaquera García, *Fiscalidad y medio ambiente* (Taxation and the Environment), Lex Nova, 1998.

3 Alongside these two works, many others could be cited, but I have chosen them because they were among the first to offer a deep and comprehensive view of environmental taxation. To them may be added, for example, the doctoral thesis of Professor García Luque: *La tributación ambiental: el deber de contribuir en la financiación y en la prevención de los gastos públicos en el siglo XXI* (Environmental Taxation: The Duty to Contribute in the Financing and Prevention of Public Expenditure in the 21st Century), defended at the University of Málaga in 2001.

4 However, as early as 2011, a publication appeared in which the term circular economy was already featured in the title: E. Carrera's “La crisis, la reforma fiscal ecológica y la economía circular” (The Crisis, Green Tax Reform and the Circular Economy), *Cantárida* [monthly journal of Cabezón y Comarca], 343, 2011.

5 B. García Carretero: “La fiscalidad ambiental en materia de residuos en el nuevo marco de una economía circular”, *Crónica Tributaria*, 170, 2019.

6 S. Sastre: “Instrumentos fiscales para una Economía Circular en España”. *Documents – Instituto de Estudios Fiscales*, 10, 2019.

7 M. M. Soto Moya: *Objetivos de desarrollo sostenible y Economía Circular. Desafíos en el ámbito fiscal*. Comares, 2019.

8 The title was intended to be original, but a quick Google search revealed a recent article using the same expression: V. García Herrera's “Redes sociales e inteligencia artificial: una simbiosis imperfecta” (Social Media and Artificial Intelligence: An Imperfect Symbiosis). *Actualidad civil*, 4, 2024.

9 A. Vaquera García: *De la tributación ambiental a las medidas financieras incentivadoras de la Economía Circular*. Aranzadi, 2020.

10 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52018DC0029>

- 11 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52023DC0306>
- 12 Resolution of 9 March 2016 by the President of the National Commission for Markets and Competition, establishing the personal data file “Register of Interest Groups”.
- 13 <https://www.crecemos.org/en/crecemos-association/>
- 14 <https://www.europen-packaging.eu/policy-areas/>
- 15 According to the RAE Dictionary: “adj. Que no se puede desenredar, muy intrincado y confuso” (That which cannot be disentangled; highly intricate and confusing).
- 16 A. Menéndez Moreno: “Una tasa o similar de la inextricable economía circular” (A Tax or Similar Levy on the Inextricable Circular Economy). *Quincena Fiscal*, 5, 2024. By the same author: “¡Marchando: otra de ecológicos!: a propósito de los tributos que contempla la Ley 7/2022, de residuos y suelos contaminados para una economía circular” (Coming Right Up: Another Round of Green Taxes! On the Taxes Established by Law 7/2022 on Waste and Contaminated Soils for a Circular Economy). *Quincena Fiscal*, 15–16, 2022.
- 17 https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40ed_emp/%40emp_ent/documents/publication/wcms_432859.pdf

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Yolanda García Calvente holds a PhD in law from the University of Málaga, which she completed in 2001. In 2003, she was appointed senior lecturer at the Autonomous University of Barcelona, and in 2007 at the University of Málaga, where she has held the position of professor of financial law since 2017. She is currently a professor at the University of Granada, a position she has held since September 2022. She holds four recognised six-year research periods (active) and one in knowledge transfer. She is the author of more than 100 publications on financial and tax law, published by the most prestigious Spanish legal publishers and academic journals, as well as several international ones. She has participated in 19 research projects, six of them as principal investigator. Her academic career includes research stays at international institutions such as Paris II, Bologna, Turin, Bergamo, Montreal and Strasbourg. She served as dean of the Faculty of Law at the University of Málaga (2009–2012), and for six years as vice-rector for academic staff at the same university (from 2016). She is a full member of the Economic and Social Council of Andalusia.