

ARTICLE/ARTÍCULO

# Towards a Circular Economy in Andalusia? Comments on the Andalusian Circular Economy Law<sup>1</sup>

¿Hacia una economía circular en Andalucía? Comentarios a la Ley 3/2023, de 30 de marzo, de Economía Circular de Andalucía

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**Received/Recibido:** 23/2/2023  
**Accepted/Aceptado:** 13/4/2023



## ABSTRACT

In recent years, the circular economy has taken a central position in the political and social agenda, so much so that the public powers have been showing great interest in promoting this economic model, as evidenced by the approval of a range of action plans, strategies, roadmaps and even legally binding regulations. Riding the wave of regional and national concern, Andalusian legislators have approved the Andalusian Circular Economy Law, which is designed to become the backbone of a robust legal framework that will propel the proper development of the circular economy in this region, placing it at the forefront in terms of circular economy legislation by becoming just the second autonomous community to pass a law on this issue.

**KEYWORDS:** circular economy; Andalusia; law; sustainability; life cycle.

**HOW TO REFERENCE:** Sedeño López, J. F. (2023). ¿Hacia una economía circular en Andalucía? Comentarios a la Ley 3/2023, de 30 de marzo, de Economía Circular de Andalucía. *Revista Centra de Ciencias Sociales*, 2(1), 45-62. <https://doi.org/10.54790/rccs.56>

La versión (original) en castellano puede leerse en <https://doi.org/10.54790/rccs.56>

## RESUMEN

En los últimos años, la economía circular se ha situado en el centro de la agenda política y social, de manera que los poderes públicos se han venido mostrando muy interesados en la promoción de este modelo económico, como constata la aprobación de diferentes planes de acción, estrategias, hojas de ruta e incluso normas con rango de ley. Aprovechando el impulso comunitario y nacional, el legislador andaluz ha aprobado la Ley 3/2023, de 30 de marzo, de Economía Circular de Andalucía, con la que se pretende diseñar un marco jurídico adecuado para el correcto desarrollo de la economía circular en este territorio, situando a esta región a la vanguardia en materia de legislación de la economía circular, al convertirse en la segunda comunidad autónoma en contar con una ley sobre esta cuestión.

**PALABRAS CLAVE:** economía circular; Andalucía; ley; sostenibilidad; ciclo de vida.

## 1. Introduction: LECA in the Current Legislative Context

Andalusian legislators approved Law 3/2023 of 30 March on the Andalusian Circular Economy (hereinafter, LECA, from its acronym in Spanish), a regulation which aims to catapult the region to the forefront in terms of promoting and developing the circular economy. Ever since the European Parliament published the communication entitled “Closing the loop – An EU action plan for the Circular Economy” (COM/2015/614 final) in 2015, public bodies across all levels have been striving to realign their policies with an economic model in which the value of resources is maintained for as long as possible while reducing waste generation to a minimum, as highlighted by the range of different initiatives, strategies, roadmaps and proposed laws developed on an autonomous community, state and regional level.

There is no doubt that the European Union (hereinafter, the EU) has become the number one driving force of the circular economy on the international stage in recent years. Although references to the circular economy had already been made, it was the publication of this communication in 2015 that placed this model among the EU’s top priorities, as it not only attempted to define circular economy for the first time, but it was also accompanied by a package of reforms that have impacted a number of EU regulations, particularly those regarding waste management. As proof of its firm commitment, in 2020 the EU published a second Circular Economy Action Plan entitled “For a cleaner and more competitive Europe” (COM/2020/98 final), alongside a new schedule for proposed actions in order to continue advancing towards the circular model. This plan is the cornerstone of the European Green Deal, unveiled in December 2019, and one of the key ways of helping Europe fully recover after the pandemic, as emphasised by the Council of the European Union in its conclusions adopted on 21 July 2020 on the multiannual financial framework and recovery plan (Next Generation EU), which claim that the adoption of production standards and circular consumption is a decisive factor for achieving the United Nations’ Sustainable Development Goals (SDGs), as part of its 2030 Agenda for Sustainable Development.

As a consequence of this *acquis communautaire*, and especially of the reforms of a number of European directives, Spain has developed two instruments which has

allowed it to align itself with the EU's circular economy initiatives: the Spanish Circular Economy Strategy (*Estrategia española de economía circular*, hereinafter, the EEEC) and Law 7/2022 of 8 April on Waste and Contaminated Soils for a Circular Economy (*Ley 7/2022, de 8 de abril, de residuos y suelos contaminados para una economía circular*, hereinafter, the LRSC). Despite receiving criticism for its lack of innovation and merely descriptive nature (Puentes Cociña, 2018, p. 34), the EEEC marked the first time Spain's legislators tackled the circular economy, which was developed in further detail in their first Circular Economy Action Plan 2021–2023 (*I Plan de Acción de Economía Circular 2021–2023 de España*, Pascual Núñez, 2021) and the LRSC, whose entry into force was somewhat delayed when considering that the first European plan dates back to 2015. The main goal of this regulation is to transpose the changes made in European laws to Spanish legislation, with new additions regarding waste and other measures linked to limiting the placement of plastics on the market (especially single-use plastics) and to extended producer responsibility, among other issues. In terms of taxes, two noteworthy new ones were introduced in Spain: a tax on landfill waste, incineration and co-incineration, aimed at remedying the disparity between regions in terms of waste taxation; and a tax on non-reusable plastic packaging, designed to make one of the critical sectors of the Spanish economy more circular<sup>2</sup>.

As stated by Ramírez Sánchez-Maroto (2022), the LRSC lays the foundations for circular economy legislation, while not preventing autonomous communities from enacting their own laws on this issue. However, the only law approved so far by an autonomous community is Law 7/2019 of 29 November on the Circular Economy of Castile-La Mancha which, containing just nine articles and four final provisions, is merely a statement of intent in that it defines the principles, objectives and lines of action without implementing binding regulations that actually foster the circular economy. Proof of this is its Article 9, which indicates that the regional administration shall promote the creation of economic incentives to reduce the wastage of food, raw materials and energy, while also incentivising efficiency and sustainability standards during the production and consumption stages, although it does not define any specific instrument for doing so. On the other hand, it urges legislators to develop their own autonomous circular economy strategy and taxation for certain types of waste, a mandate which in our opinion is made redundant by the introduction of the state tax contained in the LRSC. Indeed, the twenty-first additional provision of the state regulations lays out that autonomous communities that have their own tax at the time the law enters into force may continue to manage, settle, collect and inspect their tax, while those that do not have such a tax may not introduce one.

Catalonia, Navarre and the Balearic Islands all also have regulations that more or less indirectly touch on the circular economy (Ruiz de Apodaca Espinosa, 2019; Santamaría Arinas, 2019)— Catalan Parliamentary Law 16/2017 of 1 August on Climate Change, Regional Law 14/1018 of 18 June on Waste and Taxation, Law 8/2019 of 19 February on Waste and Contaminated Soil in the Balearic Islands and Law 10/2019 of 22 February on Climate Change and Energy Transition—which,

although they do not exclusively rule on the circular economy, they do contain provisions related to this subject, such as defining the circular economy, even though the regulations themselves are mostly focused on waste management.

Likewise, other autonomous communities have chosen to develop their own strategies and roadmaps which, although they do not have the force of law, illustrate the importance taken on by the circular economy in the political and social agenda.

## 2. Most Important Aspects of the Andalusian Circular Economy Law

### 2.1. Background: the Andalusian Circular Bioeconomy Strategy and the legislative process of the LECA

Prior to the approval of the LECA, in 2018 Andalusia introduced an Andalusian Circular Bioeconomy Strategy that aimed to encourage the transition towards an economic model based on the optimal use of biological resources (Domínguez García-Baquero et al., 2018, p. 129). Although there is an undeniable link between this strategy and the promotion of the circular model, upon further analysis of this text, the conclusion is drawn that its main goal is to progress towards the use of renewable resources and the replacement of fossil fuels, ignoring other key sectors of the Andalusian economy. Regardless, and without devaluing the Andalusian Circular Bioeconomy Strategy, the LECA is the cornerstone of the development of the circular economy in the region given that its cross-cutting nature has a greater impact on the productive sectors. Its intention, outlined in the preamble, to introduce many changes which, with the force of law, are necessary to incentivise and accelerate the transition towards a more competitive and innovative economy is clear in this regard.

The origins of the LECA trace back to the Agreement by the Regional Government of Andalusia on 30 April 2019 in which it urges the Ministry of Agriculture, Livestock, Fisheries and Sustainable Development to begin the necessary action to pass the Andalusian Circular Economy Law. As a result of this mandate, on 17 November 2020 the Ministry drew up a first draft of the Draft Law which, once it had passed through all legal procedures, was forwarded at the end of 2021 to the Advisory Council and the Economic and Social Council of Andalusia, whose reports favoured the adoption of the new regulation, with the latter's indicating that the circular economy presents Andalusia with a great opportunity thanks to its potential to create employment and boost the economy (2021, p. 16). Finally, the Law was published in the Official Gazette of the Andalusian Parliament (*Boletín Oficial del Parlamento de Andalucía, BOPA*) on 3 January 2022 (no. 732), continuing the legislative procedure until all amendments were considered, although the parliamentary process came to an early end as a result of the dissolution of the parliamentary term. Following the elections, the regulation was once again

pushed through (BOPA of 7 October 2022, no. 40), fighting off all the amendments proposed by Vox. The regulation was finally published in the Official Gazette of the Regional Government of Andalusia (BOJA) on 11 April 2023.

Unlike its counterpart from Castile-La Mancha, the LECA is a broad law that contains 87 articles across seven sections, in addition to five additional provisions, eight temporary provisions, one repealing provision and two final provisions. This study will now look at the main aspects of this law.

## 2.2. Comments on the text of the LECA

### 2.2.1. *General provisions*

Section I of the LECA covers the general aspects of the regulation, such as its purpose, scope of application, the main definitions, the guiding principles to have inspired the regulation, its objectives and the obligation of legal and natural persons to communicate via digital means.

The concept of circular economy (Article 3, sub-section i) is of particular importance, which is defined as:

An economic system in which the value of products, materials and other resources of the economy last for as long as possible, promoting their efficient use in production and consumption, thus reducing the environmental impact of their use and reducing waste and the release of dangerous substances to a minimum in all stages of their life cycle by applying the waste hierarchy, if applicable.

It could be argued that this definition is more comprehensive than the one offered by Law 8/2018 of 8 October on Measures Tackling Climate Change and on the Transition to a New Energy Model in Andalusia, which states that the circular economy is:

An economy that promotes the efficient use of resources to reach high levels of sustainability through eco-design, prevention and minimisation of waste generation, and the reuse, repair, remanufacturing and recycling of materials and products instead of the use of virgin raw materials.

Unlike this definition provided by Law 8/2018, which is basically identical to the one contained in Catalan Parliamentary Law 16/2017 of 1 August on Climate Change (Ramírez Sánchez-Maroto, 2018, p. 10), the new, updated one is better suited to the concept put forth by the EU, in that it refers to both the products' life cycle and the release of dangerous substances—mainly polluting emissions, faced with the need to advance towards a hypocarbon economic model—concepts that were completely ignored in the earlier definition. Furthermore, it stands out that the term “economy” has been replaced with “economic system”, arguably a sound decision, as it is closer to the concept of model used by the EU's blueprints, the EEEC and the LRSC.

The rest of section I refers to general aspects that have already been touched upon, such as the need to foster the circular economy as part of the framework of the SDGs

and the 2030 Agenda, the opportunities it presents the autonomous community with and the need to encourage all three pillars of sustainable development by incorporating classic principles—like the polluter pays and the efficiency principle—in addition to other newer issues such as promoting education for sustainable development and an integrated approach to the life cycle analysis of goods and services.

### 2.2.2. Governance

Section II of the LECA is dedicated to governance and is divided into three chapters, one on each of the three most important aspects: administrative organisation, planning and green public procurement.

The way in which Andalusian legislators opted to tackle organisational issues was by setting up an “office”, as opposed to a General Directorate of Circular Economy as chosen by other autonomous communities, such as Castile-La Mancha (Ramírez Sánchez-Maroto, 2018, p. 15). As such, Article 7 establishes the Andalusian Office of Circular Economy (hereinafter, the Office), whose roles, detailed in the third sub-section of the provision, centre around developing, promoting, boosting, advising, investigating and transferring all things related to the circular economy. Likewise, the remaining articles outline different tasks related to combating the digital divide and access to electronic devices in their useful life period (Article 43), reusing and recycling textiles (Article 49), the circular bioeconomy (Article 51) and promoting the Circular Economy Digital Innovation Centre in Andalusia (Article 77), among others. As will be seen later, the inclusion of the digital divide in this kind of regulation is rather odd, not just because of the seeming lack of relationship between the circular economy and digitalisation—a link that arguably does exist—but rather because of the lack of justification for this decision by the legislators.

With regards planning, the mandate to devise an Andalusian Strategy for the Circular Economy is noteworthy, which aims to develop planning and coordination mechanisms, measuring and evaluation systems for its monitoring, a platform for channelling industrial symbiosis and the mechanisms for promoting education for sustainability and citizen participation. On this subject, it is worth asking whether developing a strategy is more suitable before or after the approval of a regulation with the force of law. Until now, many autonomous communities have chosen to develop strategies and roadmaps, without ruling out the option of passing laws in the near future; for example, the Community of Madrid’s Circular Economy Law, which already features the “Madrid7R Economía Circular” initiative, is currently in the process of being passed. On the other hand, Castile-La Mancha has preferred to develop a regulation with the force of law first and then a strategy. This regulation includes aspects such as the background, an analysis and the general principles, which should logically be developed prior to the law. In defence of this model, one could argue that Castile-La Mancha’s law only contains nine articles, which undoubtedly required less work to fully develop. The LECA, on the other hand,

is a comprehensive law given that it must consider the definitive content of the future strategy to determine whether or not Andalusian legislators have chosen the correct legislative channel.

Likewise, Article 9 urges local authorities to draw up, approve, implement and execute their own circular economy action plans, which must include, at least, planning in terms of waste prevention and management. In reality, this does not just entail local authorities adapting their municipal ordinances to the new requirements of the LRSC<sup>3</sup>, but, by virtue of transitory provision four, local authorities must have their own circular economy plan within either two or four years, depending on whether their population is greater than or less than 5,000, respectively.

Regardless, all this seems to point towards the effective implementation of the LECA taking quite a while to come to fruition. In this vein, additional provision two indicates that the modification of posts in order to provide the Office with its workforce will take six months from the moment the law enters into force; meanwhile, and more critically, additional provision six allows a period of up to 18 months from the entry into force of the LECA for the strategy to be drawn up. Perhaps shortening these times would have been a good idea (for example, its Castile-La Mancha counterpart assigned a period of 12 months for this process), taking into consideration the fact that the LECA's legislative process has already experienced several delays.

Section II ends with a chapter on the inclusion of circular measures in green public procurement, developing what has been dubbed “circular public procurement” (“*contratación pública circular*”, Sanz Larruga, 2022, p. 174), thus incorporating the mandate contained in Article 16 of the LRSC, which presses public authorities to acquire products that are highly durable, reusable, repairable or made with materials that are easily recyclable. In reality, circular public procurement is a new step forward in socially responsible public procurement, under which public authorities' spending must be in line with the values and principles of general interest (García Calvente, 2012). As such, clauses that should be considered during the public procurement process include the products being recorded in the Andalusian Public Life Cycle Register (which will be looked at in more depth later), the products bearing the EU Ecolabel and the supplier being recorded in the EMAS register or equivalent, among others, particularly in relation to products and services classed as key (Article 12), provisions which must be fully developed (final provisions 10 and 14). Until another type of mechanism for developing the circular economy is established, such as tax instruments—whose implementation in the autonomous community would require careful analysis to ensure that the intended circularity objectives will be met<sup>4</sup>—circular public procurement appears to be a suitable public policy for incentivising production and consumption standards that allow the linear model to be left behind.

### *2.2.3. Implementation of the circular economy*

Section III of the law deals with the specific actions to be taken in Andalusia in order to contribute to the development of a circular economy. It is split into five chapters which in turn address the life cycle analysis, circularity in production and consumption, circularity in services and processes, the economic boost to the circular economy and strategic business investments in the circular economy.

In the first chapter, Article 13 states that the autonomous authorities shall implement and promote the performance of product life cycle analyses, which could be argued to be merely a declaration of good intentions, given that this regulation lacks binding measures to actually ensure the objective is fulfilled. On the other hand, the creation of the novel and unprecedented Andalusian Public Life Cycle Register (Article 14) is of great interest, with its mission being outlined in its name. Despite it being voluntary for natural and legal persons to join this register, sub-section 5 of Article 14 indicates that doing so may make them worthy of receiving grants. Although it is true that this scenario is just a possibility under the regulation (it is phrased as “may be included” as a criteria), the fact that the LECA aims to advance circular public procurement prompts the belief that appearing on this register may be a pre-requisite for receiving grants in the not-so-distant future. Meanwhile, alongside the financing opportunity it presents, companies opting to join this register through choice cannot be ruled out, with such a decision perhaps forming part of their social responsibility policies.

Chapter II of section III continues by detailing the sustainability principles of the products, which must not be confused with the governing principles examined earlier: while the latter apply to the regulation in its entirety, the former are related to specific aspects that must be contemplated when deciding if a good can be considered “sustainable”, which include its energy efficiency, emissions reduction, the use of recycled materials, the possibility of recycling or reusing them and the use of eco-design. However, three of the aspects that appear in the regulation are of particular interest: the functionality economy, the durability of the products and the management of unsold goods.

The functionality economy, also called the functional service economy or the performance economy, is a school of thought from which the circular economy borrows a number of principles, and which revolves around the idea that it is not owning goods that is important, but rather how they are used (Stahel, 2016); in line with this concept, as stated in the Opinion of the European Economic and Social Committee on “Towards more sustainable consumption: industrial product lifetimes and restoring trust through consumer information” (2014/C 67/05), companies would no longer sell products, only functions. This idea coincides with the definition given in Article 3, j) of the LECA, which conceives the functionality economy as a consumption culture based on paying for the



use of a good or service and not on owning it. This new way of understanding the economy would imply its dematerialisation, thanks to the efficient use of resources and the reduction in waste generation, even though it would require consumers and businesspeople alike to radically change their consumption and production standards. In this sense, Article 16 establishes that the Regional Government of Andalusia will promote pay-per-use systems for machinery and equipment, integrated mobility mechanisms and the setting up of companies dedicated to collective goods in cities.

With this in mind, managing unsold goods and increasing the repairability and durability of products are two actions that aim to extend their useful life. However, the two regulations that govern these actions lack any obligation, as the law states that the productive sectors will reduce, as much as possible, the amount of unsold goods, that the ministry that oversees waste management may establish specific prohibitions regarding the elimination of unsold goods, that companies dedicated to manufacturing products may voluntarily set up their own or associated system that allows them to offer alternatives and services for repairing them, and that they may extend the useful life of the product by making spare parts available to the public. The terminology used stands in stark contrast to that of state legislation: Article 127 bis of Royal Legislative Decree 1/2007 of 16 November approving the consolidated text of the General Consumer and User Protection Act and Other Complementary Laws, for example, indicates that the producer shall at all times guarantee the existence of a suitable technical service, in addition to the availability of spare parts for a minimum period of ten years following the date on which the good ceases to be manufactured. In other words, the LECA is a regulation that is full of good intentions, however whether or not it is effectively executed is in the hands of the stakeholders themselves. In this regard, it is impossible to overlook that workers and, in this case, companies must assume the costs of transitioning to the circular economy, which is probably why legislators have tried to avoid introducing any taxes that will have a negative impact on the business sector. Likewise, chapter III urges the authorities to drive forward circularity in service provision and production processes.

Similarly, chapter IV, which is dedicated to the economic boost to the circular economy, emphasises that the Regional Government of Andalusia shall develop mechanisms for promoting the circular economy (Article 23), focused on certain priority actions, including eco-design, reusing products and their components, industrial symbiosis, waste valorisation, advancing towards the functionality economy and promoting circularity in the value chains of key products (Article 24). Once again, the chapter suffers from an over-generalisation, given that it indicates no specific actions for boosting the circular economy and it repeats much of what is said in other parts of the LECA.

Chapter V of this section is much more specific, however, in that it defines the criteria to be met by company projects undertaken in Andalusia with regards material valorisation and which request their declaration as a strategic interest: they must contribute to the creation of at least 25 full-time jobs and invest a minimum of 10 million euro<sup>5</sup>. In terms of the concept of material valorisation activities, Article 26 refers to those listed in Appendix II of the LRSC (except for valorising material for the main purpose of its use as fuel or another form of producing energy and all prior operations). In this case, the understanding is that the concept of material valorisation activities should have been expressly included in sub-section 3.1 of Decree Law 4/2019, which indicates the project categories that are likely to be considered of strategic interest, even though sub-section i) of the same article includes energy valorisation projects for waste and biomass, which may in turn include material valorisation activities.

#### *2.2.4. Waste management*

Although advancing towards a circular economy requires actions all along a product's value chain, and especially during the initial resource extraction, design and product manufacturing stages, public authorities continue to focus on waste management. The LECA does not stray away from this, with section IV tackling this issue, which it must be said is definitely not straight forward as it falls under several different jurisdictions.

This section begins by announcing that the actions taken will revolve around the application of the waste prevention principle, based on the idea that the best kind of waste is no waste. The first chapter of general provisions also contains a series of objectives linked to the circular management of waste and municipal waste, which are more or less a direct transcription of those given in the LRSC. It is interesting to note that Article 29.5 of the LECA, which speaks of the obligation to establish a non-tax-based fee or financial contribution for managing waste, as found in Article 11.3 of the state regulations, refers to taxes, fees or, if applicable, non-tax-based financial contributions, as if the fee were not actually considered a tax<sup>6</sup>. In addition, given that this text merely reiterates the provisions of the LRSC, it is also of note that it makes no mention that the financial contribution established must be specific, separate and not incur a deficit, as mentioned in the aforementioned Article 11.3 of the LRSC, as it will be a real challenge for many local authorities to meet these characteristics.

Chapter II deals with the so-called voluntary extended producer responsibility systems which will be promoted by the Regional Government of Andalusia. It is also worth highlighting that the inclusion of the adjective "voluntary" is not a mistake; it is in line with the doctrine of the Spanish Supreme Court—as seen in Decisions 2648/2020, 2649/2050, 2650/2020 and 2651/2020, all of 27 July (among others)—which has established that extended producer responsibility is the sole competence of the Spanish state (Poveda, 2020), by virtue of the

provisions of Article 149.2.23 of the Spanish Constitution, which gives the state authority over primary legislation regarding environmental protection, rejecting claims that this power could be passed down to the autonomous communities so that they may establish additional protection regulations.

### *2.2.5. Value chains of key products*

What to do with the value chains of key products is without a doubt one aspect that the LECA hones in on, namely in section V, which contains a total of 34 articles, in turn grouped into chapters which correspond to each of the critical sectors: electronic and electric devices, batteries and vehicles; plastics and packaging; textile products; food, nutrients and bioproducts; water; and construction and buildings. These sectors are generally aligned with those indicated in the EEE, although it is surprising that the LECA does not make any reference to tourism, given its importance to Andalusia and the wide berth given to the sector to advance towards a circular model (State Company for the Management of Tourism Innovation and Technologies, SEGITTUR, n.d.). The overall goal of this section is to set out the rules that govern the recovery of raw materials considered key in each of the aforementioned sectors, to promote synergies between the affected industrial sectors, and between these and the authorities, and to raise awareness and encourage citizen collaboration in order to effectively implement a circular economy. Once again there is a lack of specificity regarding the actions that are going to be taken, with the law addressing, among other topics, the setting up of the appropriate regulatory and administrative mechanisms to establish relationships of industrial symbiosis, the streamlining of procedures and authorisations and the reduction of administrative obstacles, all without stipulating which specific measures are going to be carried out in order to reach these goals and, more importantly, the time frame for their adoption.

If a closer look is taken at each of the key products, the law begins to touch on the circularity of electronic and electric devices, batteries and vehicles, reiterating some of the obligations provided for in sectoral legislation (such as those related to the obligations of civic amenity sites to meet certain requirements). Although this point is also not particularly well-defined (for example, when it claims that civic amenity sites shall adopt measures to guarantee the security of the facilities, without specifying exactly which measures), the express acknowledgement that the Regional Government of Andalusia may establish framework agreements in collaboration with representatives from distributors and marketers in order to prevent the generation of this type of waste is welcomed. Here the regulations also refer to circular digital connectivity funds, defined in Article 3, sub-section k) as electronic devices in their service life that are supplied in order to be reused so as to eliminate the digital divide. This is explicit recognition of a new way of extending the service life of electronic products—transferring them to people with fewer resources—in an attempt to eliminate the digital divide, with the government ministries responsible for education and social affairs taking it upon themselves to define the criteria governing this transfer, an excellent measure

which combines environmental sustainability with social sustainability. With regards this type of products, Ramírez Sánchez-Maroto (2022, p. 18) considers that it should have included a clear reference to municipalities with over 200,000 inhabitants, in which so-called “urban mining”<sup>7</sup> is a key activity for recovering materials in large cities, given the intensive use of electronic and electrical devices that occurs in them. Finally, there is also mention of the improvement in managing vehicle waste once it has come to the end of its service life, which fully adheres to applicable sectoral state legislation, with the latest update urging the government ministry responsible for environmental issues to collaborate with the relevant traffic authority.

Unlike the trend currently observed in most legal texts, the articles focusing on plastics and packaging are a real improvement over the LRSC; in particular, they outline a series of minimum objectives in terms of the amount in weight of packaging recycled, and the specific materials contained in it, by 2025 and 2030 (Article 45.1). On the other hand, they do contain the same objectives regarding the separate collection of single-use plastic waste (Article 45.2 of the LECA) as those given in Article 59 of the LRSC. In order to meet these objectives, the LECA advises the autonomous and local authorities to prioritise the purchase of sustainable packaging, with this being taken into consideration when entering into contracts and in the public events they support.

The LECA also has a three-pronged approach to dealing with circularity in the textile sector: compelling social enterprises to participate in separate waste collection in order to meet recycling goals; fostering research, development and innovation to drive the creation of a more circular textile industry; and developing measures, through the Andalusian Office of Circular Economy, to minimise the use of natural resources, such as by designing product certification procedures, establishing criteria, and devising administrative procedures and end-of-waste criteria for certain textiles<sup>8</sup>. Regarding the promotion of research, development and innovation, legislators use the terms “economic instruments and incentives”, but not in reference to the implementation of a new, specific tax that could drive the circularisation of the textile sector; instead, this refers to awards, good practice guides and information campaigns.

Chapter V of section V is dedicated to food, nutrients and bioproducts and, as evidenced by the existence of an Andalusian Circular Bioeconomy Strategy, legislators have decided to pay particular attention to this sector, even though it is somewhat surprising that the LECA contains no mention of said strategy, aside from the reference in the preamble, perhaps because it is outdated, given that it was passed prior to the EEE and LRSC. In this sub-section, the regulations surrounding the reduction of food waste are of most importance, as not only has this been set as one of the priority objectives, in line with the SDGs, but the development of a general planning instrument is provided for, with the understanding that it is to be developed in the future strategy, with the goal of reducing the wastage of products that, although they are suitable for human

consumption, do not meet the requirements for sale (size, colour, appearance, etc.)<sup>9</sup>. It is at this point that one of the few binding regulations appears in the text: in accordance with Article 52.4, hospitality and restaurant establishments must provide compostable packaging for customers to take home food products that they have paid for but not consumed, a great idea and, although it may result in increased costs for the sectors, the impact of this would be minimal. Regardless, this measure is not contemplated in the LRSC, which does include the controversial obligation to offer non-bottled water free of charge, so, as can be seen, the LECA is rather innovative in that it introduces extra laws in addition to those found in state legislation.

In terms of other matters, the law once again recognises the role played by social enterprises, with its lengthy Article 53 devoted to the possibility of signing agreements to donate unsold products that are fit for consumption. In connection with this issue, it underlines that local entities may choose to offer reduced fees or financial contributions for waste collection services to food distribution and hospitality companies who enter into agreements with social enterprises to set up collection systems that help reduce food waste, which basically reiterates the provisions of Article 24.6 of Royal Decree Law 2/2004 of 5 March, approving the consolidated text of the Regulatory Law of Local Public Treasuries (hereinafter, the LRHL, from its acronym in Spanish). Similarly, Article 52.3 of the LECA declares that local entities may give tax breaks and offer reduced rates to those who adopt biowaste composting systems, an option that is not explicitly stated in the LRHL, which, aside from the aforementioned Article 24.6, only contains two references to this topic: the exemption provided for in Article 21.2 of the state, autonomous communities and local entities, and the possibility of quantifying the rate under the principle of economic capacity contained in Article 24.4. Therefore, and unless state regulations are modified, the only possibility of offering a reduced tax rate such as the one indicated in Article 56.3 of the LECA would be to justify under the principle of economic capacity, which would arguably be more questionable.

Water is an essential resource for human life, one that is increasingly scarce, particularly in the Guadalquivir basin, so it comes as no surprise that the LECA spends an entire chapter discussing the issue. The objective, as stated in Article 59 of the LECA, is to abandon the linear model based on using, purifying and dumping water and advancing towards the circular management of water that allows it to be used more efficiently, thus guaranteeing that water demands are met while also attempting to find a balance between regional and sectoral development. In this regard, and alongside the aspects that autonomous and local plans must contain, the LECA addresses the development of sustainable drainage techniques, allowing them to reuse or regenerate rainwater, something of a paradox considering the severe current drought. However, it is worth noting that water resources fall under a number of different jurisdictions, a fact that complicates their management. The same occurs with taxes, as the lack of coordination between the different authorities has prevented water from being

used sustainably (Gil García, 2022). On the other hand, the different taxation models that have been established to date only seem to be concerned with raising funds, under the guise of environmental protection measures (Vaquera García, 2020). Therefore, when Article 64 of the LECA claims that it will incentivise the circular use of water through a fiscal policy, Andalusian legislators, just like those of the other autonomous communities, must exercise caution and tackle the issue in conjunction with the state so that it can guarantee that the costs associated with water infrastructures are covered, in line with the proposals of the Expert Committee tasked with drawing up the White Paper on Tax Reform (*Libro blanco sobre la reforma tributaria*, 2022).

Section V concludes with a chapter on the construction sector and buildings. Here, in order to avoid repeating points that have already been discussed, emphasis must be placed on the importance of the inclusion of circularity and eco-design criteria in public works, given that this helps reduce waste generation during all stages of construction, promotes the use of recycled resources and contains criteria linked to the efficient use of water, energy, materials and resources when preparing projects. In addition, it adds that voluntarily obtaining internationally recognised certificates may contribute towards receiving reductions in municipal fees and other tax incentives, which should inspire local authorities to include these aspects in their tax codes. As highlighted previously, these tax codes must respect the limits set by the LRHL, which in practice presents certain restrictions in terms of offering these kinds of tax incentives and the near impossibility of doing so with municipal fees.

#### *2.2.6. Training, research, development and innovation*

Section VI is comprised of five articles which, as indicated by the Advisory Board in its report on the Draft, aims to create a geographic concentration of interconnected companies and institutions acting in the field of circular economy in Andalusia. As such, the Regional Government of Andalusia undertakes to boost training, education, technological development, knowledge transfer and innovation in generating and applying new knowledge (Article 73), as well as to support public and private universities and other research centres and actors involved in undertaking research and technological innovation projects related to the circular economy in Andalusia<sup>10</sup>.

More specifically, in order to convey these actions promoting the research, innovation and development of circular practices, the Office plans to establish a Circular Economy Digital Innovation Centre (hereinafter, CIDECE from its acronym in Spanish) for Andalusia, through which it will foster cooperation in the sector and increase the critical mass of companies who operate in the field of the circular economy. This type of centre has already been set up in other parts of the country (CIEC Madrid, n.d.) to transfer knowledge to society and connect it to the business sectors involved. In the case of Andalusia, the

CIDEC contains the adjective “Digital” in its name, although the text of the legislation does not actually justify the link between the circular economy and digitalisation, beyond mentioning the need to unlock the potential that digitalisation has on products and incorporating digital solutions (Article 15.1, h), digital systems for managing water resources (final provision 13) and the circular digital connectivity funds mentioned earlier. Although there is a relationship between the concepts of circular economy and digitalisation (García Novoa et al., 2021), it seems that the link could have been developed a bit more clearly in the provisions of the LECA.

### *2.2.7. Responsibility, vigilance, inspection, control and penalty scheme*

The last section of the LECA is focused on issues related to control and penalty procedures, detailing the rules and principles provided for in current legislation. It is interesting, however, to observe the classification of conduct as very serious, serious or minor, including issues such as the fraudulent use of life cycle analysis certificates, non-compliance with the obligation to report on the functioning or dimension of the works, products or services, and non-compliance with the obligation to keep and store documentation related to the life cycle, which is directly related to the circular economy, and can result in financial penalties of more than 120,000 euro and non-financial ones consisting of the partial or total sealing off or closure of the facilities, machinery or equivalent either temporarily or definitively.

## 3. Conclusion: Towards a Circular Economy in Andalusia?

Although the LECA should generally be viewed positively, there are certain issues that raise doubts, such as excessively generous deadlines (for creating the Andalusian Circular Economy Strategy, for example) and repeating aspects that have already been laid out in state or sectoral law, making the text unnecessarily long and difficult to read without actually providing any new legal obligations. Likewise, as indicated in the Opinion of the European Economic and Social Committee, it is missing references to a need for fairness in the transition from the linear to the circular model, which could have been achieved by adding a guiding principle in section I, for example. This change in model should be inextricably linked to sustainable growth, but without ignoring the consequences that it has on employment and corporate sustainability. All of these matters should be planned with plenty of margin to allow for the most appropriate solutions to be adopted. Aside from these topics, the LECA also introduces important improvements over current legislation, particularly those regarding product life cycle analyses and the creation of a specific, voluntary register on the matter.

On the other hand, some aspects are too vague and require more in-depth explanation. In this regard, and given that the LECA refers to both legislative development (final provision ten) and the creation of an Andalusian Circular Economy Strategy, the publication of this strategy must be monitored in the hope that it is not delayed in order to verify that the desired changes are actually brought about.

In sum, Andalusian legislators have followed the example of their counterparts from Castile-La Mancha and devised a regulatory instrument with the force of law in order to drive forward the transition towards a circular economy in this autonomous community. The LECA leverages the momentum provided by institutions on an autonomous community and national level to achieve a circular economy, aligning with the strategies and roadmaps that have already been drawn up and placing Andalusia at the forefront in terms of circular economy legislation.

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## Notas

1 This work was undertaken as part of the “Analysis and proposals for a fair transition to the circular economy: impact on companies and workers” project (*Análisis y propuestas para una transición justa a la Economía Circular: impacto sobre las empresas y las personas trabajadoras*, TED2021-132491B-I00), as part of the call for Strategic Projects Focused on the Green Transition and the Digital Transition (*Proyectos Estratégicos Orientados a la Transición Ecológica y a la Transición Digital*, 2021), with the lead researchers being Yolanda García Calvente and María del Mar Soto Moya.

2 For a more detailed analysis of the LRSC, please see the special issue of the *Revista Aragonesa de Administración Pública* (“Aragonese Journal of Public Administration”), number Extra-21 from 2022, which contains a systematic analysis of the LRSC.

3 By way of example, refer to the mandate provided for in Article 11.3 of the LRSC, giving local authorities three years from the date the law enters into force to establish a specific, separate tax-based or non-tax-based financial contribution that does not incur a deficit, that also enables payment based on generation and which reflects the real cost of collecting, transporting and treating waste, and all the problems it entails (Navarro García, 2022; Pagès i Galtés, 2022a, 2022b and 2022c).

4 Regarding this issue, the Expert Committee (*Comité de personas expertas*, 2022, p. 224) considers that greater inter-administrative cooperation and coordination is required to guarantee that the environmental objectives are met and to avoid undesired economic distortions.

5 The concept of business investment of strategic interest is contained in Decree-Law 4/2019 of 10 December on fostering economic initiatives through the administrative streamlining and simplifying of project processes and the declaration of a strategic interest for Andalusia, for the creation of an accelerator for projects of strategic interest, modifying Law 1/1994 of 11 January on Territorial Planning in the Autonomous Community of Andalusia, and Law 7/2002 of 17 December on Urban Planning in Andalusia, whose Article 2 states that those with special relevance and coherence with the development and economic, social and territorial planning of Andalusia, and which incorporate environmental sustainability measures shall be considered as such.

6 In accordance with Article 2.1 of Law 58/2003 of 17 December, the General Tax Law, taxes are classified as fees, special contributions and duties; in other words, all fees are taxes.

7 In the absence of a legal definition in the LECA, the author defines urban mining as activity consisting in collecting disused metal to recycle and reincorporate it as a new raw material. Refer to Moreu Carbonell (2022) for an analysis of the legal framework governing this activity.

8 In this regard, Article 5 of the LRSC sets out the requirements for waste to no longer be considered as such; however, it contains no specific criteria for textiles, with regional legislation having not yet been developed.

9 This issue is of such importance that nearby countries, including France, have specific measures to combat food waste (*Loi relative à la lutte contre le gaspillage et à l'économie circulaire*).

10 The Regional Government of Andalusia currently has a call for research projects focused on challenges affecting Andalusian society, including “Safe, clean and efficient energy” and “Action for climate, environment, efficiency in the use of resources and raw materials”, with developing the circular economy being implicitly included in these