# Legal regulation facilitating the transition to a circular economy in the legal system of Slovakia<sup>2</sup>

#### Abstract

This chapter explores Slovakia's transition to a circular economy within the framework of its membership to and the influence of the European Union (EU). Despite the implementation of robust environmental policies, significant gaps remain, including the marked lack of a raw material strategy. This chapter scrutinises legal regulations, revealing a convergence of circular economic initiatives regarding waste management. After analysing specific strategic documents impacting Slovakia's transition to a circular economy, this chapter examines crucial legal regulations, with a primary focus on waste management. A key finding underscores the interdependence of Slovakia's circular economy transition and advancements in waste management. However, progress is hindered by several challenges, particularly in terms of the need for mandatory changes in waste management practices looming to meet both EU and national goals. There is also a clear legislative gap in other areas that need to be actively addressed before the country can transition to a circular economy. In this respect, this chapter highlights a positive development: a collaborative effort in formulating a circular economy roadmap, one identifying impactful reforms in economic instruments, the construction sector, and the food and bio-waste value chain. This chapter concludes by calling for a cohesive and strategic approach, advancing the need for Slovakia to adopt a long-term vision and strict implementation timetable to champion a circular economy embodying sustainability principles.

**Keywords:** circular economy, environmental policies, waste management, transition to circular economy.

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#### 1. Introduction to the concept of the circular economy

Spanning the late eighteenth and early nineteenth centuries, the Industrial Revolution brought about profound and transformative changes to society, the economy, and technology, enabling humanity to overcome the scarcities of food, shelter, and goods.<sup>3</sup> There are clear linkages between the beginnings and course of the Industrial Revolution and the conceptualisation of the linear economy, including substantial resource extraction and exploitation, greater production and consumption, increased waste production and overall environmental pollution, and the use of single-use products. Historically, humanity has traditionally used the economic model of a linear economy, which is characterised by a 'take-make-usedispose' process. In this model, resources are extracted and used to manufacture products, which are discarded once they are no longer useful, typically ending up in landfills or waste incinerators. Indeed, it is estimated that up to 80% of all manufactured goods meet such a fate once their shelf life has expired.<sup>4</sup> with only 7.2% of secondary materials cycled back into the global economy.<sup>5</sup> Environmental policy has long concentrated on addressing and mitigating the repercussions of economic development, often neglecting the underlying issue: the unsustainable nature of current economic development practices, which surpass our planet's ecological boundaries.

In recent decades, opposition to this distance from the planet and the environment has emerged. Initially only an idea, this opposition has since developed into a new direction and way of thinking about the world economy: a circular economy. Neither the creation of this term nor the idea itself can be traced to a specific person or publication. That said, the initial concept can be attributed to Boulding. Writing in 1966, he proposed the concept of a 'cyclical ecological system capable of continuous reproduction of materials'.<sup>6</sup> Nevertheless, several scholars contributed to the development of this concept, including John Tillman Lyle, who proposed a regenerative approach that seeks to counter the degeneration of the earth's natural systems while designing human systems capable of co-evolving with these natural systems.<sup>7</sup> McDonough and Braungart developed the notion of 'cradle to cradle', which involves reimagining the design of industrial processes and products. This entails ensuring that, at the conclusion of their life cycle, materials can be reclaimed and repurposed. For instance, they can be reintroduced into the environment as biological nutrients or utilised as technical

3 | No. APVV-20-0076.
Stahel 2020, 7.
4 | Ellen MacArthur Foundation 2013
5 | Circle Economy 2023
6 | Boulding 1966, 3-14.
7 | Lyle 1996

resources for the creation of new products.<sup>8</sup> Another important contribution is that of Stahel and Reday, who outlined the concept of an economy operating in loops – that is, a circular economy – and discussed its potential effects in terms of job generation, economic competitiveness, the conservation of resources, and waste prevention.<sup>9</sup> Arguably, the concept also drew inspiration from seminal texts like Carson's Silent Spring (1962)<sup>10</sup> and the Club of Rome's first report, The Limits to Growth (1972).<sup>11</sup>

In contrast to a linear approach, a circular approach is defined by three essential strategies: prolonging product life to slow resource loops, promoting recycling and reuse of materials in order to close resource loops, and reducing resource usage per product to streamline resource flows.<sup>12</sup> It is difficult to believe that anyone in the science community is unfamiliar with the term 'circular economy'. However, the definition of this term may pose challenges, the extent and content of which may vary according to both geographical location and scientific discipline. In an excellent analysis of this concept, Kirchherr, Reike, and Hekkert gathered 114 definitions of circular economy and coded them on 17 dimensions.<sup>13</sup> In a subsequent study published six years later, the authors expanded these numbers to 211 definitions coded on 30 dimensions and provided a 'meta definition' of the circular economy as follows: "regenerative economic system which necessitates a paradigm shift to replace the 'end of life' concept with reducing, alternatively reusing, recycling, and recovering materials throughout the supply chain, with the aim to promote value maintenance and sustainable development, creating environmental quality, economic development, and social equity, to the benefit of current and future generations. It is enabled by an alliance of stakeholders (industry, consumers, policymakers, academia) and their technological innovations and capabilities.<sup>14</sup>"

Apart from the foregoing, the Ellen MacArthur Foundation, a British nongovernmental organisation, has provided one of the most widely-recognised definitions of this concept: 'a circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems.'<sup>15</sup> Understanding the term and its meaning is essential for knowing and determining the individual benefits of transitioning from a linear to circular economy.

8 | Braungart & McDonough 2002 9 | Stahel & Mulvey 1981 10 | Carson 1962 11 | Meadows et al. 1972 12 | Fischer 2023, 130. 13 | Kirchherr et al. 2017, 221–232. 14 | Kirchherr et al. 2023 15 | Ellen MacArthur Foundation 2023

#### 1.1. The importance of transitioning to a circular economy

Transitioning to a circular economy is increasingly recognised as a crucial step towards achieving sustainability and addressing environmental challenges.<sup>16</sup> The circular economy is a model that aims to minimise waste and make the most of resources by promoting the continuous use, reuse, refurbishment, and recycling of materials. Arguably, the main benefits of transitioning to a circular economy include: (1) Environmental protection: Promoting the reuse and recycling of products would decelerate the depletion of natural resources, minimise disturbances to landscapes and habitats, and mitigate biodiversity loss. (2) Waste Reduction: A circular economy minimises the generation of waste by designing products and systems with an emphasis on durability, repairability, and recyclability. It also reduces the environmental impact of waste disposal, including landfills and the incineration of waste. (3) Slowing down climate change: By minimising the need for raw materials and new products, a circular economy can play a pivotal role in lowering global emissions, particularly from sectors like construction, transportation, and the food industry, where emissions can be mitigated throughout the production, use (including energy for heating, cooling, and fuel), and disposal phases. According to a paper published by the Ellen MacArthur Foundation 'circular economy strategies could help reduce emissions by 40% in 2050'.<sup>17</sup> (4) Energy Efficiency: A circular economy promotes energy efficiency through the reuse of products and materials, as recycling often requires less energy than extracting and processing raw materials. (5) Economic Opportunities: A circular economy can create new business models and opportunities for innovation, such as remanufacturing, recycling technologies, and sustainable product design, generating jobs in recycling, remanufacturing, and related industries.<sup>18</sup> (6) Resilience to Supply Chain Disruptions: The transition from a linear to a circular economy will enable diversification and strengthen supply chains by reducing dependence on scarce or geopolitically sensitive resources. This shift will enhance the resilience of businesses to disruptions in the availability of raw materials. (7) Long-term sustainability: Perhaps the most universal benefit for all of humanity will come from creating a more sustainable and resilient economy by promoting practices that can be sustained over the long term without depleting natural resources.

In summary, transitioning to a circular economy is essential for achieving a more sustainable and resilient future, addressing environmental challenges, and fostering economic and social well-being. It involves a shift from a linear model to a regenerative system that values resource efficiency and minimises environmental impact.

- 16 | Schroeder et al. 2019; Corona et al. 2019
- 17 | Ellen MacArthur Foundation 2021
- 18 | Ellen MacArthur Foundation 2015

#### 2. Circular economy in the legal context of the European Union

The European Union (EU) is a significant player in and a leading advocate of the transition to a circular economy. For more than a decade, the EU has demonstrated a strong commitment to promoting sustainability, resource efficiency, and shifting to the circular economy as integral components of its policy framework. This subchapter explores the EU's approach to the circular economy, discussing the origins, current policies, and legislation of the transition to a circular economy.

#### 2.1. Historical context and evolution

The importance given to this issue by the EU first became apparent in 2010, with the adoption of the Europe 2020 strategy, which noted 'sustainable growth: supporting a greener and more competitive economy that uses resources more efficiently' as one of the three basis priorities of the EU over the next decade.<sup>19</sup> In order to fulfil this priority, the Europe 2020 strategy noted the need to detach economic growth from resource consumption, facilitate the transition to a low-carbon economy, enhance the utilisation of renewable energy sources, modernise the transportation sector, and promote energy efficiency. A year later, the European Commission (EC) presented The Roadmap to a Resource Efficient Europe,<sup>20</sup> which established a vision for the year 2050, and emphasised the significance of sustainable management across all resources, from raw materials to energy, water, land, air, and soil.

However, the road has proved a bumpy one beset with obstacles. Based on the Roadmap, in July 2014, the EC presented the Circular Economy Package entitled Towards a Circular Economy: A Zero Waste Programme for Europe.<sup>21</sup> This first package advocated for a comprehensive transformation of the EU into a circular economy by 2030, intending to achieve this transition by modifying six EU waste directives. However, in December 2014, the new EC withdrew the proposal. According to Sharff, there was little consensus regarding the package, with responses including both valid and more kneejerk criticisms.<sup>22</sup> Although the EC withdrew the proposal, it by no means abandoned the goal of transitioning to a circular economy. On the contrary, the EC wished to develop an even more ambitious proposal, one covering the entire economic cycle, not just waste reduction targets.

19 | European Commission, 2010. Europe 2020: A strategy for smart, sustainable and inclusive growth (COM(2010) 2020 final).

<sup>20 |</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Roadmap to a Resource Efficient Europe (COM(2011) 571).

<sup>21 |</sup> European Commission (2014), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Towards a circular economy: A zero waste programme for Europe (COM(2014) 398 final). 22 | Scharff 2023

A year later, on 2 December 2015, the EC adopted the updated Circular Economy Package. Significantly, in addition to the four proposals to amend six waste directives suggested in the first package,<sup>23</sup> the 2015 package advanced the first circular economy action plan: Closing the Loop: An EU Action Plan for the Circular Economy<sup>24</sup> (hereinafter, CEAP 1). CEAP 1 outlines a programme of initiatives encompassing the entire cycle, from product design, production, and consumption to waste management and the secondary raw materials market. The attached annex provided 54 actions together with a timeline for the completion thereof. That all of these actions had been implemented or approved by 2019<sup>25</sup> is incredibly promising.

In 2018, six EU waste directives were amended as proposed in the 2015 package: (a) Directive (EU) 2018/849 of the European Parliament and of the Council of 30 May 2018 amending Directives 2000/53/EC on end-of-life vehicles, 2006/66/EC on batteries and accumulators and waste batteries and accumulators, and 2012/19/EU on waste electrical and electronic equipment. (b) Directive (EU) 2018/850 of the European Parliament and of the Council of 30 May 2018 amending Directive 1999/31/EC on the landfill of waste. (c) Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste. (d) Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste.

Legally binding waste management targets have been implemented in the EU's legal system, including the goal to reduce the amount of municipal waste landfilled to 10% or less of the total amount generated by 2035.<sup>26</sup> Additionally, targets for the reuse and recycling of municipal waste are set at a minimum of 60% by 2030,<sup>27</sup> and 65% by weight by 2035.<sup>28</sup> There is also a target to recycle at

23 | Proposal for a directive amending the Waste Framework Directive (2008/98/EC), proposal for a directive amending the Directive on Packaging and Packaging Waste (94/62/EC), proposal for a directive amending the Directive on the Landfill of Waste (1999/31/EC), and the proposal for a directive amending four directives, namely, the Directive on End-of-Life Vehicles (2000/53/EC), the Directive on Batteries and Accumulators and Waste Batteries and Accumulators (2006/66/EC), and the Directive on Waste Electrical and Electronic Equipment (2012/19/EU).

24 | Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Closing the loop: An EU action plan for the Circular Economy (COM(2015) 614 final).

25 | Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of the Circular Economy Action Plan (COM(2019) 190 final).

26 | See Art. 1 para. 4 (d) of the Directive (EU) 2018/850 of the European Parliament and of the Council of 30 May 2018 amending Directive 1999/31/EC on the landfill of waste.

27 | See Art. 1 para. 12 (c)(ii)(d) of the Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste.

28 | See Art. 11 para. 12 (c)(ii)(e) of the Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste.

least 70% of all packaging waste;<sup>29</sup> this target is complemented by specific targets related to individual materials contained in packaging waste, such as 55% of plastic, 30% of wood, 80% of ferrous metals, 60% of aluminium, 75% of glass, and 85% of paper and cardboard.<sup>30</sup> Alarmingly, despite the adoption of these new and more aggressive targets, 10 of the 27 EU Member States are at risk of missing the targets for municipal and all packaging waste for 2025: namely, Bulgaria, Croatia, Cyprus, Greece, Hungary, Lithuania, Malta, Poland, Romania, and Slovakia.<sup>31</sup> It is worth highlighting other pieces of EU legislation that have been adopted to fulfil the requirements outlined in CEAP 1, whether in the legal form of a directive<sup>32</sup> or a regulation.<sup>33</sup>

29 | See Art. 5 para. (5)(f) of the Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste.

30 | See Art. 5 para. (5)(g) of the Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste.

31 | Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions identifying Member States at risk of not meeting the 2025 preparing for re-use and recycling target for municipal waste, the 2025 recycling target for packaging waste and the 2035 municipal waste landfilling reduction target (COM(2023) 304 final).

32 | Directive (EU) 2019/883 of the European Parliament and of the Council of 17 April 2019 on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC; Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment; Directive (EU) 2019/771 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the sale of goods, amending Regulation (EU) 2017/2394 and Directive 2009/22/EC, and repealing Directive 1999/44/EC.

33 | Commission Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019 laying down rules on the making available on the market of EU fertilising products and amending Regulations (EC) No. 1069/2009 and (EC) No. 1107/2009 and repealing Regulation (EC) No. 2003/2003; Commission Regulation (EU) 2019/424 of 15 March 2019 laying down eco-design requirements for servers and data storage products pursuant to Directive 2009/125/EC of the European Parliament and of the Council and amending Commission Regulation (EU) No. 617/2013; Commission Regulation (EU) 2019/2021 of 1 October 2019 laying down eco-design requirements for electronic displays pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Commission Regulation (EC) No 1275/2008 and repealing Commission Regulation (EC) No 642/2009; Commission Regulation (EU) 2019/2024 of 1 October 2019 laying down ecodesign requirements for refrigerating appliances with a direct sales function pursuant to Directive 2009/125/EC of the European Parliament and of the Council; Commission Regulation (EU) 2019/1784 of 1 October 2019 laying down eco-design requirements for welding equipment pursuant to Directive 2009/125/EC of the European Parliament and of the Council; Commission Regulation (EU) 2019/2023 of 1 October 2019 laying down eco-design requirements for household washing machines and household washer-dryers pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Commission Regulation (EC) No 1275/2008 and repealing Commission Regulation (EU) No 1015/2010; Commission Regulation (EU) 2019/2019 of 1 October 2019 laying down eco-design requirements for refrigerating appliances pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulation (EC) No. 643/2009; Commission Regulation (EU) 2019/2022 of 1 October 2019 laying down eco-design requirements for household dishwashers pursuant to Directive 2009/125/EC of the European Parliament and of the Council amending Commission Regulation (EC) No. 1275/2008 and repealing Commission Regulation (EU) No. 1016/2010.

#### 2.2. A new era of EU transformation to a circular economy

In December 2019, the EC adopted a new approach to tackle climate and other environmental-related challenges with the adoption of the Green Deal, a new growth strategy intended 'to transform the EU into a fair and prosperous society, with a modern, resource-efficient, and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use'.<sup>34</sup> One of the basic pillars of this strategy involves mobilising industry for a clean and circular economy. Through its new circular economy action plan and industrial strategy, the EC has promised to help modernise the EU's economy and harness the benefits and opportunities of the circular economy both domestically and globally. It did not take long for the EC to prepare the new circular economy action plan under the title For a Cleaner and More Competitive Europe<sup>35</sup> (hereinafter, CEAP 2), which was adopted in March 2020. CEAP 2 pursues the vision of accelerating the transition towards a regenerative growth model that will take less from the planet than it gives back and which aims 'to provide a future-oriented agenda for achieving a cleaner and more competitive Europe in co-creation with economic actors, consumers, citizens, and civil society organisations and is associated with the recent European Green Deal'.<sup>36</sup>

While CEAP 2 builds upon the achievements and initiatives of CEAP 1, there are discernible fundamental differences between them – something that is both necessary and to be expected given that it represents an enhanced approach by the EU. Where CEAP 1 placed emphasis on waste management and recycling, particularly in terms of the end-of-life phase of products, CEAP 2 adopts a more holistic and systemic approach by considering the entire life cycle of products. CEAP 2 also outlines more specific actions for key sectors – including electronics, packaging, construction, and textiles – encompassing a total of 35 actions, all of which are detailed in the document's appendix. A notable aspect of CEAP 2 is its explicit recognition of the importance of innovation and digital technology, underscoring the EU's role as a global leader in this field. Furthermore, the plan includes measures for a just and inclusive transition, acknowledging the social dimension of the circular economy transition.

Several actions in CEAP 2 will be realised through the adoption of specific strategies. Some of these strategies have already been adopted by the EC: namely,

35 | Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A New Circular Economy Action Plan for a cleaner and more competitive Europe (COM(2020) 98 final). 36 | Fidélis et al. 2021, 2.

<sup>34 |</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 (COM(2019) 640 final).

Chemicals Strategy for Sustainability 'Towards a Toxic-Free Environment',<sup>37</sup> A New Industrial Strategy for Europe,<sup>38</sup> EU Strategy for Sustainable and Circular Textiles,<sup>39</sup> and Pathway to a Healthy Planet for All EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil'.<sup>40</sup> Both the aforementioned strategies and the CEAP itself will have to be transformed into a legally binding form in order to become part of the EU legal system. While some legal regulations for their implementation have already been adopted,<sup>41</sup> others have only been proposed and the legislative process of their adoption remains ongoing.<sup>42</sup> Evidently, the EU has progressed beyond the initial stages of transitioning to a circular economy. However, there is still a long way to go before it achieves its ultimate goal, the attainment of which will require substantial negotiations, discussions, and refinements. It will also be necessary for individual legislation at the EU level to be transposed into the legal systems of the Member States because the EU has no chance of achieving a circular economy without the effective contribution of individual states.

37 | A Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Chemicals Strategy for Sustainability Towards a Toxic-Free Environment (COM(2020) 667 final).

38 | A Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A New Industrial Strategy for Europe (COM(2020) 102 final).

39 | A Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, EU Strategy for Sustainable and Circular Textiles (COM(2022) 141 final).

40 | A Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Pathway to a Healthy Planet for All EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil' (COM(2021) 400 final).

41 | Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC.

42 | Proposal for a Regulation of the European Parliament and of the Council on shipments of waste and amending Regulations (EU) No. 1257/2013 and (EU) No. 2020/1056 (COM(2021) 709 final); Proposal for a Regulation of the European Parliament and of the Council laying down harmonised conditions for the marketing of construction products, amending Regulation (EU) 2019/1020 and repealing Regulation (EU) 305/2011 (COM(2022) 144 final); Proposal for a Directive of the European Parliament and of the Council amending Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) and Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste; Proposal for a Regulation of the European Parliament and of the Council on reporting of environmental data from industrial installations and establishing an Industrial Emissions Portal (COM(2022) 156 final); Proposal for a Regulation of the European Parliament and of the Council on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904. and repealing Directive 94/62/EC (COM(2022) 677 final); Proposal for a Directive of the European Parliament and of the Council on substantiation and communication of explicit environmental claims (Green Claims Directive) (COM(2023) 166 final); Proposal for a Directive of the European Parliament and of the Council on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394, Directives (EU) 2019/771 and (EU) 2020/1828 (COM(2023) 155 final).

## **3. Legal framework outlining and facilitating Slovakia's transition to a circular economy**

Slovakia is a relatively small landlocked country with approximately 5.4 million inhabitants. Located in the heart of Europe, Slovakia has been a Member State of the EU since 1 May 2004. In 2016, the Slovak Presidency of the Council of the European Union organised an international conference entitled Transition to the Green Economy. Attended by over 500 experts from 32 countries, the conference was the first significant manifestation of Slovakia's interest in the notion and issues of the circular economy. Slovakia has confirmed its commitment to promoting green innovations and facilitating collaboration among Slovak and foreign universities, scientific institutions, the private sector, and the third sector, including towns and villages, with broad support for co-operation between ministries and the third sector.

Divided into two further sections, this subchapter examines individual strategic documents and individual formal legal sources that address Slovakia's transition to a circular economy. The subsequent subchapter then discusses Slovakia's future outlook and the anticipated legislative changes that will need to be adopted in order for Slovakia to comply with the requirements of EU law regarding the transition to a circular economy.

#### 3.1. Strategic documents related to the circular economy

According to a special report by the European Court of Auditors, almost all EU Member States had developed or were in the process of developing a national circular economy strategy in June 2022. Slovakia was preparing such a plan, as were Austria, the Czech Republic, Hungary, Estonia, Lithuania, Latvia, Romania, and Bulgaria.<sup>43</sup> It should be noted that while neither CEAP 1 nor CEAP 2 oblige Member States to adopt a national circular strategy, CEAP 2 encourages the adoption or updating of national circular economy strategies and plans. However, at present, there is no evidence to suggest that Slovakia is preparing such a document. Indeed, the very transformation of the Slovak economy to a circular economy is not even mentioned in the latest Programme Statement of the Government of the Slovak Republic, adopted in the fall of 2023.<sup>44</sup> Nonetheless, the transformation of the Slovak economy is addressed or at least mentioned in several strategic documents.

<sup>43 |</sup> European Court of Auditors 2023

<sup>44 |</sup> Government of the Slovak Republic 2023

## 3.1.1. Greener Slovakia: Environmental Policy Strategy of the Slovak Republic by 2030

In 1993, Slovakia adopted its first environmental strategy, entitled Strategy, Principles and Priorities of State Environmental Policy.<sup>45</sup> Although the strategy remained in effect, over time, it neither corresponded to the Slovak reality nor reflected the goals and direction of the environmental policy expected from a modern democratic state and member of the EU. Accordingly, Slovakia developed a new, comprehensive, and modern environmental policy strategy addressing the country's current situation and pressing environmental challenges. The initial draft of a new strategy entitled Greener Slovakia: Environmental Policy Strategy of the Slovak Republic until 2030, colloquially known as Envirostrategy 2030, was prepared in the fall of 2017.46 Formally adopted at the beginning of 2019, the basic vision of Envirostrategy 2030 is defined as follows: "the basic vision of Envirostrategy 2030 is to achieve better environmental quality and sustainable circulation of the economy, which is based on rigorous protection of environmental compartments and using as little non-renewable natural resources and hazardous substances as possible, which will lead to an improvement in health of the population. Environmental protection and sustainable consumption will be part of the general awareness of citizens and policy makers. Through the prevention and adaptation to climate change, the consequences will be as subdued as possible in Slovakia.47"

The concept of the circular economy is embedded in the fundamental vision of Eurostrategy 2030, which dedicates a separate section (section 10) to the transition to a circular economy. However, it is important to note that within this section, most, if not all, attention is given to waste management. According to Valenčiková and Marišova, *"With this document, they hope to gradually increase landfill fees, introduce quantity collection incentives, prevent the establishment of black dumps, and reduce biodegradable and food waste".*<sup>48</sup> The basic measures in this area comprise supporting the circular economy, gradually but significantly increasing landfill fees, introducing incentive bulk collection, increasing the prevention of illegal landfills, and enforcing the 'polluter pays' principle.

#### 3.1.2. Economic Policy Strategy of the Slovak Republic until 2030

Approved by the Government of the Slovak Republic in 2018, Economic Policy Strategy of the Slovak Republic until 2030 is a strategic policy document outlining the direction of Slovakia's economic policy through 2030. Maintaining an apolitical tone, the document provides insights into the continuous development and growth

46 | Resolution of the Government of the Slovak Republic No. 87/2019.

47 | Envirostrategy 2019

<sup>45 |</sup> Approved by the Resolution of the Government of the Slovak Republic No. 619, dated 7 September 1993, and Resolution of the Government of the Slovak Republic No. 339, dated 18 November 1993.

<sup>48 |</sup> Valenčiková & Marišova 2023, 11.

of the Slovak economy and outlines a strategy that seeks to facilitate the resolution of long-term conceptual issues beyond the constraints of political cycles.<sup>49</sup> According to this strategic document, Slovakia hopes to achieve a competitive economy by 2030 that enables flexible responses to new global trends and technologies built on the principles of sustainable development. Among its objectives, the strategy seeks to develop an ecologically efficient economy based on resource and energy efficiency, primarily through the adoption of the 'concept of circular economy of the Slovak Republic'. However, despite the approval of this strategic document in 2018, the aforementioned concept has yet to be adopted.

### 3.1.3. Low-Carbon Development Strategy of the Slovak Republic until 2030 with a View to 2050

Adopted in March 2020,<sup>50</sup> Low-carbon Development Strategy of the Slovak Republic until 2030 with a view to 2050 is Slovakia's main mitigation strategic document and identifies current and additional measures to achieve climate neutrality by 2050. This strategic document was adopted shortly after the presentation of the European Green Deal at the EU level, which established the ambitious goal of climate neutrality. As such, this section focuses on the less ambitious emission reduction scenarios proposed by this strategy, namely, the scenario with existing measures and a scenario with additional measures. The strategy itself acknowledges that the outlined measures may not be sufficient to propel Slovakia toward climate neutrality, necessitating additional efforts. Consequently, the strategy introduces supplementary measures labelled as 'neutral', which are slated for incorporation in future updates. Climate neutrality and the shift towards a circular economy are closely intertwined, with references to the circular economy scattered throughout this document. Enhanced support for the circular economy is explicitly highlighted through the following: (a) Eco-design emphasising reuse, durability, recyclability, recycled content, and reparability. (b) Measures to enhance resource efficiency. (c) Support for the development of new business models based on sharing, lending, or repairs. (d) Strategies to curb food waste, including the donation of edible food, composting, and energy-wise or otherwise enhanced utilisation. (e) The prevention of waste generation. (f) Mandates for the use of certified products from recycled materials when equivalents from non-renewable sources exist. (g) Obligations to reuse purified water from wastewater treatment plants and purified technological water, particularly for energy applications like water vapor.

Even in this document, emphasis is placed on waste management as the main means of transitioning to a circular economy, although to a lesser degree than in the two previous strategic documents.

<sup>49 |</sup> Resolution of the Government of the Slovak Republic No. 300/2018.

<sup>50 |</sup> Resolution of the Government of the Slovak Republic No. 104/2020.

## 3.1.4. Waste Management Programme of the Slovak Republic for the Years 2021–2025

According to Waste Management Programme of the Slovak Republic for the Years 2021–2025, the general strategic document for waste management, Slovakia's primary goal in this area is to divert waste from disposal by landfilling, especially for municipal waste, by 2025. Preventing waste is a crucial component of the overarching shift towards a circular economy, leading to a reduction not only in the consumption of natural resources but also in the efforts needed for waste collection and recycling. This general regulation is supplemented by another strategic document for the area of waste prevention, one better suited to the concept of transitioning to a circular economy. The strategic document in question subsequently regulates the goals and measures across several thematic areas: namely, municipal waste, biodegradable waste, bioplastics, textiles, packaging, non-packaging products, construction waste and demolition waste, waste tires, old vehicles, batteries and accumulators, electrical equipment and electrical waste, waste oils, hazardous waste, and polychlorinated biphenyls. However, given the limited scope and relatively general nature of this document, further detail is unnecessary for the purposes of this chapter.

#### 3.1.5. Waste Prevention Programme of the Slovak Republic for 2019–2025

In compliance with the Waste Directive, Member States are obligated to formulate and adopt what is known as the Waste Prevention Programme.<sup>51</sup> In Slovakia, a second such programme is currently in effect, namely, the Slovak Waste Prevention Programme for the years 2019–2025.52 The programme's main goal is to shift away from material recovery as the sole priority of waste management in Slovakia and focus on the prevention of waste in accordance with the hierarchy of waste management. This strategic document contains several measures related to Slovakia's transition to a circular economy, primarily in the area of waste management. It is worth noting that the document considers current developments in the EU regarding the application and principle of the circular economy as involving the transition from a linear model of economic growth ('extract-produce-distributeuse-dispose') to a complex, dynamic, and largely closed model, with a focus on developing efficient resource use and sustainable growth. The European Environmental Agency conducted research on individual waste prevention programmes of EU Member States, identifying seven possible research issues: eco-design; repair, refurbishment, and remanufacture; recycling; economic incentives and finance;

<sup>51 |</sup> See Art. 1 para. 22 (a) of the Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste.

<sup>52 |</sup> Resolution of the Government of the Slovak Republic No. 86/2019.

governance, skills, and knowledge; circular business models; and eco-innovation. In this respect, the Slovak waste prevention programme addresses all but two of the possible issues, namely, circular business models and eco-innovation.<sup>53</sup>

#### 3.2. Legislation related to the transition to the circular economy

The foregoing strategies notwithstanding, identifying specific pieces of legislation in Slovakia that facilitate the transition to a circular economy has proven challenging. This difficulty is partly rooted in the absence of a unified and comprehensive strategy for the circular economy in Slovakia. Strategic documents related to this matter primarily emphasise waste management rather than broader circular economy initiatives. It is similarly difficult to identify individual legal regulations pertaining to the transition to a circular economy. Indeed, a comparable scenario arises when pinpointing specific legal regulations that would govern the shift towards a circular economy. Accordingly, this section presents individual legal regulations that govern waste management and contribute to the transition toward a circular economy in practice. It also notes two further laws that regulate ecolabelling and green public procurement.

#### 3.2.1. Act on Waste

In Slovakia, the main piece of legislation in the area of waste management is Act No. 79/2015 Coll. on Waste and on Amendments of Certain Laws, as amended (hereinafter, the Act on Waste), which was adopted on 17 March 2015, and came into force on 1 January 2017. The Act on Waste has been amended more than 20 times since its adoption. Slovakia has chosen the path of a unified legal regulation that covers the majority of the legal agenda regarding waste management. In other words, most of the EU directives have been transposed into Slovakia's legal order through amendments to the Act on Waste. This legal regulation thus regulates several aspects of waste management related to the transition to a circular economy, primarily through the transposition of the following EU directives.

#### 3.2.1.1. Extended producer responsibility

When introducing extended producer responsibility, the EU was directly inspired by the concept developed by the Organisation of Economic Co-operation and Development (OECD).<sup>54</sup> The EU introduced extended producer responsibility through Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain directives, according to which

<sup>53 |</sup> European Environmental Agency 2021 54 | OECD 2021

"Member States may take legislative or non-legislative measures to ensure that any natural or legal person who professionally develops, manufactures, processes, treats, sells or imports products have extended producer responsibility".<sup>55</sup> The implementation of extended producer responsibility is structured by a number of directives regulating waste management of several different types of products, including batteries and accumulators, <sup>56</sup> vehicles, <sup>57</sup> electrical and electronic equipment, <sup>58</sup> and packaging.<sup>59</sup> In the legal conditions of Slovakia, extended producer responsibility is defined as a summary of the obligations of the manufacturer of the reserved product relating to the product during all phases of its life cycle, the aim of which is to prevent the generation of waste from the reserved product and to strengthen the reuse, recycling, or other recovery of this waste stream.<sup>60</sup> It is possible to conclude that Slovakia correctly and completely transposed the directives related to the introduction of extended producer responsibility and established it for batteries and accumulators, packaging, vehicles, tires, and unpackaged products. It is worth noting the Waste Act establishes that the fulfilment of the obligations of producers of such products is possible individually (by creating a system of individual management with a dedicated waste stream) or collectively (through one producer responsibility organisation and its system of joint management, with a dedicated waste stream in the case of batteries and through a third party in the case of accumulators).61

#### 3.2.1.2. Prohibition and restrictions of single-use plastic products

One of the last significant changes to the Act on Waste was an amendment<sup>62</sup> through which Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the

- 58 | Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE).
- 59 | European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.
- 60 | See § 27 para. 3 of Act on Waste.
- 61 | See § 27 para. 6 of Act on Waste.
- 62 | Act No. 430/2021 Coll. which amends Act No. 79/2015 Coll. on waste and on the amendment of certain laws as amended and which amends Act No. 302/2019 Coll. on the backup of disposable packaging for drinks and on the amendment of some laws as amended.

<sup>55 |</sup> Art. 8(1) of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

<sup>56 |</sup> Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC. It should be noted that the abovementioned directive has been repealed with effect from 18 August 2025 by Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC.

<sup>57 |</sup> Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles.

environment was transposed. As one of the main objectives of the aforementioned directive is to 'promote the transition to a circular economy with innovative and sustainable business models, products and materials', it is necessary to mention it in this context. Interestingly, this change saw the introduction of 'circular economy' and 'transition to circular economy' into the Act on Waste.<sup>63</sup> This amendment to the Act on Waste resulted in a ban on introducing selected single-use plastic products, which include cotton bud sticks, cutlery (e.g. forks, knives, spoons, chopsticks), plates, straws, beverage containers, and cups made of expanded polystyrene, and products made from oxo-degradable plastics, like refuse bags, to the Slovakian market.<sup>64</sup> The second important aspect of this amendment was the adoption of provisions aimed at reducing the consumption of single-use plastic products. As part of the freedom to choose the means to achieve the objectives of the directive. Slovakia has decided to ensure the reduction of single-use plastic by introducing the following measures: (a) The producer of a single-use plastic product, who provides selected single-use plastic products to the final consumer for consumption of food and beverages at a place other than the point of sale, is obliged to charge payment for such projects, offer the final consumer a reusable alternative, or offer a biodegradable alternative.<sup>65</sup> (b) The provision of single-use plastic products to the final consumer for consumption of food and beverages at the point of sale in permanent public and fast-food establishments is prohibited.<sup>66</sup> (c) The provision of single-use plastic products to the final consumer for consumption of food and beverages at the point of sale at public events is prohibited.<sup>67</sup>

The Slovak government has also introduced a new measure obliging the producers of selected disposable plastic products (e.g. containers or drinking glasses)<sup>68</sup> to bear the costs of increasing awareness of the introduction of their products to the Slovak market; the costs associated with the collection, transport, recovery, recycling, processing, and disposal of product waste; and the costs associated with cleaning up the environment polluted by waste from these products when not disposed of using local waste collection systems.<sup>69</sup> Starting from 1 December 2024, additional entities, such as producers of tobacco products, balloons, and wet

63 | Provision of § 75a para. 1: "This section regulates the requirements and measures to prevent the impact of certain single-use plastic products on the environment, in particular on the aquatic environment, on human health, with the aim of reducing this impact and supporting the transition to a circular economy with innovative and sustainable business models, products and materials".

64 | See part B of annex No. 7a Act on Waste and part B of Annex to the Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment.

- 65 | Provision of § 75b para. 1 of Act on Waste.
- 66 | Provision of § 75b para. 2(a) of Act on Waste.
- 67 | Provision of § 75b para. 2(b) of Act on Waste.

68 | See Section I of part E of annex No. 7a Act on Waste and Section I of part B of Annex to the Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment.

69 | Provision of § 75f para. 1 of Act on Waste.

wipes,<sup>70</sup> will be included among these producers of disposable plastic products.<sup>71</sup> However, it is necessary to note the imperfection of the transposition as the details regarding these obligations have not been transposed. In this respect, the Slovak legislator has asserted that the EC has yet to issue guidelines regarding the criteria for the costs of cleaning the environment polluted by waste.<sup>72</sup> For this reason, it can be assumed that these costs will not have to be paid by these producers at this point in time.

#### 3.2.1.3. Mechanical-biological treatment of waste

According to Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, only waste that has been subject to treatment can be landfilled. Slovakia's reaction to this obligation of EU law has been somewhat peculiar. Originally, the ban on the storage of untreated mixed waste in landfills was established in the legal order of Slovakia through the decree of the Ministry of the Environment of the Slovak Republic (hereinafter, the Ministry) adopted in 2021.<sup>73</sup> with effect from 1 January 2023. However, the adopted proposal met with strong opposition from representatives of cities and municipalities, who claimed that they would be unable to introduce mechanical-biological sorting by this date. The Ministry backed down and adopted an amendment<sup>74</sup> to the decree in question, postponing the effective date of the obligation to treat mixed municipal waste to 1 January 2024. However, several studies have confirmed that Slovakia currently does not have the capacity for the mechanical-biological treatment of mixed waste, although a significant increase in this capacity is expected in 2024.75 Based on the foregoing, the Ministry issued a decree<sup>76</sup> extending the deadline for this obligation by an additional year, purportedly the final extension. Consequently, until 1 January 2025, municipalities are allowed to deposit untreated mixed municipal waste in landfills, provided

70 | See Sections II and III of part E of annex No. 7a Act on Waste and Sections II and III of part B of Annex to the Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment.

71 | Provision of § 75f para. 3 of Act on Waste.

72 | See Table of conformity to Act No. 430/2021 Coll., which amends Act No. 79/2015 Coll. on waste and on the amendment of certain laws as amended and which amends Act No. 302/2019 Coll. on the backup of disposable packaging for drinks and on the amendment of some laws as amended.

73 | See Decree of the Ministry of the Slovak Republic No. 26/2021 Coll. which amends the decree of the Ministry of the Environment of the Slovak Republic No. 382/2018 Coll. on waste dumping and storage of waste mercury.

74 | See Decree of the Ministry of the Slovak Republic No. 522/2022 Coll. amending the decree of the Ministry of the Environment Slovak Republic No. 26/2021 Coll., amending Decree of the Ministry of the Environment of the Slovak Republic No. 382/2018 Coll. on waste dumping and storage of waste mercury.

75 | See Inštitút environmentálnej politiky 2023; Zväz odpadového priemyslu 2023.

76 | See Decree of the Ministry of the Slovak Republic No. 521/2023 Coll. amending Decree of the Ministry of the Environment of the Slovak Republic No. 382/2018 Coll. on waste landfilling and on the storage of waste mercury as amended by decree No. 26/2021 Coll.

that the municipality ensures the organised sorting of selected municipal waste components.<sup>77</sup>

#### 3.2.2. Act on Fees for Waste Disposal

Act No. 329/2018 Coll. on fees for waste disposal and on amendments to Act No. 587/2004 Coll. on the Environmental Fund and on amendments to certain laws, as amended (hereinafter, the Act on Fees for Waste Disposal), is an important legal regulation primarily intended to motivate municipalities to recycle more. The adoption of this legislation was driven by several factors. Slovakia has one of the highest percentages of waste sent to landfills among EU Member States, while charging some of the lowest landfilling fees in the EU. The Act on Fees for Waste Disposal was designed to disadvantage landfilling and establish incentive mechanisms for the separate collection of municipal waste, ultimately promoting increased recycling of municipal waste.<sup>78</sup> Based on this Act, every municipality is obligated to pay a fee for depositing mixed municipal waste and bulky waste in landfills. The quantity of waste subject to the landfilling fee is established by the landfill operator, who weighs the waste at the landfill site. The landfilling fee for municipal waste is computed by the landfill operator by multiplying the waste quantity with the applicable rate specified in Annex No. 1 of the Regulation issued by the Government of the Slovak Republic, No. 330/2018 Coll., which sets the rates of fees for waste disposal and provides details concerning the redistribution of revenues from waste disposal fees. When depositing mixed municipal waste and bulky waste at a landfill, the applicable rate is determined based on the share of separately collected municipal waste in a municipality. The specific fee varies according to this sorting level, and, as Table No. 1 illustrates, the range is extensive (ranging from EUR 7 to EUR 17 in 2019, and from EUR 11 to EUR 33 in 2021 and subsequent years). This was intended to incentivise municipalities to enhance their separate municipal waste collection systems. However, based on research carried out by the European Environmental Agency,<sup>79</sup> these fees are still relatively low compared to those charged in other Member States. If we take the lowest possible rate of EUR 11 for depositing one ton of municipal waste in a landfill in Slovakia, then only Italy has a lower fee while the same fee is charged in Slovenia. If we take the highest possible fee of EUR 33, Spain, Estonia Austria, France, Portugal, Greece, Hungary, Romania, and Poland have lower fees. Arguably, these rates need to be

78 | Act No. 329/2018 Coll. on fees for waste disposal and on amendments to Act No. 587/2004 Coll. on the Environmental Fund and on amendments to certain laws as amended. 79 | European Environmental Agency 2023

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<sup>77 |</sup> This includes biodegradable kitchen waste from households, used edible oils and fats from households, biodegradable waste from gardens, parks and cemeteries, as well as sorted collection for paper, plastics, metals, glass, and cardboard-based composite packaging, bulky waste, small construction waste, and hazardous household waste.

updated to provide even greater motivation for municipalities to try to increase the recycling rate in their territory.

#### 3.2.3. Deposit System Act

In 2019, Slovakia became the ninth EU country to introduce a deposit return scheme for plastic bottles and beverage cans through the adoption of Act No. 302/2019 Coll. on Deposit on Single-use Beverage Packaging and on amendments to certain acts (hereinafter, the Deposit System Act). In Slovakia, when buying a drink in a plastic bottle or can with a volume of 0.1–3 litres, the customer pays the so-called deposit, which will be returned only upon returning this package. The system in question finally reached full functionality on 1 January 2022, and has produced very positive results in its short period of operation. Indeed, in the 18 months, a total of 1,311,799,190 beverage containers were collected, representing a 77% return rate for beverage containers.<sup>80</sup> However, a missed opportunity involves the idea of also collecting packaging sold before the system was launched as no deposit was paid for it; doing so may contribute to cleaning black landfills.

#### 3.2.4. Ecolabelling Act

Ecolabelling is a voluntary environmental policy tool aimed at encouraging the production and consumption of products that exhibit greater environmental friendliness throughout their life cycle. These labels furnish consumers with accurate and science-based information, ensuring transparency about the environmental impact of products. The conditions procedure for the award and use of the national ecolabel are regulated by Act No. 469/2002 Coll. on Environmental Labelling of Products, as amended (hereinafter, the Ecolabelling Act). An ecolabel can serve as a valuable guide for consumers during product purchases and may influence their buying decisions. Since 1997, 269 products have been evaluated and awarded the environmentally suitable product mark. Currently, 44 products have the right to use this brand.<sup>81</sup>

#### 3.2.5. Public Procurement Act

In Slovakia, the general legal regulation in the area of public procurement is the Act No. 343/2015 Coll. on public procurement and amending certain acts, as amended. The environmental aspect was added to this law in 2022, and defined as an environmental aspect related to the subject of the contract that reduces or prevents the negative impacts of procured goods, construction works, or services on

80 | Ministry 2023 81 | Ministry 2023 the environment during any phase of their life cycle, contributes to the protection of the environment, supports adaptation to climate change, or promotes sustainable development The environmental aspect has been added to several parts of the aforementioned act. In the Slovak Republic, GPP has long been considered a voluntary instrument. However, in the Envirostrategy 2030, Slovakia stated its intent to secure 70% of the total amount of contracts in public procurement through green public procurement by 2030, while making the same mandatory for central state administration bodies, self-governing regions, and cities. To achieve this goal, the Slovak government passed a resolution whereby green public procurement instruments must be applied in public procurement procedures related to construction works valued above EUR 30,000; public procurement procedures related to construction works below this value and line construction works are excluded from this obligation. In addition to applying green public procurement instruments wherever possible, emphasis should be placed on environmental aspects.<sup>82</sup>

#### 4. Conclusion

As Slovakia is an EU Member State, a portion of this chapter is dedicated to the EU's approach towards the transition to a circular economy. The significance of this topic is evidenced by the wealth of strategic documents and EU legislation in this domain. Slovakia's EU membership is the primary driving force behind the country's transition to a circular economy. This chapter has addressed various strategic documents facilitating the transition to a circular economy to some extent. Analysis revealed that while Slovakia possesses relatively well-established policy frameworks concerning waste management and the environment overall, several other areas have been neglected, such as raw material strategy, which has yet to be adopted. This chapter also examined several legal regulations with a focus on this transition. In this respect, it appears that in Slovakia, the transition to a circular economy is generally understood as being synonymous with more efficient waste management.

In Slovakia, the transition to a circular economy is closely intertwined with more efficient waste management. Slovakia has made remarkable progress in this area, achieving a substantial reduction in the rate of municipal waste landfilling, which decreased from 78.7% in 2005 to 39.3% in 2022. There has also been an extraordinary improvement in the amount of recycled municipal waste, which increased from around 3% in 2005 to 49.5% in 2022.<sup>83</sup> However, Slovakia cannot afford to rest on its laurels, as achieving the national goals outlined in the Envirostrategy 2030 and the EU's targets will not be easy. These goals include

<sup>82 |</sup> Resolution of the Government of the Slovak Republic No. 541/2022.

increasing the recycling rate of municipal waste, including its preparation for reuse to 60% by 2030, and reducing the rate of landfilling to less than 25%. As Šimková et al. note, 'Achieving [these goals] requires new approaches, as well as innovative solutions in this area'.<sup>84</sup> In terms of waste management, Slovakia will face several challenges in the near future, including the mandatory introduction of mechanical-biological treatment for municipal waste and the implementation of sorted collection for textiles in 2025. Perhaps one of the most significant obstacles Slovakia faces involves the construction of the necessary infrastructure to divert waste from landfill disposal.

It is worth noting that Slovakia is approaching the transition in a relatively fragmented manner, as evidenced by the absence of a singular strategic document or comprehensive legal regulation (lex generalis). A good example of comprehensive legislation is Art. 5 of the Polish Constitution, which is the basis for the national raw materials policy.<sup>85</sup> Such a document would be instrumental in detailing and encompassing the vision through an inclusive approach, incorporating a longerterm plan, principles, management, as well as monitoring and evaluation. In an encouraging update, between 2020 and 2022, the Ministry, in collaboration with the EC and the OECD, launched a project entitled, Preparation of a Road Map for a Circular Economy in the Slovak Republic. The objective of this initiative was to analyse and formulate recommendations for transitioning the Slovak economy to a circular model. The result of this project was presented in May 2022 and represents a comprehensive study that provides basic elements for building a road map for the transition to a circular economy in Slovakia. The initiative identified three areas where implementing circular economy reforms could have a particularly significant impact: "the use of economic instruments to promote sustainable consumption and production, the construction sector, and the food and bio-waste value chain".<sup>86</sup> An inevitable result of the analysis of Slovakia's approach towards the transition to a circular economy is the need to harmonise the non-conceptual approach applied to date. It is necessary to adopt a long-term vision, a plan comprising individual measures, and a strict timetable for implementation. Only such a procedure can be effective if Slovakia is to become a promoter of the circular economy and a sustainable and low-emission country.

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