

## Riga State City Municipality Circular Economy **Action Plan for** 2026-2030











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# LIST OF ABBREVIATIONS

RWMC	Regional Waste Management Centre
NRC	Riga Neighbourhood Residents Centre
OMD	Riga State City Municipality Outdoor and Mobility Department
CEAP	Cleaner and Competitive Europe circular economy action plan
CO <sub>2</sub> e	Mass unit of greenhouse gas emissions expressed as carbon dioxide equivalent
CSB	Central Statistical Bureau
NRT	Natural resource tax
EU	European Union
PD	Riga State City Municipality Property Department
EDO	Riga City Municipality Executive Director's Office
ECSD	Riga State City Municipality Education, Culture, and Sport Department
IPCC	Intergovernmental Panel on Climate Change
MoCE	Ministry of Climate and Energy
LCA	Life Cycle Assessment
СМ	Cabinet of Ministers
HED	Riga State City Municipality Housing and Environment Department
UDD	Riga State City Municipality Urban Development Department
REA	Riga Energy Agency
RITA	Riga State City Municipality Investment and Tourism Agency
RM	SIA Rīgas meži
RN	SIA Rīgas nami
RSCM	Riga State City Municipality
RMA	Riga State City Monument Agency
RS	SIA Rīgas satiksme
RŪ	SIA Rīgas ūdens
SSS	Statistics and supervision system
URBACT	European Union interregional cooperation programme
MSARD	Ministry for Smart Administration and Regional Development
GPP	Green public procurement

## INTRODUCTION

The circular economy is a model of production and consumption that promotes sustainability by preserving, increasing and retaining the value of products, materials and resources in the economy for as long as possible, reducing the consumption of raw materials, the amount of waste, and the environmental impact, taking the planetary limits of finite resource consumption into account. The benefits of the circular economy include social welfare, efficient resource management, economic transformation, skilled governance, and the maintenance and development of infrastructure and technology.

The implementation of a circular economy makes it possible to build new cooperation models, open new markets, create new jobs, attract investments, make financial and resource savings, shorten supply chains, and reduce the dependence on imported raw materials. High-quality and sustainable housing and improved quality of life are the most important social benefits of implementing a circular economy. The circular economy also enables vulnerable groups to participate more fully in the job market. The environmental benefits include a reduction in the extraction and consumption of primary raw materials, lower overall amounts of waste and annual greenhouse gas (GHG) emissions, and a cleaner environment.

The Riga State City Municipality Circular Economy Action Plan for 2026–2030 ('RCEAP') has been developed with the goal of gearing the city towards sustainable development that is based on resource efficiency and is in line with the European Green Deal, the Latvian National Climate and Energy Plan, and the goals of Riga Sustainable Development Strategy 2030. Addressing such environmental problems as wastage of resources, food and construction waste, as well as working on the public's habits, requires systemic and coordinated action. The implementation of the RCEAP will facilitate the transition of Riga, its companies, local residents, and other stakeholders towards a circular economy. This includes managing resource flows, changes in the public's behaviour patterns, and the implementation of new initiatives.

The development of the RCEAP is based on an analysis of existing data, policy documents, and experience gained in international cooperation and other circular economy initiatives. Good practices of European cities implementing circular economy strategies and action plans were taken into account in the development of the RCEAP. The RCEAP goals and actions were set based on the capacity of the municipality to influence processes, to make decisions (e.g., by setting up an infrastructure appropriate for implementing the principles of the circular economy in the city, including in spatial and investment planning), and to use the resources available for informing and educating the public, and providing it with access to circular solutions. Various stakeholders were involved in the development of the RCEAP, with national government and municipal institutions and companies, non-governmental organisations, the academic sector, private businesses, Riga's citizens, as well as local and international experts. The document will complement and support Riga's other development planning documents.

The development of the Circular Economy Action Plan takes place as part of the URBACT IV 2021–2027 European Union interregional cooperation programme project LET'S GO CIRCULAR! The URBACT funded Action Planning Network LET'S GO CIRCULAR! is paving the way for a sustainable, just and productive transition of cities towards a functioning Circular Economy. Ten partner cities and their stakeholders develop integrated approaches for urban areas. LET'S GO CIRCULAR! addresses all issues relevant to a holistic strategy of circular city ecosystems, fostering innovative solutions. The concept of the 10 R Ladder (from REFUSE to RECOVER) serves as an underlying principle for the action planning.

LET'S GO CIRCULAR! partner cities: Lead Partner Munich (DE), Cluj-Napoca (RO), Corfu (GR), Granada (ES), Guimarães (PT), Lisbon (PT), Malmö (SE), Riga (LV), Oulu (FL) and Tirana (AL).







## PLAN SUMMARY

The RCEAP is a short-term planning document for the municipality that offers a vision of how the municipality is to use the implementation of the principles of the circular economy to achieve its climate targets set in the Riga State City 2030 Climate Target Achievement Action Plan ('Climate Agreement') and the Riga State City 2030 Sustainable Energy and Climate Action Plan ('RECP2030').

The RCEAP has been developed in accordance with the EU Covenant of Mayors, which Riga joined in 2008, and which includes significant GHG emissions reduction targets by 2030, including an 80% reduction compared to 1990, and no more than 20% in emissions offsets.

Since the inclusion of circular economy topics in climate policy documents has been rather fragmentary so far, the RCEAP has been developed as a systemic framework for implementing the principles of circularity in urban governance, in the economy, and in society as a whole. The plan is necessary for addressing the current challenges associated with the use of resources, waste management, and climate change. This will make it possible to improve economic, environmental and social sustainability, as well as foster innovation and improvements in the quality of life of the city's residents.

The RCEAP consists of five main sections. The first section offers an overview of the role of the circular economy in cities, of the policy and regulatory frameworks at the European, national and regional levels, and describes the main challenges that Riga faces in its transition to a circular economy. The second section provides a detailed description of the planning work process, the target audiences, the vision, the goals, and a summary of priority actions. The third section presents the actions, with a detailed description of the tasks. The fourth section addresses the implementation and supervision mechanisms, while the fifth section analyses the main risks and makes proposals for mitigating them.

The main objective of the RCEAP is to build an integrated system for effective resource use that is based on data and established in municipal functions, and that contributes to the city's transition to sustainability and climate neutrality in line with the principles of the circular economy.

The RCEAP envisages specific actions that will promote the circularity of resources (involving the sharing, reuse, repair, refurbishment, and recycling of materials and products), the participation of local residents, circular business practices, and the alignment of municipal management and procurement processes with the goals of the circular economy. Integrated in this plan are the European Union (EU) policy guidelines (including the EU Green Deal and the European Commission's Circular Economy Action Plan), the Latvian Circular Economy Transition Action Plan 2020–2027, and the RSCM's development planning documents. At the regional level, the plan is linked to the 2014–2030 Riga Planning Region Development Strategy.

It is expected that the implementation of the plan will increase the productivity of resources (from EUR 0.90 per kg to EUR 1.55 per kg) and the material circularity rate (from 6% to 11%) in Latvia, while significantly improving the sorting rate of municipal waste in Riga (from 44% to 60%) and reducing the amount of waste per capita (from 501 kg to 451 kg). The plan promotes the building of institutional capacity in implementing the circular economy within the municipality through cross-sectoral coordination, improved data analysis, and sustainable financing solutions.

Particular attention is paid in the plan to the role of the municipal government, for example, in conducting procurement and in developing infrastructure that promotes citizen participation and business practices within the circular economy. The implementation of the RCEAP will contribute to the transition towards sustainable resource management in 8 action areas (AA).

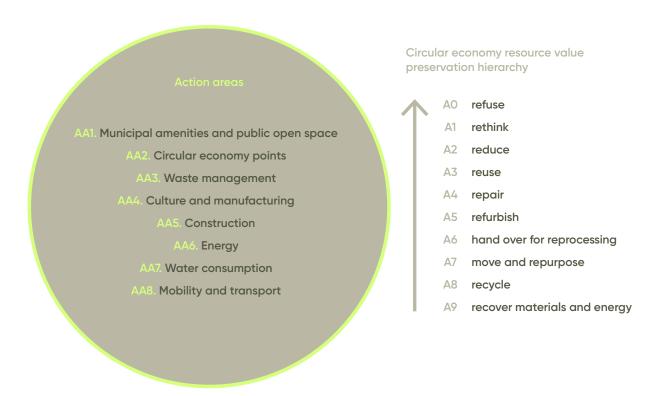


Figure 1. The RCEAP's 8 action areas and resource value preservation hierarchy

The RCEAP structure consists of 4 levels (Figure 2. RCEAP structure). A long-term vision with 3 goals has been defined as its basis. These goals are used to determine the policy outcomes to be achieved, with actions specified in the 8 action areas above to be taken to achieve these outcomes.

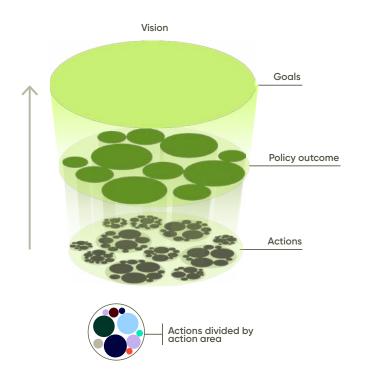


Figure 2. RCEAP structure

#### **Vision**



Riga is becoming a modern driver for circular economy innovations, supporting the development of new technologies, infrastructure, and processes aimed at bringing resources back into circulation, and ensuring that resource limitations are taken into account. This makes Riga a source of inspiration that contributes to resource efficiency in Latvia.

In order to achieve the proposed vision, the action plan sets 3 goals and 9 policy outcome indicators that require the implementation of 39 subordinate actions.

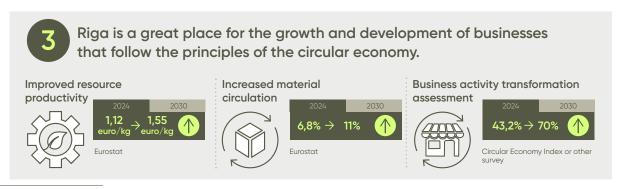
**Goal 1.** Riga's residents use infrastructure that supports the circular economy, and participate in the implementation of the circular economy.<sup>1,2</sup>



Goal 2. The municipality manages the resources at its disposal in a circular manner.



**Goal 3.** Riga is a great place for the growth and development of businesses that follow the principles of the circular economy.<sup>3,4</sup>



- <sup>1</sup> Circular Economy Index (2024). Source: <u>CleanR</u>
- <sup>2</sup> HED annual waste management data summary (2024). Source: Housing and Environment Department
- <sup>3</sup> Resource productivity in Latvia (2024). Source: <u>Eurostat</u>
- 4 Circularity rate in Latvia (2024). Source: Eurostat

The 39 actions are aimed at closing the corresponding material flow cycles through various circular economy tools, thus contributing to the more efficient use of resources and the reduction of waste.

A majority of the actions included in the Riga Circular Economy Action Plan, almost half of the total number, are aimed at reusing resources and improving recycling processes. This is a reflection of the municipality's goal of strengthening the existing waste management system, improving the sorting of materials, and promoting the recycling of resources. At the same time, a significant part of the actions also pertains to reducing resource use and to adaptations in infrastructure and intelligent procurement practice, thus ensuring that the principles of circularity are integrated into both the city's governance and the everyday habits of the public.

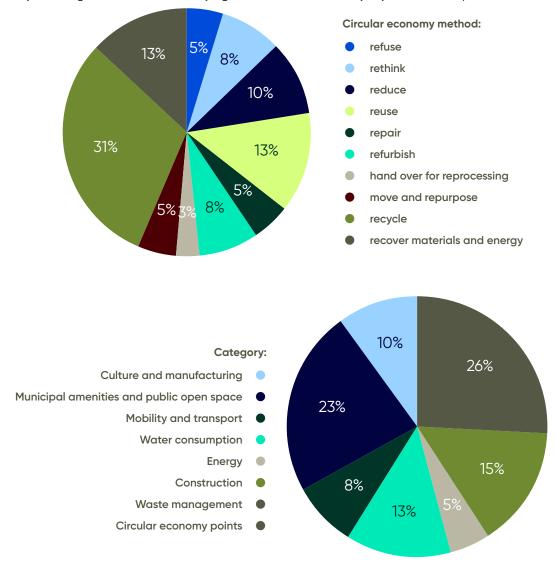


Figure 3. Breakdown of actions by material streams and circular economy methods used

The 'LET'S GO CIRCULAR!' project is a framework for the development of an action plan based on the URBACT integrated action plan methodology. Riga benefitted from the active involvement of stakeholders in the meetings of the local group of URBACT, using the effective participation methods and tools offered by URBACT, as well as a wide range of tools for the development of the integrated action plan. Cooperation groups at two levels were established as part of the project:

- the URBACT local group, for which 71 members registered originally, with more joining during the development of RCEAP;
- 'LET'S GO CIRCULAR!' project partner group, with 10 partner cities from 9 countries: Munich (Germany), Riga (Latvia), Lisbon and Guimarães (Portugal), Cluj-Napoca (Romania), Corfu (Greece), Granada (Spain), Tirana (Albania), Oulu (Finland), and Malmö (Sweden).



# 1. DESCRIPTION OF THE SITUATION







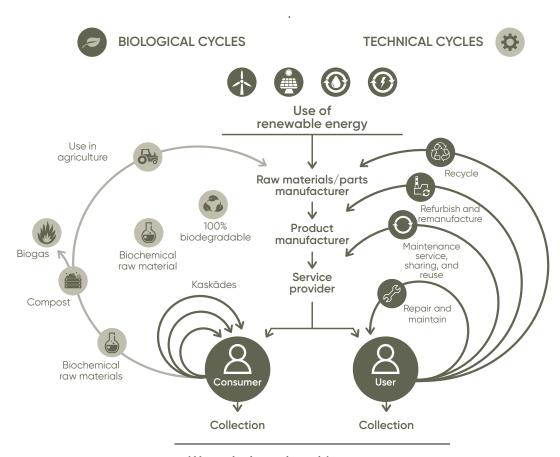




#### 1.1. What is the circular economy?

Historically, in terms of the production and use of products and materials, the development of cities has been based on a linear economic model described by the 'take, make, waste' approach.

This approach has led to an exponential growth in the amount of materials consumed, pollution and waste. For example, between 2016 and 2021, the world's economy consumed 582 billion tonnes of materials. This is not much less than what was consumed throughout the entire 20th century: 740 billion tonnes<sup>5</sup>



Waste incineration with energy recovery

Waste disposal in landfills

Figure 3. Circular economy principles

New models for managing resources are necessary in order to use these resources more efficiently and to reduce the negative impact of cities on the environment. One of these is the circular economy, the origins of which date back to the 1970s. One of the first works to examine the limited availability of resources and the problem of waste on our planet was likely the Limits to Growth report, commissioned by the Club of Rome and published in 1972. The concept of the circular economy was further developed in 1976, when Walter Stahel and Genevieve Radey published their paper 'Potential for Substituting Manpower for Energy', in which they proposed a vision of the more efficient use of resources, of reducing waste without affecting

economic competitiveness, and of creating jobs, thus defining the principle of a 'closed-loop' economy'.

As early as the 1970s, Walter Stahel defined the term 'cradle-to-cradle', still used today to explain the principles of the circular economy in relation to the life cycle of goods and products. The circular economy emphasises the reuse of manufactured products and the recycling of waste for remanufacturing, replacing the linear economy model with a 'cradle-to-grave' product life cycle.

However, we have only seen the circular economy enjoying widespread attention and implementation in the last 15 years, as the public becomes increasingly

<sup>&</sup>lt;sup>5</sup> Limits of Growth (1972), Club of Rome. Source: <u>Club of Rome</u>

<sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> School of thought that inspired the circular economy (2023). Available at: Ellen MacArthur Foundation

aware of climate change and global warming. The global necessity to balance industrial development and economic growth with environmental and human health serves as a driver for greenhouse gas (GHG) emissions reduction strategies, including through the use of the circular economy. In a circular economy, products and materials are created to be reused, refurbished, recycled, or recovered, meaning that they remain in the economy for as long as possible, eliminating or reducing the production of waste, especially hazardous waste, and eliminating or reducing GHG emissions.

The REA defines the circular economy as a development model that promotes sustainability, the essence of which is preserving, increasing and retaining the value of products, materials and resources in the economy for as long as possible, while reducing the consumption of raw materials, the amount of waste produced, and the impact on the environment. Meanwhile, the definition published on the European Parliament's website<sup>8</sup> emphasises that:

'The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products for as long as possible.'

Circulation activities and their impact on the preservation of the value of products and materials are shown through the process based on a model by the Ellen MacArthur Foundation (Figure 3), revealing the user or consumer decisions that make it possible for the life cycle of a product or material to be extended. These principles form the basic structure of the circular economy and are being increasingly integrated into the development strategies of cities across Europe. 10

The circular economy is also compared to the transition towards more responsible production and consumption models. With the proper management of material and resource flows and fostering of the preservation, renovation and development of environmental and natural capital, the circular economy contributes to the stability of city systems, reducing the risks associated with the exhaustion of resources. This paradigm shift also brings substantial economic and social benefits, such as Europe's better competitiveness coming from new business models that are based on the principles of the circular economy, as well as the development of innovations

and improvements in the quality of life of people living in cities.

These principles form a hierarchical structure, the socalled circular hierarchy or the 10R model, which sets the priorities for activities according to their capacity to preserve the value of products and materials (Figure 4):

#### Circular economy



Figure 4. Resource-saving hierarchy

#### Top priority— refuse and rethink:

- 1. Refuse: reject the use of unnecessary products and materials
- 2. Rethink: revise the design of products and services to pursue more intensive use

#### Extending the life cycle of products:

- 3. Reduce: increase product efficiency by using fewer resources
- 4. Reuse: reuse products according to their original function
- 5. Repair: maintain products to extend their service life
- 6. Refurbish: restore products, improving their function
- 7. Remanufacture: use existing products in the manufacture of new products
- 8. Repurpose: use products or their parts for other purposes

#### Material level solutions:

- 9. Recycle process materials to produce new products
- 10. Recover recover energy from materials that cannot be recycled

<sup>&</sup>lt;sup>8</sup> Circular economy: definition, importance and benefits (2023). Source: <u>Circular economy</u>

What is the circular economy? (2024) Source: <u>Riga Energy Agency</u>

Accelerating the Circular Economy in Europe — State and Outlook 2024 (2023). Source: EEA Report

Compost and Digestate for a Circular Bioeconomy (2022). Source: ECN Data Report

This hierarchy emphasises that priority must be given to solutions that preserve as much of the value and function of products as possible, thus maximising resource use efficiency and minimising the production of waste.

The actions included in the plan were also assessed following this principle, to ensure the sound implementation of the circular economy in the economy and in society, fostering a transition towards more responsible resource planning and use, as well as sustainable production and consumption, integrating these considerations into all sectoral policies and linking them to priority circularity stages and resource flows.

#### 1.2. Global situation in resource use

Since 2018, the global circularity rate has fallen from 9.1% to only 7.2%, meaning that more than 92% of all materials are produced from new rather than recycled sources<sup>12</sup>. Meanwhile, the total consumption of materials exceeds 100 billion tonnes per year, and if nothing changes, it could reach 190 billion tonnes by 206010. Non-metallic minerals, biomass, and fossil fuels make up most of the consumption, and combined, exert enormous pressure on the capacity of the planet.

The intensity of material use varies from region to region, and these differences are caused by different stages of development, production structures, and available resources. Emerging economies focus on infrastructure and industrial growth, while in the more developed regions, consumption still remains high.

The economy of the European Union is still too resource intensive. According to data analysed by the European Environment Agency, more than 8 billion tonnes of materials were used in the EU's economy in 2022. Of this amount, some 68% was obtained from natural resources within the EU, with the rest imported from third countries. This total quantity corresponds to an average of 17 tonnes per capita per year, more than twice the sustainable global level (approximately 5 to 6 tonnes per capita). Of the materials used, about 5 billion tonnes were directly consumed for the needs of the EU. Around 35% of it became waste, while the remainder was accumulated in long-term storage of various forms: buildings, infrastructure, equipment,

and technology. In other words, for every eight tonnes of materials entering the EU economy, three tonnes were incorporated into long-life-cycle assets that will determine the recycling and circular potential in the future.<sup>13</sup>

Material consumption structure in EU states in 2022:

- non-metallic minerals: 50% or 3.45 billion tonnes;
- biomass: 22% or 1.52 billion tonnes;
- fossil fuel: 19% or 1.3 billion tonnes;
- metals: 9% or 0.6 billion tonnes.

Although this structure has been relatively stable in recent years, progress in reducing the material footprint has been limited. According to the European Environment Agency, the EU's material footprint reached 6.9 billion tonnes in 2022, at 15.5 tonnes per capita, which is substantially lower than the average for high-income countries (27.8 tonnes), but exceeds sustainable levels by almost a factor of three.<sup>14</sup>

In 2022, the material circularity rate was 11.5%, which means that only one in nine tonnes of materials was reused in the EU economy. 15 Although this indicator has gone up since 2015 (10.3%), such progress is too slow to reach the goal set in the European Green Deal, aiming to double the circularity rate by 2030.

The amounts of waste generation and recycling also point to systemic deficiencies: every year, the EU generates more than 2.2 billion tonnes of waste, of which only 39% is recycled or reused, while 53% is landfilled or incinerated. Construction and demolition waste takes up the biggest share of this amount, more than half of the total, and it is this sector that offers the greatest circularity potential.

In the Circularity Gap Report 2024, it is concluded that if it is to implement the principles of circularity in the four main systemic sectors — food, mobility, construction, and consumer goods — Europe could reduce its consumption of materials by 30–33% by 2040, without compromising on social welfare and competitiveness.<sup>17</sup>

## 1.3. What this means in the context of local governments

According to the 2024 Circular Cities Declaration report<sup>18</sup>, cities integrate the circular economy with

Europe's Material Footprint — Assessment of progress towards circular economy targets (2024). Source: European Environment Agency

<sup>13</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> Accelerating the Circular Economy in Europe (2024). Source: European Environment Agency

<sup>&</sup>lt;sup>15</sup> Circular Economy Action Plan (2020). Source: European Commission

<sup>&</sup>lt;sup>16</sup> Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste. Source: European Commission

Europe's Material Footprint – Assessment of progress towards circular economy targets (2024). Source: European Environment Agency

<sup>&</sup>lt;sup>18</sup> Material stream accounts – resource productivity (EUR per kg) Source: <u>Latvian official statistics</u>

the help of various policy instruments: methods and mechanisms or tools that municipalities include in their action plans and use to achieve the expected results. These policy and influence tools are classified using the Urban Policy Framework developed by the Circle Economy and the Ellen MacArthur Foundation, which defines 42 policy instruments divided into five main categories: mobilise, educate, manage, incentivise, and regulate.

The above policy instruments were taken into account in describing the RCEAP actions, and combined, they were used to select the following intervention lines:

- strengthening of knowledge and human resources;
- indicators and supervision;
- regulation;
- infrastructure;
- procurements;
- reporting;
- road maps and strategy.

Local governments play a vital role in the transition to the circular economy because they are close enough to citizens to implement specific changes and because they have a significant impact on the local economy and resource flows. The institutional, territorial and financial framework of municipalities offers advantages for implementing the principles of the circular economy, including in waste management, construction, public procurement, promotion of local business activities, and informing the public.

Municipalities have the main responsibility for managing municipal waste, and this field holds the most potential for immediate improvements. Latvia is required to increase the rate of preparation of municipal waste for reuse and recycling from approximately 29% (2023) to 55% by 2025, 60% by 2030, and 65% by 2035<sup>19</sup>. Since 40–45% of total municipal waste in Latvia is biological waste, of which only about 12% is composted, there is substantial potential for improvement in this field.<sup>20</sup>



Figure 5. Breakdown of actions by material streams and circular economy methods used<sup>21</sup>

According to European Union requirements, the separate collection of textile waste becomes mandatory starting on 1 January 2025<sup>22</sup>; however, Latvia currently lacks a single infrastructure and an effective logistics system<sup>23</sup>. Municipalities need to provide a network of containers for collecting textile

waste, and establish cooperation mechanisms with recycling companies and charitable organisations. For plastic packaging, the rate of recycling is about 42% in Latvia, which is slightly above the EU average<sup>24</sup>, but still below the target of 50% by 2025.<sup>25</sup> Municipalities need to improve sorting quality, reduce pollution in

<sup>&</sup>lt;sup>19</sup> Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste. Source: European Commission

<sup>&</sup>lt;sup>20</sup> LV Municipal Waste Factsheet (2024). Source: European Environment Agency

<sup>&</sup>lt;sup>21</sup> Material stream accounts — resource productivity (EUR per kg) Source: <u>Latvian official statistics</u>

<sup>&</sup>lt;sup>22</sup> Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018, Article 11 (textile waste). Source: European Commission

 $<sup>^{\</sup>rm 23}~$  Latvia CE Country Profile (2024). Source: European Environment Agency

<sup>&</sup>lt;sup>24</sup> Europe's Plastic Waste and Recycling Data (2024). Source: European Environment Agency

<sup>&</sup>lt;sup>25</sup> Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018. Source: European Commission

sorted waste streams, and build public awareness of the significance of sorting. Some 61% of the waste generated in Latvia is still landfilled26, which is significantly above the EU average (47%).<sup>27</sup> Every piece of material landfilled represents a loss for the economy and the environment, producing methane emissions, contaminating the soil, and losing raw materials. Municipalities need to expand their separate collection systems and implement additional sorting actions to reduce the amount of landfilled waste.

Construction and demolition waste accounts for about 57% of the total amount of waste in Latvia.<sup>28</sup> Europeanlevel predictions suggest that this amount could double by 2050<sup>29</sup>, which is why municipalities must pursue a sustainable approach to managing the construction cycle. The principles of the circular economy must be followed in renovation and construction projects, with the reuse of materials, high-quality recycling and demolition designs. Currently, only about 4% of C&D waste in Latvia sees high-quality recycling, whereby the material is returned to closed circulation.<sup>30</sup> Public procurement documents should include requirements for the use of recycled materials, material data sheets, and structures to be demolished, in order to ensure the long-term circulation of resources. Before demolition work, an audit of the materials should take place, preparing a plan for their reuse or recycling.

Public procurement is one of the most important tools for implementing the circular economy at the local level. By integrating the principles of circularity in their procurement procedures and requiring the use of recycled materials, municipalities can encourage the development of local recycling businesses, ensure the more sustainable circulation of goods, also including requirements on the service life duration of products, their reparability and reuse, in line with the Right to Repair Directive<sup>31</sup>, and encouraging the development of a service economy, transitioning from the procurement of goods to a service contract model such as 'lighting as a service'.

Municipalities can promote food redistribution initiatives in conjunction with food banks and charitable organisations, conduct public awareness campaigns on food planning and storage, and support local composting programmes to encourage the recycling of biological waste at the local level.

Municipalities play a vital role in educating the public and fostering behaviour changes. The most important actions include clear and visually effective communication on the rules for sorting waste, setting up demonstration sites such as community composting sites or municipal buildings renovated following the principles of circularity, and working with educational institutions to integrate the topics of circular economy into curricula and practical activities.

The circular economy opens up new opportunities for promoting local business activities and job creation. Municipalities can support repair and reuse businesses, such as repair workshops, second-hand shops and resource centres, encourage the development of local recycling businesses by providing access to infrastructure and premises, and create circular economy centres where people can hand over items, perform repairs, and learn about sustainable consumption.32

Forecasts show that the number of urban populations facing water scarcity could double by 2050<sup>33</sup>. Although Latvia currently has sufficient water resources, climate change may cause this situation to change. Municipalities must implement water-saving actions in public buildings, including the collection and reuse of rainwater, and the development of green infrastructure that facilitates the infiltration of rainwater, reduces the heat island effect, and improves the microclimate of the urban environment.

#### 1.4. Regulatory framework for implementing the circular economy

The figure below offers a summary of the currently binding guidelines and regulations that directly and indirectly influence the development of the circular economy strategic vision and action plan at the level of Riga (Figure 6). The EU and its member states use the goals and activities defined in these documents to ensure the implementation of the circular economy in the everyday life of governments, businesses and the public, and to promote circular economy values by focusing on those activities that can lead to more value in materials, resources, or products.Latvijas ilgtspējīgas attīstības stratēģija

<sup>&</sup>lt;sup>26</sup> LV Waste Prevention Factsheet (2024). Source: European Environment Agency

<sup>&</sup>lt;sup>27</sup> EEA (2024). Europe's Material Footprint – Assessment of progress towards circular economy targets. Source: European Environment Agency

<sup>&</sup>lt;sup>28</sup> EEA (2024). Construction and Demolition Waste in Europe. Source: European Environment Agency

<sup>&</sup>lt;sup>29</sup> Accelerating the Circular Economy in Europe – State and Outlook 2024 (2023). Source: EEA Report

EEA (2024). Construction and Demolition Waste in Europe. Source: European Environment Agency

<sup>&</sup>lt;sup>31</sup> Directive on Common Rules Promoting the Repair of Goods (2024). Source: European Commission

<sup>32</sup> EEA (2024). Circularity in Municipalities – Urban Resource Centres in Europe. Source: European Environment Agency

<sup>33</sup> EEA (2024). Water Resources Across Europe – Adapting to Climate Change. Source: European Environment Agency

European Union level							
European Green Deal							
Circular Economy Action Plan (2020)							
EU Industrial S	Strategy EUC	hemicals Strateç	gy EU Plastic	s Strategy	EU Strategy for S tainable and Cire Textiles		ollution Action Plan
			Latvia	n level			
		Latvian	National Devel	opment Plan 20	021-2027		
		Cir	cular Economy	Strategy for Lo	tvia		
		Circular Ed	conomy Transiti	on Action Plan	2020-2027		
		Latvian Strate	egy for Achievin	g Climate Neu	trality by 2050		
		National	Energy and Cli	mate Plan for 2	021–2030		
	Latvian Design Strategy 2022–2027						
	National Waste Management Plan 2021–2028						
Riga State City level							
Riga Sustainable Development Strategy 2030							
		Riga I	Development Pr	ogramme 2022	2–2027		
	Riga State City Sustainable Energy and Climate Action Plan 2022–2030						
Riga Metropolitan Area Development Action Plan							
Riga State City Munici- pality Circu- lar Economy Action Plan for 2026– 2030	Riga State City Com- mitment to Climate Neutrality by 2030	Riga State City Munici- pality Hou- sing Policy Guidelines 2024–2030	Neighbour- hood Centre Development Plan for 2024–2028	Riga Metro- politan Area Outdoor Noi- se Reduction Action Plan 2024–2028	, .	Riga City Bicycle Traffic Development Concept 2015–2030	Riga City Guidelines for Social Integration 2019–2024

Figure 6. EU and Latvian regulatory framework in the field of the circular economy<sup>34 35 36 37 38 39</sup>

The European Green Deal<sup>40</sup> is one of the main drivers promoting sustainable consumption and manufacturing at the EU level, and it is particularly relevant to the Latvian Circular Economy Action Plan 2020–2027 and its sustainable product policy framework.

Before 2015, there were no regulations for the transition from a linear to a circular economy, but there were a number of EU Directives covering certain aspects related to the circular economy or pertaining to a particular sector, such as EU Directive 2008/98/EC on waste.<sup>41</sup>

The European Commission published its first circular economy guidelines in 2015. The Circular Economy Package included a strategy document on the importance of the circular economy for the EU's development ('Closing the loop — An EU action plan for the Circular Economy') and a number of new proposals to reduce waste through the reuse of materials and goods. The purpose of this action plan was transition, in line with other EU goals such as employment, growth, energy, and innovation, towards an economy where the value of products, materials and resources is preserved for as long as possible, while waste is reduced to a minimum. The action plan was also aligned with the United Nations Global

 $<sup>^{34}</sup>$  Latvian National Development Plan 2021–2027 (2024). Source: <u>Laws and regulations of the Republic of Latvian</u>

<sup>35</sup> Circular Economy Transition Action Plan 2020–2027 (2024). Source: Laws and regulations of the Republic of Latvia

<sup>36</sup> Latvian Strategy for Achieving Climate Neutrality by 2050 (2024). Source: Laws and regulations of the Republic of Latvia

<sup>&</sup>lt;sup>37</sup> Circular Economy Strategy for Latvia (2021). Source: Ministry for Smart <u>Administration and Regional Development</u>

National Energy and Climate Plan (2024). Source: <u>Laws and regulations of the Republic of Latvia</u>

<sup>&</sup>lt;sup>39</sup> National Waste Management Plan 2021–2028 (2021). Source: Ministry for Smart Administration and Regional Development

<sup>&</sup>lt;sup>40</sup> European Green Deal (2019). Source: <u>European Commission</u>

<sup>&</sup>lt;sup>41</sup> Directive 2008/98/EC of the European Parliament and of the Council (2008). Source: European Commission

Sustainable Development Goals (SDG), also defined in 2015 and published in early 2016 (Figure 7).<sup>42</sup>

In the 4 years following the publication of the Circular Economy Package, all of its 54 activities were either implemented by EU member states or adapted by them at the national level. In 2020, building upon this success, the European Commission adopted its next Circular Economy Action Plan ('For a cleaner and more competitive Europe. Circular economy action plan') as a separate, highly detailed section of the European

Green Deal.<sup>43</sup> CEAP, too, recommended that EU member states adapt the strategies defined in their national circular economy action plans. CEAP made a far more extensive presentation of the sectors with high potential for the implementation of the circular economy that are most important to Europe, including electronics, batteries, textile products, packaging, and plastics. The management of construction and construction waste was also given a substantial focus.







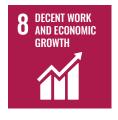














Figure 7. Breakdown of actions by material streams and circular economy methods used44

It should be noted that the publication of the CEAP also improved the availability of funding for various innovations and research activities, which contributed to the implementation of the circular economy. Most EU member states developed their first circular economy action plans between 2016 and 2022 (Figure 8). As shown in the figure, Latvia adopted its 2020–2027 action plan for the transition to a circular economy in 2020. As of 2023, four member states had not yet developed their action plans.

The Latvian Circular Economy Action Plan, prepared by the MSARD, establishes the critical role of municipal institutions as the main drivers for implementing the principles of the circular economy in practice.<sup>45</sup> For this reason, municipalities must engage in activities aimed at engaging, informing and educating the public. Other action areas focus on the more efficient use of resources, including:

- transition from waste management to resource management;
- improving resource productivity in all sectors of the economy through research and innovation;
- meeting the prerequisites for the reuse of goods;
- transition from procuring products to facilitating services.

Finally, the need to further improve the waste management and governance processes in priority sectors is also emphasised in the action plan. Two quantitative indicators were defined in order to measure the results achieved:

- increase in resource productivity from EUR 0.90 to EUR 1.55 per kg;
- increase in the material circularity rate from 6.6% to 11.0%.

The data show that Latvia's resource productivity in 2022 was EUR 0.94 per kg<sup>46</sup>, while in the EU, the average was EUR 2.5 per kg.<sup>47</sup> The last indicator defined was the increase in circular economy awareness and participation among the public. This was assessed using the results of the Eurobarometer and other surveys over the 2020–2027 period for the implementation of the action plan.

<sup>&</sup>lt;sup>42</sup> Accelerating the Circular Economy in Europe (2024). Source: <u>European Environment Agency</u>

EEA (2024). Construction and Demolition Waste in Europe. Source: European Environment Agency

 $<sup>^{44}\,</sup>$  The Circular Economy in Cities and Regions (2020). Source:  $\underline{\text{OECD}}$ 

<sup>&</sup>lt;sup>45</sup> Circular Economy Transition Action Plan 2020–2027 (2020). Source: Ministry for Smart Administration and Regional Development

<sup>&</sup>lt;sup>46</sup> Material stream accounts – resource productivity (EUR per kg) Source: <u>Latvian official statistics</u>

<sup>&</sup>lt;sup>47</sup> Resource productivity statistics (2023). Source: <u>Eurostat</u>

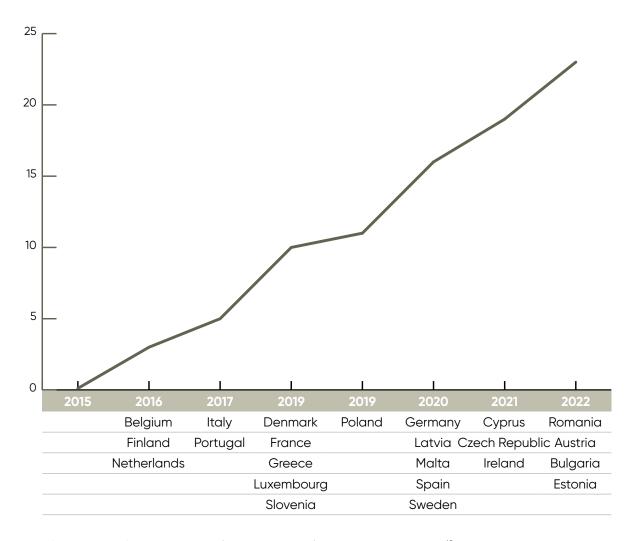


Figure 8. Breakdown of actions by material streams and circular economy methods used  $^{48}$ 

Currently, only seven out of Latvia's 47 municipalities (including two state cities – Daugavpils and Rēzekne) have developed circular economy strategies. The importance of the topic is demonstrated by the European Circular Cities Declaration Report 2024, which shows how EU cities implement and develop circular economy principles and roadmaps based on a broad range of actions.<sup>49</sup>

The European Circular Cities programme encompasses a total of 54 cities from 18 countries, including Copenhagen, Florence, Turku, Tampere, Rotterdam, and others, with a total population of more than 16 million. Of these cities, 46% have already developed a circular economy strategy, 22% are in the process of developing one, and another 22% are integrating the principles of circularity in other development documents. The cities have identified more than 200 specific actions, with the largest share of these being in the construction sector (37%). As already

noted, more than 30% of the total waste amounts is generated specifically by construction and demolition. This explains why these European cities focus on the sector. The sector with the second most actions aimed at it (17%) is the bioeconomy sector, encompassing agriculture, forestry, the fishing industry, and other sectors that are based on the use of renewable natural resources. With European cities moving towards a circular economy, Riga has a chance to become a sustainable development leader in the Baltic region.

For Riga, this is the first comprehensive circular economy action plan, although the circularity principles have already been integrated in a number of other strategic development planning documents:

- Riga Sustainable Development Strategy 2030 (RSDS);
- RECP2030;
- Climate Agreement.<sup>50</sup>

 $<sup>^{\</sup>rm 48}\,$  The Circular Economy in Cities and Regions (2020). Source:  $\underline{\rm OECD}$ 

<sup>&</sup>lt;sup>49</sup> Circular Cities Declaration Report 2024 (2024). Source: European Circular Economy Shareholder Platform

<sup>&</sup>lt;sup>50</sup> Riga State City 2030 Climate Target Achievement Action Plan (2024). Source: REA

The RSDS is a comprehensive RSCM long-term spatial development planning document, drafted based on the principles of sustainability and socio-economic development. The RSDS emphasises the need for Riga to consume resources in a responsible manner and to efficiently use energy in order to ensure a highquality environment that is balanced with economic growth. The RSDS defines the need for the sustainable and rational use of the municipality's resources as a key circular economy statement. The efficient use of resources in the construction of infrastructure and in the spatial development plan is likewise emphasised. However, there are no explicit references to the circular economy and its promotion in this document, which can be explained by the fact that at the time of the preparation of the RSDS, the Latvian Circular Economy Transition Action Plan 2020-2027 had not yet been published.

RECP2030 focuses on actions that improve the municipality's infrastructure, following the principles of the circular economy associated with improving energy efficiency, constructing and renovating buildings in a circular manner, educating the public about the principles of the circular economy, and working with educational institutions.

In 2022, Riga was selected as a participant in the European '100 climate-neutral and smart cities by 2030' mission. As part of this initiative, Riga undertook to become a climate-neutral city by 2030 and developed an integrated action framework (Climate Agreement) for the main areas, including for the circular economy.

The Climate Agreement envisages producing a 53% reduction in  $\rm CO_2$  emissions compared to 2019, which means reducing  $\rm CO_2$  emissions in Riga by 80% compared to 1990, as well as achieving climate neutrality in the municipality's infrastructure. Meanwhile, it is planned to use forest areas to maintain a constant GHG capture rate of around 300 kt  $\rm CO_2$  per year until 2030, which will provide a 16% reduction in  $\rm CO_2$  emissions, compared to the total GHG emissions in 2019.

Specific tasks have been defined for each sector, and in the field of waste and circular economy, one of the main tasks was the development of the RCEAP. Because Riga is Latvia's biggest industrial, business, cultural, sports, and finance centre, and given the city's population and significant consumption of resources, drafting the RCEAP is a strategically important step towards the sustainable and climateneutral development of the city.

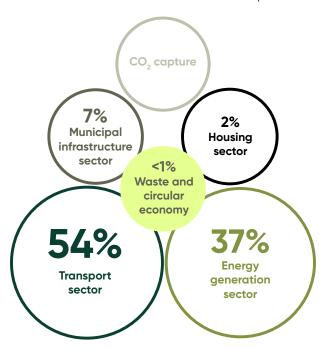


Figure 9. Greenhouse gas emissions reduction results set in the Climate Agreement, sector breakdown

It must be noted that, unlike other sectors included in the climate plan, for which specific GHG emissions reduction outcomes were calculated, no such quantitative target was set for the Circular Economy and Waste Management sector. The explanation for this is that at the time the plan was prepared, no

comprehensive set of actions had been created in that field. However, given the potential of the sector, it was estimated that the contribution of circular economy actions to overall emission reductions should be up to 1% (Figure 9).

#### 1.5. Description of Riga

#### **Territory**

The capital of Latvia, Riga, was founded in 1201, and is located in the central part of Latvia, on the southern coast of the Gulf of Riga (Baltic Sea), at the mouth of Latvia's largest river, the Daugava, in the Gulf of Riga. Although Riga takes up only 0.5% of the total area of Latvia, a third of the total population of Latvia lives in the city,<sup>51</sup> making it the largest city in both Latvia and the Baltic states. The territory of the RSCM is divided as follows (Figure 10):

 6 administrative-territorial units: Central District, Kurzeme District, Northern District, Vidzeme Suburb, Latgale Suburb, Zemgale Suburb; - 58 neighbourhoods.

#### The area of Riga is 307.17 km², including:

- 67.00 km<sup>2</sup> (21.8%) residential zones;
- 52.45 km<sup>2</sup> (17.0%) industrial zones;
- 24.64 km<sup>2</sup> (8.0%) streets and roads;
- 57.54 km<sup>2</sup> (19.0%) parks;
- 48.50 km<sup>2</sup> (15.8%) bodies of water.

In terms of green areas, Riga is one of the greenest capitals of Europe.



Figure 10. Map of Riga neighbourhoods<sup>52</sup>

<sup>&</sup>lt;sup>51</sup> What is the quantitative description of each of Latvia's 6 regions? (2020). Source: <u>Latvian official statistics</u>

<sup>&</sup>lt;sup>52</sup> 2024–2028 Neighbourhood Centre Development Plan (2030). Source: <u>Urban Development Department</u>

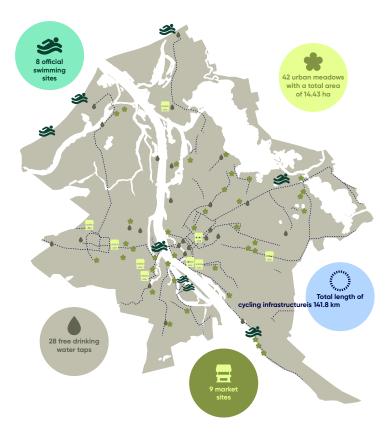


Figure 11. Public infrastructure in Riga<sup>53</sup>

#### **Population**

Riga is the largest city in the Baltic states in terms of population. 32% of all people in Latvia live in Riga. This is the highest share of people living in the capital among all EU countries. Since the 1990s, there has been a gradual decrease in the population of Riga, as well as in most of Latvia. Since 1991, the population has fallen by 34%. This can be partly explained by a decrease in the birth rate and people moving to Riga's

suburbs. As of the beginning of 2024, the population of Riga was 605,273 people.<sup>54</sup>

Riga is a multi-ethnic city, with the largest ethnic groups being Latvians (46.6%) and Russians (34.6%), with many Belarusians, Ukrainians, Poles, Lithuanians, and people of other ethnicities living in the city (Figure 12).

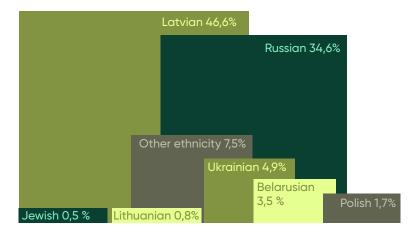


Figure 12. Multi-ethnic composition of Riga's population  $^{55}\,$ 

 $<sup>^{\</sup>rm 53}~$  Riga City Economic Profile 2024 (2024). Source: <u>Live Riga</u>

<sup>54</sup> What is the quantitative description of each of Latvia's 6 regions? (2020). Source: <u>Latvian official statistics</u>

<sup>55</sup> Ibio

#### **Education and research**

The largest number of Latvia's higher educational institutions is concentrated in Riga, almost all of which are accredited and internationally recognised bodies. Riga is the leading hub for education in Latvia, with 101 comprehensive schools, 148 pre-schools, and 36 colleges and universities providing education to more than 150,000 children and young people. Riga and its surroundings are home to almost half of all vocational schools in Latvia. 39.2% of Riga's population have higher education degrees, while about a fifth have secondary or higher professional education degrees. More than half of Riga's citizens speak at least two foreign languages.<sup>56</sup>

By 2030, it is planned to develop a common innovation and science infrastructure on the left bank of the Daugava (Pārdaugava). It will encourage synergies between science and business, for a development boost in Riga and in Latvia as a whole. This potential will be further developed in the future with the connection of the Rail Baltica line through the Torṇakalns neighbourhood. This place is expected to become the biggest campus in the Baltic states, with an area of 4–5 km² and some 30–40 thousand students.<sup>57</sup>

#### **Economy**

Riga is the economic and financial centre of Latvia. The city generates half of Latvia's gross domestic product and exports. Latvia is a full member of all the world's biggest economic and political organisations, making it possible to guarantee foreign investment support and investment security. Riga is the region of Latvia with the most business activity. There is an average of 95 enterprises per 1000 people in Latvia; in Riga, this figure is 120. Riga is home to 72.5 thousand economically active companies overall. 40% of all companies registered in Latvia are located in Riga.<sup>58</sup>

According to a survey of company founders carried out by the European Start-up Initiative<sup>59</sup>, the Baltic states are one of the most attractive regions for establishing new companies, and in 2022, Riga was Europe's 26th most attractive city for start-ups. Figure

13 shows the sectors most popular for companies to operate in.

Q	uantity	Type of business (NACE)			
	4350	rental or management of own or leased immovable property			
	1978	software development			
	1853	business and other management consultancy activities			
	1715	retail sale via post or internet			
	1697 construction of residential and non-residential buildings				
	construction of residential and non-residential buildings				
	1495	restaurant and mobile food services			
	1478	taxi services			
	1467	road freight transport			
	1387	car maintenance and repairs			

Figure 13. Most active business sectors<sup>60</sup>

#### Culture

Riga has an active cultural life. Its most popular cultural venues include the Latvian National Museum of Art, the Kalnciema Quarter, Āgenskalns Market, the National Library of Latvia (Castle of Light), Dailes Theatre, and the Tallinas Street Quarter. The historic centre of Riga is a UNESCO World Heritage Site. Riga is also referred to as an architectural gem: it is a city where you can see churches from its early period, the medieval buildings of the Old Town, unique Art Nouveau structures, as well as wooden architecture that has stood for centuries and other outstanding examples of modern architecture. Around 40% of all buildings in the centre of Riga are in the Art Nouveau style, much higher than in other European cities.<sup>51</sup>

#### Culture

The territory of the municipality is divided into four waste management zones:

- a. Riga Central District and Latgale Suburb administrative territory;
- b. Riga Vidzeme Suburb and Northern District administrative territory;
- c. Riga Kurzeme District administrative territory;
- d. Riga Zemgale Suburb administrative territory.

<sup>&</sup>lt;sup>56</sup> What is the quantitative description of each of Latvia's 6 regions? (2020). Source: <u>Latvian official statistics</u>

<sup>57</sup> Ibid.

<sup>58</sup> Ibid.

 $<sup>^{\</sup>rm 59}~$  Startup Heatmap Europe by DEEP (2024).  $\underline{\rm Startup~Heatmap}$ 

<sup>&</sup>lt;sup>60</sup> What is the quantitative description of each of Latvia's 6 regions? (2020). Source: <u>Latvian official statistics</u>

<sup>61</sup> Ibio

3 waste management companies provide their services in these four zones, selected through an open

tender, with the selection criterion being the most economical bid for the respective zone (Figure 14).



Figure 14. Municipality waste management zone map<sup>62</sup>

Figure 15 shows the existing and planned infrastructure, as well as the population density in Riga. The map presents the current distribution of population, its density, the location of existing waste sorting points, and the planned location of waste sites.<sup>63</sup>

Separate collection of municipal waste takes place using a system with multiple containers: one container for paper, cardboard, plastic, and metal waste, and separate containers for glass and biological waste. A total of 85 publicly accessible separate municipal waste collection points were set up in the municipality as of 1 April 2025. With the growth of the separation of waste at its source, the role of public waste sorting points in the urban environment rapidly decreases. In addition to public sorted waste collection points,

Riga City Council Binding Regulation No. 87 'On the management of municipal waste in Riga' of 29 November 2019 requires that containers for paper, cardboard, plastic, and metal waste must be placed at buildings with more than five apartments, and containers for glass packaging and biological waste must be placed at houses with more than ten apartments.

There are 94 containers for textile products set up in the municipality. These containers are installed by the waste management contractor in charge of the respective zone. A current list of locations for separate waste collection for the entirety of Latvia is available at *skiroviegli.lv.*<sup>64</sup> In addition to these containers, there are other containers installed by charitable

<sup>&</sup>lt;sup>62</sup> Riga City Council Binding Regulation No. 87 'On the management of municipal waste in Riga' of 29 November 2019 (2019). Source: <u>Laws and regulations of the Republic of Latvia</u>

<sup>&</sup>lt;sup>63</sup> Study on municipal waste streams and management in Riga State City Municipality (2025), Source: Housing and Environment Department

<sup>&</sup>lt;sup>64</sup> Public Sorted Waste Collection Points in Your Neighbourhood. Source: Šķiro Viegli

organisations, for example, for textile products. No records of these are currently being kept.<sup>65</sup>

There are two sorted waste collection sites for separately collected municipal waste, special waste groups, and waste harmful to the environment within the territory of the municipality that comply with the requirements of laws and regulations at Spilves iela 8E (which does not accept household hazardous) and at Vietalvas iela 5, both of which are managed by SIA Clean R. In addition to the existing sites, it is planned to set up 8 new sorted waste collection sites. By the end of 2026, the municipality will have created two of the eight planned sorted waste collection sites, at

Beberbeķu iela 39 in Riga's Kurzeme District and at Ūdeļu iela 8 in Riga's Vidzeme District.<sup>66</sup>

There are seven special hazardous waste collection points within the territory of the municipality where its residents can hand over waste oil and discarded oil filters, varnish and paint waste, mercury waste, fluorescent lamps, organic solvents, unused medications, chemicals, batteries, printer and copier cartridges, and contaminated packaging. 213 packaging collection points operate in the municipality.

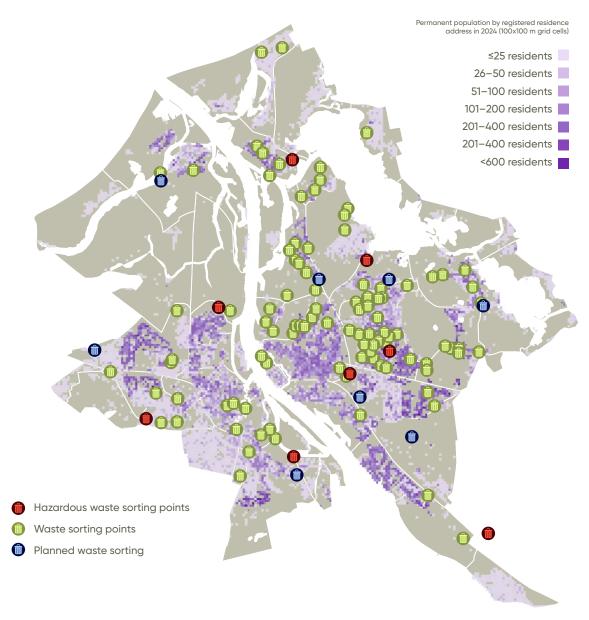


Figure 15. Current and planned infrastructure and population density

<sup>65</sup> Study on municipal waste streams and management in Riga State City Municipality (2025). Source: Housing and Environment Department

<sup>66</sup> Ibio

## 1.6. Circular economy potential and challenges in Riga

#### 1.6.1. Territory

## Riga sustainability portrait report reveals exceeded environmental thresholds

Riga's sustainability portrait was created based on the principles of Doughnut Economics, and it presents the social and environmental situation and impacts in the city across four mutually related contexts: impact on local social issues, impact on global social issues, impact on local environmental issues, and impact on global environmental issues.<sup>67</sup> It helps with the

understanding that the economy is based on the basic needs of the public, limited by the planet's resources, and it cannot be viewed in isolation from these aspects. This visual portrait of Riga shows that human needs are not met in more than half of the dimensions, while environmental thresholds have been exceeded, and in some categories, there are serious signs of degradation and development limitations (Figure 16). Threshold values are exceeded in a number of environmental dimensions, such as climate change, ocean acidification, and land conversion. Global social needs, including in health, food security, education, access to housing, and political freedom, are also severely limited.

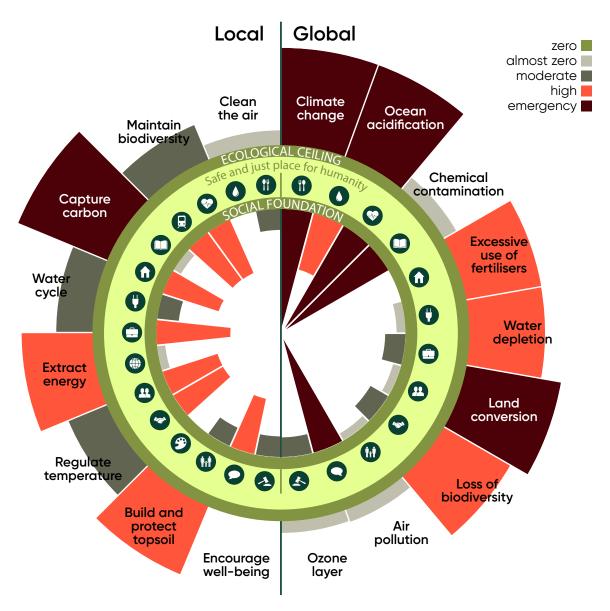


Figure 16. Riga doughnut economy portrait<sup>68</sup>

Study on municipal waste streams and management in Riga State City Municipality (2025). Source: Housing and Environment Department.

<sup>68</sup> Riga doughnut economy portrait (2025). Source: Riga Energy Agency

Overall, for most of the exceeded thresholds, the same situation is observed globally, and in these fields, more than half of Riga's impacts are at high or emergency levels. This is closely associated with the global nature of our consumption models, contributing to global warming, loss of biodiversity, and social inequality around the world. The goods we import often come from countries where they are usually produced at prices lower than they would have been if the goods were made sustainably, ethically, and using local raw materials. This look at the global impact makes it possible for us to recognise the excessiveness of our resource consumption in Riga and in Latvia, which is very similar to that of many other European and American countries. How this impact is felt is not the same across the world, and it is often most pronounced in the 'global majority' countries, prompting us to rethink and to change how our society defines what a 'good life' is, and how to provide such a life while satisfying the social needs of the people and protecting the environment. These results call for a radical revision of our current economic paradigm of unchecked growth.

#### Low resource productivity

The sustainable use and management of natural resources is one of the cornerstones for growth in Europe. The 'Resource-efficient Europe' EU flagship initiative marks the way for using synergies between different sectoral policies to ensure the sustainable use of natural resources, improve resource efficiency, and support the transition to a circular economy (with a particular emphasis on moving to a low-carbon economy that includes renewable energy and actions to modernise transport and energy efficiency, among other things). Estimates show that the use of natural resources by Latvia's economy is not yet sufficiently efficient for sustainability in natural resource consumption. Table 1 presents resource efficiency data in Latvia and the EU over the last 5 years.

Unfortunately, no data for the Riga statistical region are available yet. However, because Riga is the economic and financial centre of Latvia, and Riga produces 50% of Latvia's gross domestic product and exports, it is assumed that the data presented below can also provide an objective view of the situation in the RSCM.

Table 1. Resource productivity in Latvia and the EU over the last 5 years<sup>72</sup>

	2020	2021	2022	2023	2024
Resource productivity in the EU (EUR/kg)		2.07	2.16	2.31	2.35
Resource productivity in Latvia (EUR/kg)	0.90	0.89	0.87	1.08	1.12
Domestic material consumption per capita, EU (tonnes per capita)		14.52	14.42	13.51	13.35
Domestic material consumption per capita in Latvia (tonnes per capita)	14.82	16.11	16.90	14.04	13.58

#### Circular use of resources

Eurostat has developed a new indicator for the EU's circular economy monitoring system. It is referred to as the 'circularity rate' or the 'circular material use rate'<sup>73</sup>, and it measures the share of recycled materials in the total amount of materials used (Figure 17). The circularity rate is the share of resources used in the EU and extracted from recycled waste, thus obviating the need for obtaining primary raw materials/resources. Higher circularity rates imply that primary raw materials are more often replaced by recycled materials, thus reducing the environmental impact of extracting

primary materials.<sup>74</sup> This figure shows that Latvia lags far behind in terms of using recycled materials. The highest circularity rate was recorded in 2024, at 6.8%.

#### Rising amount of per-capita waste

Latvia generates some 790,000 tonnes of municipal waste every year, averaging 461 kg per capita annually (2022). For comparison, in 2022, the EU's average was 513 kg, with 465 kg in Lithuania and 373 kg in Estonia. In 2023, the EU countries with the highest per-capita GDP, Luxembourg, Ireland, and the Netherlands, produced a respective 721 kg, 624 kg, and 473 kg of

<sup>&</sup>lt;sup>69</sup> Thematic Strategy on the sustainable use of natural resources (2005). Source: <u>European Commission</u>

Europe 2020 strategy flagship initiative 'Resource-efficient Europe' (2011). Source: European Parliament

<sup>&</sup>lt;sup>71</sup> On the Circular Economy Transition Action Plan 2020–2027 (2020). Source: <u>Laws and regulations of the Republic of Latvia</u>

 $<sup>^{72}</sup>$  Resource productivity in Latvia (2024). Source:  $\underline{\text{Eurostat}}$ 

<sup>73</sup> Domestic material consumption rate (2024). Source: <u>Eurostat</u>

<sup>&</sup>lt;sup>74</sup> Circular economy material flows (2025). Source: <u>Eurostat</u>

waste per capita. The average per-capita amount of waste generated in Latvia has increased significantly over the years (from 318 kg in 2004 to 461 kg in 2022<sup>75</sup>). This rising environmental pressure caused by economic activity brings forth the need for more consistent

movement towards a circular economy. The total per-capita amount of municipal waste collected in Riga in 2023 was 480 kg, comparable to the national average.  $^{77}$ 

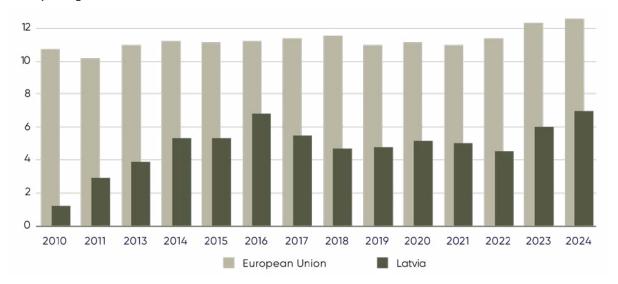


Figure 17. Circularity rate in Latvia and the EU<sup>78</sup>

## Unsorted municipal waste takes up the largest share of Riga's municipal waste stream.

The share of sorted packaging waste and other recyclable waste is relatively high, at just under 38% in total in 2023. It is worth mentioning, however, that

the amount of unsorted municipal waste is still almost 2/3 of all municipal waste produced, which suggests that those producing waste need to be included in the sorted waste collection system. The very low level of separately collected biological waste is worthy of a particularly critical remark, as it did not even exceed 2.5% of the total waste collected in 2023.4279

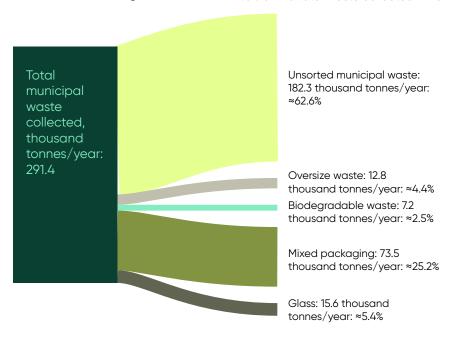


Figure 18. Municipal waste collected by municipal waste management companies in 2023 (% by mass)80

<sup>&</sup>lt;sup>75</sup> Municipal waste statistics (2025). Source: <u>Eurostat</u>

<sup>&</sup>lt;sup>76</sup> Waste management indicators and policies. Source: <u>European Environment Agency</u>

<sup>&</sup>lt;sup>77</sup> Study on municipal waste streams and management in Riga State City Municipality (2025). Source: <u>Housing and Environment Department</u>.

<sup>&</sup>lt;sup>78</sup> Resource productivity in Latvia (2022). Source: <u>Latvian official statistics</u>

<sup>&</sup>lt;sup>79</sup> Study on municipal waste streams and management in Riga State City Municipality (2025). Source: Housing and Environment Department.

<sup>80</sup> Ibid

#### Waste caused by disposable products is a major contributor, aggravated by recycling and sorting limitations.

Focus should be placed on more sustainable solutions, such as reusable products and biodegradable alternatives, which can reduce the negative environmental impact. Developing and implementing sustainable procurement guidelines that include requirements for resource efficiency and recyclable materials could reduce waste and help protect the environment.<sup>81</sup>

## Understanding the functioning of the circular economy

There is a misconception that the circular economy is mainly associated with waste management, so it only applies to a small range of activities and businesses.82 However, waste management is only the clean-up of the consequences. It is necessary to rethink and manage main resource flows in a way that eliminates the causes of waste. Decisions made during the design phase of a product determine 80% of its environmental impact, including the user's ability to interact with the product in a sustainable way (use for a long time, repair, refurbish, replace parts, convert, etc.).83 These factors must be considered during the design phase and as part of the development of the infrastructure and support system for the product use phase (business models, provision of maintenance, availability of spare parts and repair services, recycling options, etc.).

#### Awareness of the circular economy and the practical use of its principles among municipality employees

A survey of 212 staff members of 18 departments of Riga State City Municipality was held to determine their level of awareness of and their attitudes towards circular economy actions. <sup>84</sup> The survey revealed a lack of awareness of the principles of the circular economy among the municipality's employees; however, there was general interest in the topic observed, with a willingness to participate in the implementation of solutions:

- Currently, circular economy-related initiatives in Riga are fragmented, and there is no common vision.
- The respondents associate the circular economy with the keywords 'reuse' and 'resource savings',

- but many employees lack a more detailed understanding of this economic model.
- 43% of the respondents lack information about external activities taking place that are related to the circular economy, and 32% lack information about internal activities.
- 58% of the respondents do not know if the use of premises and resources is efficient, and 46% are not aware of recycling or reusing unnecessary resources.
- Only 1 out of the 212 respondents confirmed the existence of a GPP policy or guidelines, which demonstrates the low priority assigned to this matter. 54% of the employees had to deal with procurements, while 65% did not know the share of GPP in the municipality's procurements.
- Most of the employees travel to work individually (using private or public transport), with only 4% using vehicle-sharing opportunities.
- The provision of micro-mobility options is uncommon, although the demand for it as part of work mobility is present.
- Waste management actions are not yet implemented sufficiently effectively across a large share of institutions. 42% of the respondents stated that there were no actions in place at all, while another 31% revealed that although sorting was implemented, there was not enough motivation or education among the staff. Another 16% indicated that sorting was in place, but was ineffective. Only 25% of the institutions reported having a system operating effectively or very effectively, which emphasises the necessity to further strengthen the implementation of waste management and its quality.

#### Regulatory burden and lack of crosssectoral coordination

There are a number of companies within the territory of the RSCM that are interested in improving resource efficiency and see industrial symbiosis as one of the most effective tools in this field. However, currently, companies are more likely to face obstacles (the application of end-of-waste status) if they pursue a circular-economy business model, thus being unable to improve resource efficiency and reduce the amount of waste they produce. It should be noted at the same time that sectoral policy is created separately from the circular economy development model, and

<sup>&</sup>lt;sup>81</sup> Study on municipal waste streams and management in Riga State City Municipality (2025). Source: Housing and Environment Department.

<sup>82</sup> Study 'Riga State City Municipality Circular Economy Strategy 2040' (2025). Source: Riga Energy Agency

<sup>83</sup> The Ellen MacArthur Foundation study. Source: Ellen MacArthur Foundation

<sup>84</sup> Municipal waste statistics (2025). Source: <u>Eurostat</u>

<sup>85</sup> Ibid

industries do not communicate with each other with regard to the need to transform business practices and the environment.

#### Measurability

The necessary information about major flows, such as unsorted municipal waste and oversize waste, is also available for Riga. However, it must be noted that there is no detailed information about separately collected waste in Riga based on a classifier across different classes of waste. The same is true for the outcomes of recovery and recycling activities. Because waste from other municipalities is also brought to the infrastructure facilities used for processing waste, it is not possible to determine exactly how much of the waste collected is handed over for processing in Riga. Limitations regarding the availability of sufficiently detailed information impede the monitoring of waste management system performance and development planning.<sup>86</sup>

There is no centralised database that would enable one to coordinate waste streams, optimise resource use, and ensure compliance with regulatory requirements. This causes difficulties in planning, data analysis, and the management of environmental risks.

## Lack of information about the opportunities available

In order to promote the public's awareness and engagement, it is necessary to introduce improvements for the better availability of information and more clarity on the services available, thus reducing the amount of waste and promoting the development of the circular economy.<sup>87</sup>

## Circular economy procurement models, requirements, and workshops

The analysis of procurement processes carried out by Geo Consultants<sup>88</sup> as part of the study on municipal waste streams and their management in the RSCM revealed a number of options for implementing waste reduction actions. It was found that there is a dual system of coordination of procurements that causes complications and differences in how sustainability requirements are enforced.<sup>89</sup>

The procurements analysed suggest opportunities for integrating sustainable solutions, such as the reuse of materials, improvements in resource efficiency,

and requirements to use recyclable or sustainable materials.

In order to improve this process, it is recommended to implement a uniform sustainable procurement policy, to set stricter product life cycle and resource use requirements for suppliers, and to foster active cooperation between the municipality and its suppliers, pursuing a better understanding of the principles of the circular economy.

It would also be necessary to develop and implement a requirement to assess products before they are classified as waste, to ensure that the products are examined to see if they can be reused, refurbished, or recycled before being classified as waste.

#### 1.6.2. Potential

Previous studies were used to assess the composition of the unsorted municipal waste stream. The assessment shows that potentially recyclable materials – plastics, paper and cardboard, glass, and metal make up around 46% of the unsorted household waste. The share of biodegradable waste in the unsorted waste stream is relatively smaller, at 22.7%; however, if the amount of biodegradable waste present in fine waste particles is added to that, the share of biodegradable waste could be closer to 30%.90

## The amount of landfilled waste can be reduced by actively sorting biological waste and recyclable materials.

204.7 thousand tonnes of unsorted municipal waste collected in Riga were brought to the Getlini municipal waste landfill (including the unsorted municipal waste delivered to the landfill by waste managers operating in public areas) in 2023. The sorting plant at the landfill separates biodegradable waste from the unsorted municipal waste stream and recycles it: in 2023, its share was 32.9%. Waste-derived fuel (WDF) handed over for recovery and production of energy accounted for 14%, and recyclable materials such as metal, glass, etc., separated from the unsorted municipal waste received, accounted for a total of 4.7% of the waste stream. Mechanical sorting machines have limited capacity to separate undesirable impurities from biological waste, resulting in mechanical impurities in the final recycled product, such as glass or plastic particles, impeding its use. Increasing the amount of sorted waste collection is an important aspect in

<sup>86</sup> Study on municipal waste streams and management in Riga State City Municipality (2025). Source: Housing and Environment Department

<sup>87</sup> Ibid.

<sup>88</sup> Riga State City Municipality Housing Policy Guidelines 2024–2030 (2025). Source: Housing and Environment Department

Study on municipal waste streams and management in Riga State City Municipality (2025). Source: Housing and Environment Department

<sup>90</sup> Ibid

increasing the economic potential of using the final product of recycling biodegradable waste.

64.8% of the waste received, or 132.6 thousand tonnes, was disposed of in the landfill. The share of landfilled

municipal waste relative to the total amount of municipal waste collected in Riga is 43.5%. The amount of landfilled waste can be reduced by increasing the amount of sorted waste.<sup>91</sup>

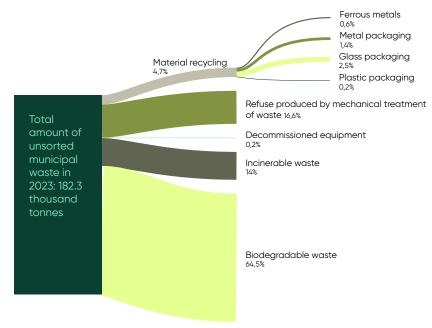


Figure 19. Waste streams caused by the processing of unsorted municipal waste 92

## Deposit system as a support tool for sorting and reintroducing resources into circulation

The nationally used beverage packaging deposit system implemented in 2022 makes an important

contribution to achieving the recycling and recovery goals. In 2023, 13.2 thousand tonnes of waste was managed as part of the deposit system in Riga, accounting for approximately 4.2% of the total amount of municipal waste. $^{93}$ 

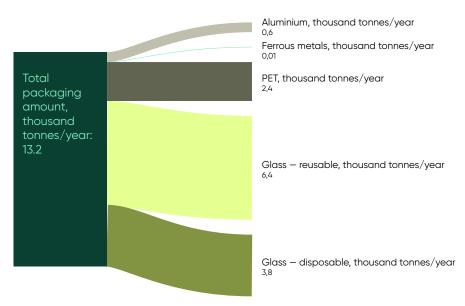


Figure 20. Packaging waste collected as part of the deposit system in 202394

<sup>&</sup>lt;sup>91</sup> Study on municipal waste streams and management in Riga State City Municipality (2025). Source: Housing and Environment Department

<sup>92</sup> Ibid.

<sup>93</sup> Ibid.

<sup>94</sup> Ibid.

## Resource efficiency is an old and tried practice: but it is not a unified system

Data show that there are currently a total of 845 service facilities for repairing, refilling, exchanging, and trading in Riga, with drinking water refilling and second-hand trade options being the most widely represented among these. Information about the

existing options for repairing, exchanging, refilling, or trading goods in Riga was obtained using the data collected as part of the LIFE integrated project 'Waste as a Resource in Latvia: Promoting Regional Sustainability and Circulation', which encompassed 33 different categories (Table 2).95

Table 1. Resource productivity in Latvia and the EU over the last 5 years

Category	Quantity in Riga
Active recreation equipment rental	9
Antiques, works of art	3
Footwear and leather goods repair	16
Clothing repair	19
Outdoor bicycle repair and maintenance	13
Car rental	11
Car maintenance and repair	5
Library	197
Office equipment rental	13
Outdoor fitness machines	2
Construction product rental	15
Other household goods rental	15
Exchange of gardening products	4
Computers and computer equipment repair	9
Drinking water refilling	172
Book exchange	22
Second-hand goods trade	25
General goods exchange	18
Co-creation spaces and equipment	4
Household utensil, home and gardening equipment repair	
Furniture repair and cleaning	8
Musical instrument rental	3
Tuning and repair of musical instruments	1
Event equipment rental	7
Watch and jewellery repair	0
Renovation	10
Household goods repair	11
Household appliance repair	6
Textile product care and rental	27
Bicycle rental	2
Bicycle repair	12
Refilling services	177
Smart device repair, mobile phone repair	9

#### **Environmentally friendly mobility options**

The public transport system of Riga is extensive and diverse, with 51 bus routes, 21 trolleybus routes, and 5 tram routes operating in the city. In 2022, the system transported 93.3 million passengers, demonstrating its importance for the mobility of Riga's citizens.<sup>96</sup>

Bicycle infrastructure is becoming an increasingly important part of sustainable mobility in the city. The current total length of bicycle paths in Riga is 119 kilometres, with plans to raise this number to 300 kilometres by 2030. Some 40% of those living in Riga use a bicycle as transport: 10% do so on a daily basis, while 17% use a bicycle at least once a week.<sup>97</sup> Shared

<sup>95</sup> LIFE programme integrated project 'Waste as a Resource in Latvia: Promoting Regional Sustainability and Circulation by Implementing the Concept of Waste as a Resource' (2024). Source: <u>State Environmental Service</u>

<sup>&</sup>lt;sup>96</sup> Riga City Economic Profile 2024 (2024). Source: <u>Live Riga</u>

<sup>&</sup>lt;sup>97</sup> Riga City Economic Profile 2024 (2024). Source: <u>Live Riga</u>

mobility solutions, especially electric scooter and bicycle-sharing services, are also developing, bringing along more flexible and environmentally friendly mobility options.

Although mobility has been witnessing various improvements, the principles of the circular economy are yet to be fully implemented in the construction and maintenance of roads. There is a need to implement the more extensive use of recycled asphalt and other recycled materials based on the latest research and practices adopted in other European cities, in order to reduce the consumption of resources and promote sustainable infrastructure solutions.

## Local residents show interest in recycling centres

In 2024, a circular economy space, called Sadarbnīca, was created in Riga as part of the Centres for Urban Resources, Reuse and Remanufacture (CURE+) international project.98 Sadarbnīca is a multifunctional space where people can learn about the principles of the circular economy, learn new skills, and engage in the circular economy in practice. The Sadarbnīca community space is used for hosting various events: workshops, seminars, lectures, discussions, classes, and stakeholder meetings, with the aim of developing and implementing new circular economy initiatives. Local residents can visit the woodworking shop to repair or convert furniture and household items that would have otherwise been disposed of as waste. Repair skills that are disappearing and valued as essential in developed countries such as the United States are learnt in the process.<sup>99</sup> The Sadarbnīca workshop is also a good example of tool sharing. Its tools are used not only more intensively, but thanks to the workshop craftsman's support, also more effectively.<sup>100</sup>

## Opportunity to use existing infrastructure to create new centres

Stakeholder consultations revealed that the most effective way to boost the involvement of local residents in promoting circular economy practices is to use existing infrastructure (in 33 neighbourhood centres and 6 cultural centres), to involve waste management company representatives, and to expand existing functions with relevant content.<sup>101</sup>

## Investment and Development Agency of Latvia Creative Industry Business Incubator

The Creative Industry Business Incubator provides 50% co-funding for various services and 100% assistance for pre-incubation services. The incubator is open to applicants working in the creative industries: architecture, design, film, art, publishing, media and advertising, IT, cultural education and heritage, entertainment, and other cultural activities. The incubator offers courses, training and information about grant programmes for transitioning to a circular business model.<sup>102</sup>

#### Housing policy

The RSCM owns more than 11,600 apartments, of which 1773 are social-housing apartments, and the municipality's housing stock takes up 3.4% of the housing market in Riga, one of the smallest values in Europe. By 2030, it is planned to set up 2116 new rental apartments, with an emphasis on improving access to housing for various social groups. Guidelines for improving social housing and public spaces are being implemented, taking international principles and the New European Bauhaus ideas into account. The principles of the circular economy are planned to be used in the courtyards and public spaces of social-housing buildings in Riga. 103

#### Recovery of resources from sewage sludge

SIA Rīgas ūdens already manages sewage sludge. <sup>104</sup> Most of the sludge is processed using the existing methane tanks of the Daugavgrīva biological treatment plant, with biogas extraction equipment in place. The sludge mass produced there is used to make fertiliser for agriculture and to generate biogas. Electricity and heat are produced out of the biogas, for a substantial reduction in natural gas consumption, both in the long and short term. The dewatered sludge is stored in the Vārnukrogs area until the start of the active agricultural season, at which point it is used to improve soil quality.

## Natural resources tax as a driver for positive change

One effective environmental protection tool in Latvia has historically been the principle of the 'polluter pays', which lies at the foundation of NRT. The purpose of the

<sup>98</sup> CURE+ project (2025). Source: Riga Energy Agency

<sup>99</sup> Public Notice of Revised Exchange Visitor Skills List. Source: <u>Federal Register</u>

<sup>&</sup>lt;sup>100</sup> Sadarbnīca (2025). Source: <u>Riga Energy Agency</u>

<sup>101</sup> Study on municipal waste streams and management in Riga State City Municipality (2025). Source: Housing and Environment Department

<sup>102</sup> Creative Industry Incubator Programme (2025). Source: Investment and Development Agency of Latvia

<sup>&</sup>lt;sup>103</sup> Riga State City Municipality Housing Policy Guidelines 2024–2030 (2025). Source: <u>Housing and Environment Department</u>

<sup>104</sup> SIA Rīgas ūdens 2040 Sustainability Strategy. Source: Rīgas ūdens

NRT Law is to encourage the economically efficient use of natural resources and to limit the pollution of the environment. NRT is a tool for fostering environmental protection in Latvia, based on the 'polluter pays' principle. It contributes to the efficient use of natural resources and limits pollution. The tax is charged over various activities, including the extraction of resources, landfilling of waste, pollution, and harmful goods. If a manufacturer does not participate in the extended producer responsibility scheme, it becomes subject to DRT rates that are regularly revised. In 2024, the scope of DRT was expanded to textile and other products. The Ministry of Climate and Energy drafts the law and its amendments, while the income from NRT is divided between national and municipal budgets in order to promote the development of municipalities. The ratio of this division will change in 2026, with a higher share going to municipalities. The income is used in environmental protection projects, integrating these principles in economic sectors and promoting sustainability and the protection of biodiversity.

## Green public procurement as a powerful tool to achieve municipality goals

The Ministry for Smart Administration and Regional Development is in charge of the implementation of green public procurement (GPP). GPP is a procurement process that involves setting requirements for environmental protection. This practice encourages sustainable consumption and production, and helps implement innovative and environmentally friendly solutions. In Latvia, the use of GPP is growing, especially in municipalities where it is more common than in national governance. GPP is considered an important tool for stimulating the circular economy. The Ecodesign for Sustainable Products Regulation (ESPR), which took effect on 18 July 2024, makes it possible to set mandatory green public procurement criteria for specific products, ensuring that government institutions buy more sustainable and circular products. Over time, there must be a transition from voluntary or additional scoring criteria to minimum requirements. In order to improve the procurement process and contribute to reducing waste, it is essential to include requirements that give preference to reusable and biodegradable or recyclable materials, reducing the amount of packaging, and calling for information to be provided about the life cycle of products and their compliance with sustainability certificates. Furthermore, active cooperation should be promoted with suppliers, building contractors and service providers, ensuring awareness of the principles of the

circular economy and emphasising efficient resource use. This can include a requirement to provide detailed information about the life cycle of the product, taking all of its production, use and disposal stages into account. Sustainable procurement policies should also be developed and implemented, incorporating the principles of green procurement as a mandatory element of the strategy, ensuring regular revisions and updates based on the latest technologies and environmental challenges.

#### 1.6.3. Benefits

## How can the circular economy help make everyday life better?

Fostering environmental protection: the development of the product reuse and recycling sector will make it possible to reduce the use of natural resources and curtail the negative impacts on landscapes and habitats, also limiting the loss of biodiversity.

**Mitigating climate change:** the circular economy can help reduce overall annual greenhouse gas emissions. According to the 2024 Latvian Environment, Geology, and Meteorology Centre (LEGMC) data, <sup>105</sup> industrial processes generated 8.5% of Latvia's total GHG emissions in 2022, while waste management accounted for 5.8%. Notably, emissions from both industrial processes and waste management are calculated, not counting emissions associated with land use, land-use changes, and forestry (LULUCF) – but counting indirect CO<sub>2</sub>e emissions.

- In 2022, Riga produced fewer GHG emissions than in 2021 and 2020. Meanwhile, 92% or 2072 kt CO<sub>2</sub>e of GHG emissions in Riga came from the use of fossil fuels in the energy sector, including transport (Figure 19).
- In 2022, 23% of Latvia's GHG emissions came from its capital, Riga, with 2256 ktCO₃e (Figure 20).
- Figures 21 and 22 show RSCM emissions data that are different from those presented in Figure 9, as CSB uses a methodology different from that of the Climate Plan, mainly in terms of system boundaries and the inclusion of emissions sources.

**Optimisation of energy and resource consumption:** the largest share in the RSCM's total energy consumption in 2020 was taken up by the heating of municipal buildings (58%). Electricity consumption in the water management system accounted for 15%, in municipal buildings, for 11%, and in street lighting, for 11%.<sup>106</sup>

<sup>105 2024</sup> Greenhouse Gas Inventory Summary (2024). Source: <u>LEGMC</u>

<sup>&</sup>lt;sup>106</sup> Riga Sustainable Energy and Climate Action Plan 2022–2030 (2022). Source: Riga Energy Agency

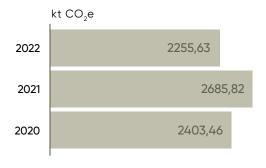
Creating more efficient and sustainable products can reduce energy and resource consumption.

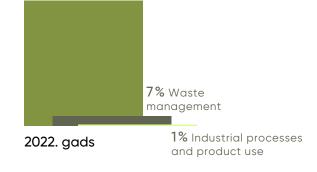
**Transition to more sustainable products:** switching to products and materials that can be reused, refurbished, and repaired, thus reducing the amount of waste. Both Latvia and Riga aim to eliminate the use of excessive packaging and to improve packaging design, encouraging reuse and recycling.

Reduction of dependence on primary raw materials: compared to importing new raw materials, recycling materials within the municipality or the country involves lower supply-associated risks, such as price

volatility, availability and dependence on imports. This is particularly important when it comes to the critical raw materials necessary to produce technologies that are decisive in achieving the climate targets (e.g., batteries and electric motors).<sup>107</sup>

**Job creation and cost optimisation:** adapting materials and products for circular use will boost innovation in various sectors of the economy. Consumers will be able to buy more lasting and innovative products that will improve their quality of life and save their financial resources in the long run.<sup>108</sup>





92% Energy sector

Figure 21. Riga GHG emissions, broken down by source<sup>109</sup>

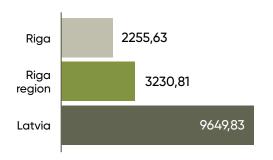
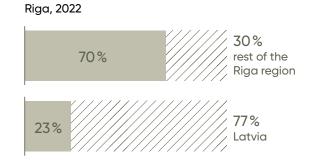


Figure 22. GHG emissions in Riga and the Riga region  $^{\rm 110}$ 



<sup>&</sup>lt;sup>107</sup> 2021 statistical report on the types of packaging waste produced and resource recovery rates in the Republic of Latvia in accordance with the decision of the European Commission (2023). Source: Ministry for Smart Administration and Regional Development

<sup>108</sup> Limits of Growth (1972), Club of Rome. Source: Club of Rome

 $<sup>^{109}</sup>$  Regional climate change indicators (2024) Available from: <u>Latvian official statistics</u>

<sup>&</sup>lt;sup>110</sup> Greenhouse gas emissions in the regions, state cities, and municipalities – Air Polluters, Sector, Territorial Unit, Measurement Unit, and Time Period (2024). Source: <u>Latvian official statistics</u>



# 2. GOALS AND ACTION AREAS OF THE PLAN











#### 2.1. Work process

One of the priorities set during the development of the plan was the comprehensive and multifaceted collection and analysis of the views of stakeholders in the sector.

2 key studies were used to assess the situation as part of the action plan:

- Study 'Riga State City Municipality Circular Economy Strategy 2040' conducted by Sustainability Partners (2024). As part of the study, stakeholders were interviewed, with two workshops and a survey of RSCM employees on circular economy awareness and practice, involving 212 employees from 18 departments.53 <sup>111</sup>
- Geo Consultants 'Study on municipal waste streams and management in Riga State City Municipality'.

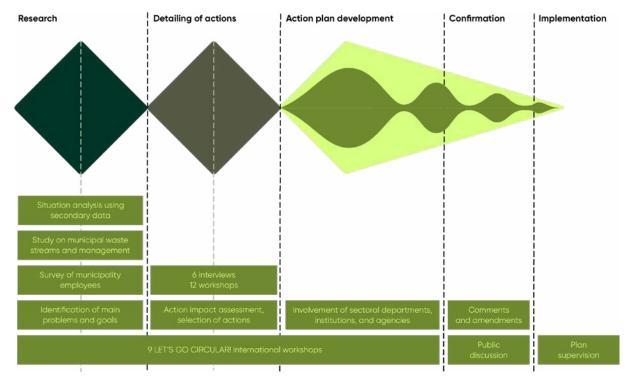


Figure 23. Development of the plan

Secondary data were also considered for assessing the situation, analysing grey literature, a collection of EU best practices in existing circular economy strategies, and circularity initiatives in the eight fields identified. European, national and regional circular-economy approaches were also taken into account, as well as their link to Riga's development planning documents.

Six stakeholder interviews and twelve stakeholder workshops were conducted during the drafting of the action plan to identify problems, detail actions, and discuss strategic goals, receiving suggestions that were included in the situation assessment and taken into account in the development of the actions.

The participants included representatives of national government and Riga local government institutions, higher educational institutions, healthcare institutions, various non-governmental organisations, associations, and the private sector, as well as Riga citizens.

In 2023, Riga joined the LET'S GO CIRCULAR! 2021–2027 project of the URBACT IV EU interregional cooperation programme, which provided extensive opportunities for exploring international experience, cooperation network support, and advice from specialists.<sup>113</sup>

The 'LET'S GO CIRCULAR!' project is a framework for the development of an action plan based on the URBACT integrated action plan methodology. Riga benefitted from the active involvement of stakeholders in the meetings of the local group of URBACT, using the effective participation methods and tools offered by URBACT, as well as a wide range of tools for the development of the integrated action plan.

III Study 'Riga State City Municipality Circular Economy Strategy 2040' (2025). Source: Riga Energy Agency

<sup>112</sup> Study on municipal waste streams and management in Riga State City Municipality (2025). Source: Housing and Environment Department

<sup>113 &#</sup>x27;LET'S GO CIRCULAR! transition to circular economy' project (2025). Source: Riga Energy Agency

Cooperation groups at two levels were established as part of the project:

- the URBACT local group, for which 71 members registered originally, with more joining during the development of RCEAP;
- 'LET'S GO CIRCULAR!' project partner group, with 10 partner cities from 9 countries: Munich (Germany),
   Riga (Latvia), Lisbon and Guimarães (Portugal),
   Cluj-Napoca (Romania), Corfu (Greece), Granada (Spain), Tirana (Albania), Oulu (Finland), and Malmö (Sweden).

#### **Target audiences**

Three main target groups were identified as part of an analysis of Riga's capacity to successfully implement the principles of the circular economy:

- Citizens
- Businesses and municipal companies
- Employees of municipality departments and institutions

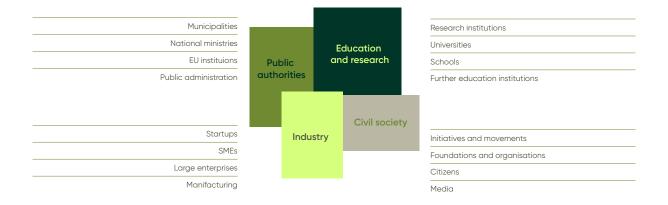


Figure 24. Stakeholders involved in the plan

#### 2.2. Vision

The vision communicates the main areas of development and their nature to the planners, the

stakeholders, and the general public. The vision serves as a guide for what basic things need to be protected and what needs to change in the future.

#### **Vision**



Riga is becoming a modern driver for circular economy innovations, supporting the development of new technologies, infrastructure, and processes aimed at bringing resources back into circulation, and ensuring that resource limitations are taken into account. This makes Riga a source of inspiration that contributes to resource efficiency in Latvia.

#### 2.3. Goals and policy outcomes

This section defines three main goals, each accompanied by a set of policy outcomes that describe how progress toward the goals will be assessed. For every outcome, appropriate indicators, measurement units, and data sources are identified to ensure clear and measurable tracking of results.

## Goal 1. Riga's residents use infrastructure that supports the circular economy, and

## participate in the implementation of the circular economy.

Riga builds infrastructure and services that support and motivate Riga's residents to become more responsible towards the environment and engage them in the transition from a linear to circular economy. The implementation of this practice is facilitated through the state city, ensuring the availability of information and providing activities and infrastructure

that help and motivate its residents in changing and adapting their behaviour patterns and habits.

Table 3. Goal 1 policy outcome

Policy outcome	Unit	Baseline year	Outcome	Target area	Target year	Outcome	Data source
Awareness and participation of the public in the circular economy	%	2024	59	Increase	2030	80	Circular Economy Index or other survey
Share of separately collected household waste out of the total municipal waste collected	%	2024	44%	Increase	2030	60%	HED annual waste management report
Amount of municipal waste generated per capita	kg	2024	501	Reduction	2030	451	HED annual waste management data summary

# Goal 2. The municipality manages the resources at its disposal in a circular manner.

It is planned to implement the principles of circularity in the management of Riga Municipality's day-to-day affairs (organising of routine work and equipment in offices, procurements, internal events, etc.),

infrastructure (real estate, roads, areas zoned for industrialisation), and management of resources. For example, using appropriate public procurement or municipality-defined principle and guideline criteria to achieve the reuse, repair, refurbishment, and efficient use or repurposing of products and materials.

Table 4. Goal 2 policy outcome

Policy outcome	Unit	Baseline year	Outcome	Target area	Target year	Outcome	Data source
GHG emission savings through the implementation of RCEAP actions	t CO <sub>2</sub> e	2025	0	Reduction	2030	25,801	REA RCEAP implementation report
Amount of EU funding for the circular economy project	%	2025	1,635,000	Increase	2030	3,000,000	UDD project management division summary
Resource management assessment	kg	2024	55.5	Increase	2030	80	REA data summary, Circular Economy Index report or other municipality resource management survey

Goal 3. Riga is a great place for the growth and development of businesses that follow the principles of the circular economy.

Riga becomes a centre for circular economy and business support in Latvia, attracting investment and businesses that prioritise the incorporation of circular economy practices in their business models and the implementation of projects that promote circularity, as well as the integration of the principles of the circular economy in municipal companies.

Table 5. Goal 3 policy outcome

Policy outcome	Unit	Baseline year	Outcome	Target area	Target year	Outcome	Data source
Improved resource productivity	EUR/ kg	2020	0.90	Increase	2030	1.55	Summary of CSB data on Latvia
Increased material circulation	%	2023	5	Increase	2030	11.0	Summary of Eurostat data on Latvia
Business activity transformation assessment	%	2024	43.2	Increase	2030	70	REA data summary, Circular Economy Index report or other equivalent transformation assessment

# 2.4. Action areas

In the plan, 8 main action areas and 39 implementation actions are defined for the 2026–2030 period that are to be used to implement circular economy practices in Riga. The plan sets an outcome, a performance indicator, the institutions responsible and coresponsible for implementing it, and a deadline for its implementation for each action.

- AA1. Municipal amenities and public open space
- AA2. Circular economy points
- AA3. Waste management
- AA4. Culture and manufacturing
- AA5. Construction
- AA6. Energy
- AA7. Water consumption
- AA8. Mobility and transport

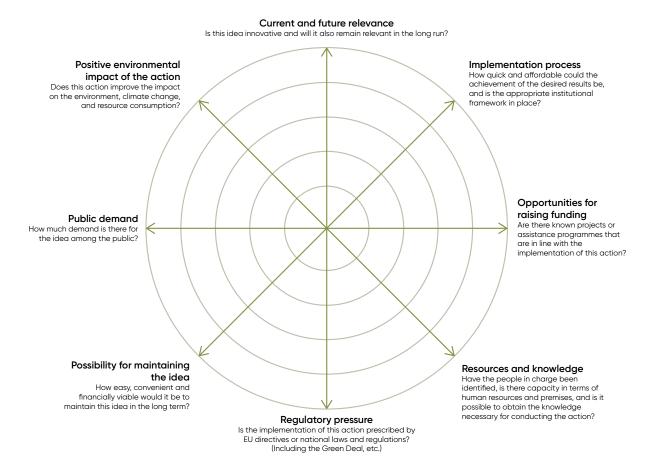


Figure 25. Impact and implementation potential assessment criteria

# 2.5. Priority actions and GHG emissions assessment

Determining clear priorities is a critical implementation element that ensures the effective and consistent implementation of RCEAP actions. In this case, a 2-stage assessment approach is used. During the first stage, every action was assessed according to eight (8) criteria, identifying those with the highest potential for impact and implementation. Once the results of the initial assessment were obtained, the actions were updated and corrected.

During the second stage, the actions were compared against each other based on the detailed assessments, allocated to groups in order of priority, setting the procedure for implementing them.

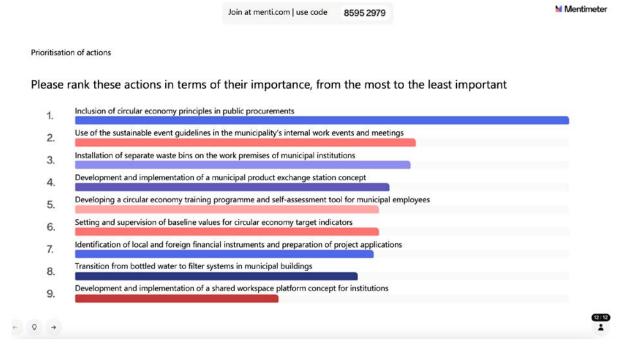


Figure 26. Illustrative example demonstrating the prioritisation process

In the summary, each action is shown with its priority and the first-stage assessment result using the following symbols:

HighHighMedium

# GHG emissions assessment

The purpose of the calculation is to assess the GHG emissions reduction potential of the actions envisaged during the RCEAP period.

The methodology developed by the Covenant of Mayors, based on the 'How to develop a sustainable energy action plan' guidelines, was used to determine the GHG emissions. The GHG emissions were divided into two categories:

 energy-related emissions resulting from the amount of energy consumption (e.g., electric power, heating supply);  non-energy-related emissions coming from the wastewater, waste management, and forestry sectors (as pertains to the circular economy).

The unit of measurement for emissions from waste management and land use is tonnes of  $\rm CO_2e$ . The calculation is based on emission factors included in international databases or on emission factor values received from businesses. The calculations only accounted for emissions reductions associated with sources located in the city of Riga (Scope 1 and 2). Indirect emissions reductions associated with reductions in the amount of materials were not taken into account.

# The 3 GHG emission scopes were assigned according to the standard of the GHG Protocol for Cities:

Scope 1 encompasses emissions in the territory of the city, coming from sources located within the city;

Scope 2 covers the GHG emissions from the generation and delivery of electricity consumed in the city;

Scope 3 includes other GHG emissions originating outside the city boundaries but related to activities that took place in the city.

Table 6. RCEAP categorisation<sup>114</sup>

	Scope 1	Scope 2	Scope 3
Stationary energy sources	Heat energy consumption through CHS	Electricity consumption by households, municipality, industry, services, and other sectors	
Circular economy and waste management	Centralised and decentralised wastewater treatment		Waste disposal at Getliņi landfill
Industrial processes and product use	as the installations generati	cesses and from the use of proc ng these emissions are part of t le Covenant of Mayors guideline	he EU Emissions Trading

Table 7. RCEAP emissions factors

Category	Unit	Emissions factor
Transport emissions per passenger-kilometre	kg CO <sub>2</sub> e/pkm	0.185
Drinking water extraction	kg CO <sub>2</sub> e/m³	0.153
Landfilling of minerals	kg CO <sub>2</sub> e/m³	1.234
Recycling	kg CO <sub>2</sub> e/t	6.41
Heating energy production	kg CO <sub>2</sub> e/MWh	148.00
Average emissions from electricity consumption	kg CO <sub>2</sub> e/MWh	109.00
Emissions prevented by composting or anaerobic digestion, as compared to landfilling	kg CO <sub>2</sub> e/t	1090.00
Waste disposal	kg CO <sub>2</sub> e/t	700.00
Emissions from building construction	kg CO <sub>2</sub> e/m²	0.185

It must be additionally noted that the impact of information and education actions on GHG emission reductions was not directly calculated. These actions are considered supporting activities that facilitate the implementation of other actions and habit changes, which in turn leads to emission reductions.

According to the Covenant of Mayors guidelines, emissions from industrial processes and from the use of products are not included, as the installations generating these emissions are part of the EU Emissions Trading System and fall outside these categories. Otherwise, this would lead to the double recording of emissions in different countries. However, in the context of a circular economy, it is also important to be aware of the global impact of product use, so the possibility of assessing actions using the LCA method should be considered in the future. LCA is a scientific method used to assess the environmental impact associated with all life cycle stages of a product, from

the extraction of raw materials and processing of substances, to manufacturing, distribution, use, repair and refurbishment, to disposal or recycling.

GHG emissions reduction estimates are based on a number of assumptions pertaining to initial activity data (waste and activity amounts, energy consumption) and to the expected effectiveness of the actions once these are implemented. These assumptions set the foundation for calculating the reductions in emissions, determining the baseline situation, as well as the expected effects.

The following basic formula was used to determine the reductions in GHG emissions:

GHG emissions reductions (t  $CO_2e/year$ ) = Action effect amount (tonnes/year) × Emissions factor (t  $CO_2e/t$ )

# Conclusions

<sup>114</sup> The 3 GHG emission scopes follow the standard of the GHG Protocol for Cities. Source: <u>Greenhouse Gas Protocol</u>

The purpose of the circular economy plan is to achieve a 1% reduction in GHG emissions, amounting to 101,547  $\rm tCO_2$ . The calculation results show that the total GHG emissions reductions from the proposed circular economy actions are expected to reach 42,035

 ${\rm tCO_2e}$  by 2030, whereby the largest reduction (33%) is associated with improvements in the municipality's amenities and public outdoor spaces. This means that additional actions may be needed to achieve the goal.

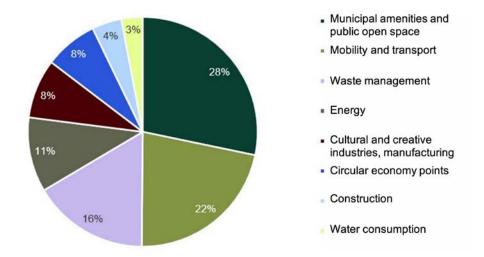


Figure 27. Action GHG emissions impact assessment, broken down by action area, according to the Covenant of Mayors guidelines

The greatest share of the emissions savings comes from integrating the principles of the circular economy in public procurements, as well as actions such as the setting up of sorted waste sites and bicycle maintenance stations, and the development of a circular energy sector and the creation of business symbioses in the city. It should be noted, however, that not all actions with a 'high emission reduction potential are included in the plan. For example, it is estimated that improvements in the waste management system by increasing the accessibility of containers and replanning the management zones could result in an additional 8000 tonnes of CO<sub>2</sub>e savings by 2030 alone. At the same time, data concerning the types of waste, their breakdown and measurements (especially for construction waste, food service leftovers and local initiatives) are incomplete and heterogeneous, which makes it difficult to accurately assess the impact. In addition to major systemic actions, local, smaller-scale solutions such as collective composting or repairs of electrical appliances can play an important role. However, their effectiveness substantially depends on the scale of their implementation and the involvement of the public.

- revise and improve the recording of emissions at the municipal level, in particular, with respect to waste streams (biological, construction, textile, etc.) and emission sources, in order to ensure a more accurate assessment of the impact of actions in the future.
- systematically develop pilot projects with high potential for reducing emissions, such as smallscale composting, electronics repair, closed container sites, and testing the 'pay as you throw' principle.
- develop systems for monitoring and recording actions that currently lack quantitative data for assessing their effectiveness (e.g., food left over from food services in educational institutions, construction waste generated by households, and the reuse of textile products).
- focus on a scalability-oriented approach, as individual small-scale local actions do not have a significant effect, while centrally coordinated implementation can bring about a significant contribution to the achievement of the climate plan and circular economy goals.

# 2.6. Planned action summary

 $\bullet \bullet \bullet - \mathsf{High}$ 

lacktriangleleft lacktriangleleft - Medium

Low

Table 9. Planned action summary

					10	ble 9. Planned (	action summe
No.	Action	Person in charge	Stakeholders	Implementation period	Circular economy impact	Technical feasibility	Economic viability
AA1. Mu	nicipal amenities and public open space						
MPO1	Inclusion of circular economy principles in public procurements	REA	EDO	2026-2028	•••	• •	•••
MPO2	Use of the sustainable event guidelines in the municipality's internal work events and meetings	REA	HED, EDO	2026	•••	•••	•••
MPO3	Installation of separate waste bins on the work premises of municipal institutions	HED	EDO, REA	2026	•••	•••	•••
MPO4	Development and implementation of a municipal product exchange station concept	REA	PD	2027–2028	•	•	• •
MPO5	Developing a circular economy training programme and self-assessment tool for municipal employees	REA	EDO	2026	•••	•	• •
MPO5	Developing a circular economy training programme and self-assessment tool for municipal employees	REA	EDO	2026	•••	•	• •
MPO6	Analysis of material streams and monitoring of circular economy targets	REA	HED, UDD	2026-2028	•	•	•
MPO7	Identification of local and foreign financial instruments and preparation of project applications	REA	HED	Regularly	•••	•••	•••
MPO8	Transition from bottled water to filter systems in municipal buildings	REA	EDO	2026	•••	•••	•••
MPO9	Implementation of a shared workspace system for work premises in municipal institutions	RN, RDA	PD, REA	2026-2030	•	•••	•••
AA2. Ci	rcular economy points						
CEP1	Ensure the functioning of the Sadarbnīca space, its further development, and awareness-raising among the public	REA	HED	Regularly	•••	• •	•
CEP2	Creation of circular economy points and their development in neighbourhoods	REA	HED, UDD, RNRC	2026-2030	•••	• •	•

No.	Action	Person in charge	Stakeholders	Implementation period	Circular economy impact	Technical feasibility	Economic viability
AA3. W	aste management						
AA1	Public awareness campaigns to improve sorting quality	HED	CA, REA	Regularly	• •	•••	
AA2	Development of the availability of waste sorting bins in public outdoor spaces	HED	UDD, OMD, RM	2026-2030	•••	• •	
AA3	Creation of 8 sorted waste collection sites and reusable product exchange stations	HED		Until 2030	•••	• •	• •
AA4	Implementation of sustainable food service practices and reduction of food waste in educational facilities	REA, ECSD	HED, EDO	2027–2028	•••	• •	•••
AA5	Development of a separate waste collection system	HED	RWMC	2026-2030	•••	•••	•••
AA6	Promotion of composting of biodegradable garden and park waste	HED	RM, OMD, RWMC	2026-2030	•••	• •	•••
AA7	Exploration of opportunities in small-scale collective composting and its implementation in apartment building courtyards	REA	UDD, HED	2026-2030	•••	•	•••
MPO7	Identification of local and foreign financial instruments and preparation of project applications	REA	HED	Regularly	•••	•••	•••
AA4. Cu	ulture and manufacturing						
CM1	Development and implementation of guidelines for sustainable public events	REA	HED, ECSD	2026	•••	•••	•••
CM2	Development of a container deposit scheme at public events	EDO, HED, RNRC, ECSD,	REA	2026-2030	••	• •	•••
СМЗ	Expand options to sort waste at public events	HED	REA, ECSD, RNRC	2027–2030	• •	• •	•••
CM4	Cooperation with educational institutions and fostering of the integration of circular economy principles in education, professional training and lifelong education	REA	ECSD	2027–2030	••	•••	•••
CM5	Development of circular business models, technologies and processing innovations	REA		2026-2030	••	•	•
CM6	Fostering of circular economy tourism	RITA	REA	2027–2030	•	000	

No.	Action	Person in charge	Stakeholders	Implementation period	Circular economy impact	Technical feasibility	Economic viability
AA5. C	onstruction						_
C1	Sustainable construction and development of the urban environment	RN	REA, HED	2026-2030	•••	•	•••
B2	Encouraging of empty space, land and building use	RNRC, UDD, OMD	PD	2025–2027	••	••	• •
AA6. Eı	nergy						
E1	Assessment of heat recovery potential and the implementation of solutions	REA	RS	2024-2027	•••	• •	•••
E2	Installation of solar panels onto municipal infrastructure (building roofs, degraded urban areas, etc.) and the development of renewable energy communities	REA	UDD, HED, PD	Starting in 2025	••	••	•••
AA7. W	ater consumption						
W1	Promotion of the processing and recycling of sewage sludge	RŪ	MoCE	Starting in 2025	•••	• •	•••
W2	Promotion of the collection, storage and use of water for utility purposes in municipal buildings and grounds	OMD, UDD	REA, RM, RŪ	2026-2030	•••	• •	•••
W3	Use of rainwater to wash the undersides of public transport vehicle	RS		Starting in 2025	•••	• •	•••
W4	Installation and availability of free drinking water taps in public spaces	HED, RNRC, PD, RŪ	ECSD	2026-2030	•	•••	• •
W5	Promotion of the availability of free water taps in cafés and restaurants	REA	RITA, RNRC	2026-2030	•••	•••	•••
AA8. M	obility and transport						
MT1	Increasing the use of milled asphalt in road construction	OMD		Starting in 2026	•••	•••	•••
MT2	Inclusion of other recycled materials in road construction and renovation procurements	OMD		2026-2030	•••	• •	• •
MT3	Fostering of bicycle maintenance station development	OMD	CA, UDD	Starting in 2025	•••	• •	•
MT4	Sustainable mobility solutions for municipality employees	REA	OMD	2026-2027	•••	• •	•
MT5	Recording and circular management of abandoned bicycles	OMD, RMP	RNRC, REA, MSARD	Starting in 2026	• •	•••	•













# 3.1. Municipal amenities and public open space

# MPO1. Inclusion of circular economy principles in public procurements



Activity outcome:

Use of circularity principles in procurements for construction, food services, event planning, and fields.



Performance indicator: A municipality-level framework for integrating the principles of the circular economy in various fields has been developed, and training is being provided.

# Description:

In order to ensure the systematic integration of the principles of the circular economy in public procurements, the RSCM needs to develop an industry-specific framework to help its departments understand and apply the principles of the circular economy in different types of procurements.

The RSCM has already initiated pilot projects to implement the principles of the circular economy in public procurements. Guidelines for circular construction were drafted in 2022, <sup>113</sup> in 2023, a design procurement was launched for the reconstruction of the building at Ziepju iela 11, <sup>114</sup> an interior design procurement was initiated in 2024, <sup>115</sup> and an outdoor improvements procurement was initiated in 2025. <sup>116</sup> In the future, it will be necessary to also test the principles of the circular economy in other procurements and to create a knowledge base and models for future procurements according to the experience gained.

#### Period:

2026-2028

# Institutions in charge:

REA – in charge of development, in conjunction with the PA (Procurement Administration) and other RSCM institutions

#### Stakeholders:

EDO – delegates responsibilities to all stakeholders

# Source of funding:

Within the budget allocated by the RSCM

Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

6413.2 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R1 Rethink

Intervention line:

**Procurements** 

<sup>115</sup> Circular construction guidelines. Source: Riga Energy Agency

<sup>&</sup>lt;sup>116</sup> Development of a project for the reconstruction of a shared-living house for various social groups at Ziepju iela 11 in Riga and the improvement of its grounds. Available at: eis.gov.lv

<sup>117</sup> Setting up of a Riga Circular Economy Centre Community Space in line with the principles of the circular economy. Available at: eis.gov.lv

<sup>118</sup> Improvement of the Riga Central Library Bolderāja Branch garden in line with the principles of the circular economy. Available at: eis.gov.lv

# MPO2. Use of the sustainable event guidelines in the municipality's internal work events and meetings



Activity outcome:

A single procedure for organising internal work events is implemented at the municipality, ensuring the more efficient use of resources and a reduction in waste and disposable products



Performance indicator:

Guidelines published

# Description:

REA regularly holds work events and meetings following the principles of the circular economy and sustainability, eliminating the use of disposable packaging and bottled water, using reusable containers, etc. However, there is currently no single approach, regulations, or guidelines that would enable the systematic implementation of such practice across all municipal institutions.

The purpose of the action is to develop and implement practical guidelines for the municipality's internal events and meetings, integrating sustainable solutions. As part of the action, it is planned to:

- develop a single guideline document for organising sustainable internal events;
- prepare a practical template for specifications with sustainability requirements (food services, materials, logistics);
- include the use of the guidelines as a good-practice standard in the internal governance of the municipality.

# Period:

2026

# Institutions in charge:

REA — in charge of drafting the guidelines

# Stakeholders:

HED — cooperation in the development of the guidelines

EDO – delegates responsibilities to all stakeholders

# Source of funding:

Within the budget allocated by the RSCM

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

1.1 kg/t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

A0 Refuse

Intervention line:

# MPO3. Installation of separate waste bins on the work premises of municipal institutions



Activity outcome:

Reduction in the amount of disposable packaging



Performance indicator:

Separate waste bins installed

# Description:

In order to ensure that waste is also sorted on the work premises of municipal institutions, it is necessary to implement a mandatory requirement for setting up separate waste bins, especially in shared-use areas, meeting rooms, and dining areas. As part of the action, it is planned to:

- assess the current situation at the institutions and prepare an implementation plan;
- set the minimum requirements for waste bin types, locations, and for uniform labelling;
- assess the possibility of also sorting biodegradable waste;
- provide explanatory materials on the sorting procedure and raise the awareness of the staff of such.

# Period:

2026-2030

# Institutions in charge:

HED — in charge of implementing the action

# Stakeholders:

REA — cooperation in the implementation of the action

EDO – delegates responsibilities to all stakeholders

# Source of funding:

Within the budget allocated by the RSCM

Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

614.6 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R6 Remanufacture

Intervention line:

# MPO4. Development and implementation of a municipal product exchange station concept



Activity outcome:

Optimum use of municipal resources



Performance indicator:

Shared-use premises platform implemented

# Description:

The various institutions and departments of Riga Municipality have access to work, meeting, event, and creative premises that are not used in full or have overlapping functionality. In order to improve the efficiency of the use of internal resources of the municipality, it is planned to develop and implement an internal digital platform for shared-use premises, making it possible to book, manage and monitor the use of such premises for RSCM internal work events and meetings. As part of this action, it is planned to:

- identify the municipality's premises (meeting rooms, workrooms, workshops, etc.)
   that have shared-use potential;
- develop a digital platform for booking the premises:
- define governance and maintenance responsibilities, booking priorities, and conditions of use;
- implement the platform within a limited group of departments and assess its usefulness and scalability.

#### Period:

2026-2030

# Institutions in charge:

RN - in charge of implementing the action

# Stakeholders:

PD, REA - participation in the implementation of the action  $% \left( 1\right) =\left( 1\right) \left( 1\right$ 

# Source of funding:

Within the budget allocated by the RSCM

Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

SDG 9 – Industry, Innovation and Infrastructure

GHG emissions reduction forecast:

224 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R3 Reuse

Intervention line:

# MPO5. Developing a circular economy training programme and self-assessment tool for municipal employees



Activity outcome:

Municipal employees have access to knowledge of the circular economy that is tailored to their needs, promoting a uniform understanding and capacity for action at all levels of governance.



Performance indicator:

Self-assessment and training programme developed

# Description:

In order to ensure the practical implementation of the principles of the circular economy in the work of the municipality, it is necessary to strengthen the understanding of this field among the municipality's employees and their competencies in it. This is why it is planned to develop and implement a systematic training programme tailored to the functions of different departments: from strategic planning and procurements to infrastructure management and informing the public. As part of the action, it is planned to:

- develop training content on the principles of the circular economy and on how to apply them in the context of the municipality;
- create training modules that are suitable to specific target groups (procurement specialists, project managers, digital technologies, etc.);
- integrate the training into work induction programmes for new employees;
- conduct information campaigns;
- develop a circular economy transition self-assessment tool for the municipality's departments.

#### Period:

2026-2027

# Institutions in charge:

 ${\sf REA-in}$  charge of the implementation of the action

# Stakeholders:

All RSCM institutions

# Source of funding:

Within the budget allocated by the RSCM

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

# GHG emissions reduction forecast:

Information event

# Intervention line:

Strengthening of knowledge and human resources

# MPO6. Setting and supervising of circular economy indicators to be achieved



Activity outcome:

Data-driven circular economy governance and informing of the public about the circular economy



Performance indicator:

Database created and maintained

# Description:

During the study, it was found that for a number of key resources and circular economy indicators in Riga, there are no defined baseline values for the indicators to be achieved. A general analysis of material flows is necessary in order to ensure the data-driven planning and supervision of the action. This approach makes it possible to identify the most important groups of raw materials and resource losses. As part of the action, it is planned to:

- conduct a general analysis of material flows at the level of the city of Riga;
- develop the concept for a data management platform that collects and visualises the indicators;
- gradually expand the functions of the platform, also including external data and opportunities for public participation.

#### Period:

2026-2028

# Institutions in charge:

 ${\sf REA-in}$  charge of implementing the action

# Stakeholders:

 $\ensuremath{\mathsf{HED}}, \ensuremath{\mathsf{UDD}} - \ensuremath{\mathsf{participate}}$  in the implementation of the action

# Source of funding:

Within the budget allocated by the RSCM, external financing (e.g., ESPON)

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

Information event

Intervention line:

Indicators and supervision

# MPO7. Identification of local and foreign financial instruments and preparation of project applications



Activity outcome:

Increased capacity of the municipality and its partners to raise external funding for circular economy initiatives.



Performance indicator: Project idea applications for RCEAP implementation prepared

# Description:

In order to facilitate the implementation of circular economy projects and attract investment, it is necessary to systematically identify the available sources of funding, both local and international (EU funds, LIFE, Interreg, Horizon Europe, etc.). At the same time, it is critical to provide practical support in preparing project applications to municipal institutions, partners and cooperation networks.

# Period:

Regularly

# Institutions in charge:

REA – in charge of the implementation of the action

# Stakeholders:

Relevant RSCM institutions

# Source of funding:

Within the budget allocated by the RSCM

Global Sustainable Development Goals (SDG):

SDG 17 - Partnerships for the Goals

GHG emissions reduction forecast:

Information event

Intervention line:

Strengthening of knowledge and human resources

# MPO8. Transition from bottled water to filter systems in municipal buildings



Activity outcome:

Amount of disposable packaging reduced, supply of water ensured



Performance indicator:

Filter systems installed

# Description:

Most of the municipality's buildings still use bottled water, which leads to unnecessary plastic waste and logistical costs, and leaves a carbon footprint. Meanwhile, tap water in Riga is clean and safe to drink. In order to reduce the environmental impact and set an example of sustainable practices, it is planned to phase out disposable water packaging, replacing it with integrated water filters and refilling systems in municipal buildings, and completely eliminating the use of bottled water. As part of the action, it is planned to:

- determine the most suitable solutions;
- install and maintain the filter systems.

#### Period:

2026

# Institutions in charge:

REA — in charge of the development of the transition guidelines and the collection of proposals for solutions

#### Stakeholders:

EDO – delegates responsibilities to all stakeholders

# Source of funding:

Within the budget allocated by the RSCM

Global Sustainable Development Goals (SDG):

SDG 11 — Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

28.8 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

An Refuse

Intervention line:

# MPO9. Development and implementation of a shared workspace platform concept for institutions



Activity outcome:

Optimum use of municipal resources



Performance indicator:

Shared-use premises platform implemented

# Description:

The various institutions and departments of Riga Municipality have access to work, meeting, event, and creative premises that are not used in full or have overlapping functionality. In order to improve the efficiency of the use of internal resources of the municipality, it is planned to develop and implement an internal digital platform for shared-use premises, making it possible to book, manage and monitor the use of such premises for RSCM internal work events and meetings. As part of this action, it is planned to:

- identify the municipality's premises (meeting rooms, workrooms, workshops, etc.)
   that have shared-use potential;
- develop a digital platform for booking the premises:
- define governance and maintenance responsibilities, booking priorities, and conditions of use;
- implement the platform within a limited group of departments and assess its usefulness and scalability.

#### Period:

2026-2030

# Institutions in charge:

RN - in charge of implementing the action

# Stakeholders:

PD, REA - participation in the implementation of the action  $% \left( 1\right) =\left( 1\right) \left( 1\right$ 

# Source of funding:

Within the budget allocated by the RSCM

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 9 - Industry, Innovation and Infrastructure

# GHG emissions reduction forecast:

224 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R3 Reuse

Intervention line:

# 3.2. Circular economy points

# CEP1. Creation of circular economy points and their development in neighbourhoods



Activity outcome:

Improved access to circular economy services



Performance indicator:

Operating model for circular economy points created

# Description:

Riga residents need easier access to circular economy services. The creation of circular economy points in Riga's neighbourhoods will significantly contribute to the participation of local residents in reusing and sorting waste, and reducing its amount, while strengthening the public's awareness of the principles of the circular economy. As part of the action, it is planned to:

- define the main functions of circular economy points, including the services for repairing and refurbishing textile, electronics, hazardous waste, furniture, and other goods, exchange and reuse zones, waste sorting options for different material flows, and information and education elements to engage local residents and raise their awareness;
- explore the possibility of implementing micro-solutions and mobile solutions, e.g., providing circular economy services in the central part of the city on certain days without the need to use private vehicles;
- work out development model types, such as fixed points, mobile solutions, or community spaces;
- identify the best locations in Riga's neighbourhoods, taking population density, access to infrastructure, and socio-economic indicators into account;
- assess the legal, technical and financial feasibility of implementation and develop a sustainable model for cooperation with representatives of the municipality, NGOs and businesses;
- develop and implement the solutions, establishing circular economy points, and expanding their accessibility in various areas.

# Period:

2026-2029

# Institutions in charge:

REA — in charge of implementing the action

# Stakeholders:

 $\ensuremath{\mathsf{HED}}, \ensuremath{\mathsf{UDD}}, \ensuremath{\mathsf{RNRC}} - \ensuremath{\mathsf{participation}}$  in the planning and implementation of the action

# Source of funding:

Within the budget allocated by the RSCM, EU funding

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

1926.9 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R3 Reuse

R4 Repair

A5 Refurbish

Intervention line:

# CEP2. Ensure the functioning of the Sadarbnīca space, its further development, and awareness-raising among the public



**Activity outcome:** 

Improved access to circular economy services; implementation of circular economy solutions facilitated

Performance indicator:



Sadarbnīca functions maintained, regular involvement of local residents in its events

# Description:

Sadarbnīca, Riga's first circular economy space, has began its activities as a place where local residents can learn about the principles of the circular economy, repair and refurbish household items, take part in practical workshops, and attend educational events. In order to improve the work of Sadarbnīca, it is necessary to maintain its core functions and, at the same time, build on its potential by strengthening cooperation and involving the broader public. These functions include:

- informing local residents about the circular economy and educating them on the topic;
- organising practical events and workshops on the repair, reuse and longevity of resources;
- provision of repair workshops, including for electronics and textile repairs;
- building and strengthening of partnerships with businesses, non-government organisations and educational institutions;
- improvement of the regulatory framework, and launching of innovations and new solutions in conjunction with partner organisations.

#### Period:

Regularly

# Institutions in charge:

REA — in charge of implementing the action

# Stakeholders:

HED — participation in the implementation of the action

# Source of funding:

Within the budget allocated by the RSCM, EU funding

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

# SDG 13 - Climate Action

# GHG emissions reduction forecast:

10.8 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R3 Reuse

R4 Repair

A5 Refurbish

Intervention line:

Infrastructure

# 3.3. Waste management

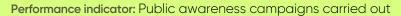
# AA1. Public awareness campaigns to reduce waste and improve sorting quality



Activity outcome:

Reduced waste quantity per resident

Higher share of sorted waste in the total amount of waste produced Increased awareness among local residents and their involvement in the transition to a





# Description:

As part of the action, a coordinated and systematic set of information and education activities will take place, aimed at improving the knowledge and habits of local residents in order to reduce waste and promote the sorting of waste. It is envisaged to develop a plan of thematic campaigns, adapting their content to different target groups (e.g., schoolchildren, seniors, residents of apartment buildings) and making the information available through different channels. Key activities include:

- updating and spreading the waste sorting guide;
- achieving the widespread use of uniform pictograms;
- running a coordinated campaign in conjunction with RWMC, CP, REA, and other partners.

# Period:

Regularly

# Institutions in charge:

HED - in charge of implementing the action

CA – conducts communication on delegated topics

# Stakeholders:

RWMC, CA, REA — participate in the planning of the action

# Source of funding:

Within the budget allocated by the RSCM

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

SDG 17 – Partnerships for the Goals

GHG emissions reduction forecast:

Information event

Intervention line:

# AA2. Development of availability of waste sorting bins in public outdoor spaces



Activity outcome:

Higher share of sorted waste in the total amount of waste produced



Performance indicator:

Availability of waste sorting bins in public outdoor spaces developed

# Description:

In order to boost the capacity of local residents to sort waste outside their households, the RSCM needs to systematically expand and improve the availability of waste sorting bins in public outdoor spaces (including sports pitches and playgrounds, parks, forests, other public spaces). The following will be carried out as part of the action:

- the feasibility of placing waste sorting bins will be assessed, and criteria for placing them will be set;
- urban environment improvement guidelines will be expanded with uniform design requirements for waste sorting bins;
- management requirements will be developed:
- bins will be procured and managed.

# Period:

2026-2030

# Institutions in charge:

UDD - in charge of urban environment planning

HED — ensures the compliance of the planning with sustainability and waste management goals

RM, ĀMD — in charge of implementation and maintenance in line with the set requirements

# Source of funding:

Within the budget allocated by the RSCM, RM budget

Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

855.1 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R6 Reuse

Intervention line:

# AA3. Creation of 8 sorted waste collection sites and reusable product exchange stations



Activity outcome:

Improved waste sorting and handover facilities



Performance indicator:

8 sites for sorted waste set up

# Description:

It is planned to set up 8 new waste sites to promote the sorting of waste and reduce the amount of waste that is landfilled. It is planned to set up two new sorted waste collection sites by the end of 2026: in Riga Kurzeme District, at Beberbeķu iela 39 (cadastral designation 01000822138) and in Riga Vidzeme District, at Ūdeļu iela 8 (cadastral designation 01001230224), and 6 more sites are planned. These sites will accept all the types of waste specified in Cabinet Regulation No. 788 of 13 December 2016, including oversize and hazardous municipal waste; there will also be an exchange point for furniture, construction goods, electronics, etc.

#### Period:

Until 2030

# Institutions in charge:

HED — in charge of implementing the action

# Source of funding:

EU funding, within the budget granted by the RSCM

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

2570.1 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R6 Reuse

A7 Recycle

R9 Recover materials and energy

Intervention line:

# AA4. Implementation of sustainable food service practices and reduction of food waste in educational facilities



Activity outcome:

Reduced food waste



Performance indicator:

Better food service practices in schools

# Description:

An assessment of leftover food in Riga's municipal schools, carried out as part of the *StratKIT+* ECSD project, provides data on the most important causes of food waste and possible improvements in food service practices. Based on these results, it is necessary to take further actions to reduce food waste and work towards sustainable food services in educational institutions. As part of the action, it is planned to:

- introduce the portion flexibility principle (smaller initially, with an option to top up);
- revise menu proportions, the life cycle of the products used, and options for using local products;
- regularly survey schoolchildren on their food preferences;
- provide chefs with training in recipes and quality;
- introduce a single methodology for recording leftover meals;
- promote cooperation with social partners (e.g., soup kitchens, food donation networks).

#### Period:

2027-2028

# Institutions in charge:

REA - in charge of offering circular solutions

ECSD — in charge of involving schools in implementing the actions

#### Stakeholders:

HED — cooperation in planning the action

EDO — informs and delegates responsibilities to all stakeholders

# Source of funding:

Within the budget allocated by the RSCM

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

# SDG 13 - Climate Action

GHG emissions reduction forecast:

414.9 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R2 Reduce

Intervention line:

Procurements

# AA5. Development of separate waste collection system



Activity outcome:

Improved waste sorting and handover facilities



Performance indicator:

8 sites for sorted waste set up

# Description:

It is envisaged to assess the efficacy of the action by lowering the mandatory waste sorting threshold: in other words, to determine the number of apartments for which mandatory waste sorting (e.g., biological waste, packaging, glass) should be imposed. It is also necessary to assess the requirement to set up sorted waste containers at public buildings and buildings used for business activities, such as hotels and offices. Based on the results of the assessment, appropriate amendments must be made to Riga City Council Binding Regulation No. 87 of 29 November 2019.

# Period:

2026-2030

# Institutions in charge:

HED — in charge of planning and implementing the action

# Stakeholders:

RWMC — cooperation in the implementation of the action

# Source of funding:

Within the budget allocated by the RSCM

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

336.6 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R6 Reuse

Intervention line:

# AA6. Promotion of composting of biodegradable garden and park waste



Activity outcome:

Higher share of sorted waste in the total amount of waste produced



Performance indicator:

Sites for composting biodegradable garden and park waste set up

# Description:

As part of this action, it is planned to promote the composting of biodegradable garden and park waste in order to reduce the share of such waste in the municipal waste stream and create a closed biomass cycle on the scale of the city. Potential for expanding municipal infrastructure for collecting green waste and composting it will be assessed, and models for cooperation with the RWMC and local residents will be developed. Particular attention will be paid to neighbourhood-level solutions.

#### Period:

2026-2030

# Institutions in charge:

HED — in charge of planning and implementing the action

# Stakeholders:

RM, RWMC, OMD — cooperation in the implementation of the action

# Source of funding:

Within the budget allocated by the RSCM

Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

10.7 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R6 Reuse

A7 Recycle

Intervention line:

# AA7. Study and development of small collective composting options



Activity outcome:

Higher share of sorted waste in the total amount of waste produced Biodegradable waste management improved



Performance indicator:

New small collective composting sites created

# Description:

As part of the action, it is envisaged to develop small-scale collective composting opportunities in the courtyards of apartment buildings and educational institutions.

# Period:

2026-2030

# Institutions in charge:

REA — in charge of planning and implementing the action

# Stakeholders:

UDD, HED - cooperation in implementing the action

# Source of funding:

Within the budget allocated by the RSCM

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

28.9 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R6 Reuse

A7 Recycle

R9 Recover materials and energy

Intervention line:

# 3.4. Culture and manufacturing

# CM1. Development and implementation of guidelines for sustainable public events



# Activity outcome:

Municipal and co-financed public events organised, following sustainability and circular economy principles



# Performance indicator:

Guidelines for sustainable events developed and implemented

# Description:

Riga State City Municipality holds a variety of public and municipal events every year, with cultural, sporting, educational, and social activities. In order to ensure that these actions comply with the principles of the circular economy and sustainable development, it is necessary to develop common guidelines that set minimum requirements for resource use, waste sorting, food services, transport, and information.

#### Period:

2026

# Institutions in charge:

 $\ensuremath{\mathsf{REA}} - \ensuremath{\mathsf{in}}$  charge of planning and implementing the action

#### Stakeholders:

HED, ECSD — cooperation in action planning and implementation

# Source of funding:

Within the budget allocated by the RSCM

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

Information event

Circular economy resource value preservation hierarchy:

A0 Refuse

Intervention line:

Strengthening of knowledge and human resources

Roadmap and strategy

# CM2. Development of a container deposit scheme at public events



# Activity outcome:

More widely used and effective container deposit system at events, reducing the use of disposable containers and promoting responsible consumption.

Higher share of sorted waste in the total amount of waste produced



#### Performance indicator:

Improved container deposit system at events

# Description:

There is already a requirement in effect in Riga for the provision of deposit beverage containers as part of street retail activities during events, temporary street retail, and Winter Holiday street retail; however, the system needs to be gradually improved in order to further reduce waste from disposable containers and packaging. As part of this action, it is necessary to:

- conduct consultations regarding assistance mechanisms and their use with event organisers and traders;
- improve the informing of guests of the events about the functioning of the system and its benefits.

#### Period:

2026-2030

# Institutions in charge:

EDO — in charge of supervising the implementation of the action

HED — in charge of planning improvements in the action and of implementing them at retail outlets at RSCM beaches

RNRC — in charge of implementing the requirements at the annual Winter Holiday market

ECSD — in charge of the application of requirements at public events organised by the RSCM

# Stakeholders:

REA – cooperation in researching solutions for improvements

# Source of funding:

Within the budget allocated by the RSCM, EU fund financing

# Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

8 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

A0 Refuse

# Intervention line:

Strengthening of knowledge and human resources

Roadmap and strategy

# CM3. Expand options to sort waste at public events



# Activity outcome:

Efficient sorting system at events, especially in food service areas. Higher share of sorted waste in the total amount of waste produced



# Performance indicator:

Requirements and technical solutions developed and implemented

# Description:

Although Riga already has requirements in place that ensure the sorting of waste at public events, their practical implementation is often lacking. Large amounts of packaging, food and other waste are produced, especially near food service areas; however, waste sorting stations are often too far away, insufficiently labelled, or are provided in insufficient quantity. It is necessary to:

- assess current practices;
- develop additional requirements that determine the location and supervision of waste sorting stations;
- implement an improved approach for individual events;
- gradually introduce the enforcement of the requirements at all events supported by the municipality;
- provide information materials and training.

#### Period:

2027-2030

# Institutions in charge:

HED — in charge of planning and implementing the action

# Stakeholders:

REA, ECSD, RNRC — cooperation in action planning and implementation

# Source of funding:

Within the budget allocated by the RSCM

Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 — Climate Action

GHG emissions reduction forecast:

126.7 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R6 Reuse

Intervention line:

Infrastructure

Procurements

# CM4. Cooperation with educational institutions and fostering of the integration of circular economy principles in education, professional training and lifelong education



Activity outcome:

School and university students, teachers and adults learn the principles of the circular economy



Performance indicator:

Integration of circular economy content in education materials

# Description:

The education system plays a key role in building a sustainable and circular society. In order to ensure knowledge transfer, increase professional capacity, and raise public awareness of the circular economy in Riga, it is necessary to integrate these principles across all levels of education, from preschool to higher education, including vocational education and lifelong learning programmes. As part of this action, it is planned to:

- create a platform for cooperation with educational institutions (pre-school, primary, secondary, vocational, and higher education);
- ensure the integration of circular economy content into teaching subjects, project week events, and interdisciplinary activities;
- develop professional upskilling programmes for teachers.

# Period:

2027-2030

# Institutions in charge:

REA — in charge of planning and implementing the action

#### Stakeholders:

ECSD - cooperation in planning the action

# Source of funding:

Within the budget allocated by the RSCM

# Global Sustainable Development Goals (SDG):

SDG 4 - Quality education

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

# GHG emissions reduction forecast:

Information event

Circular economy resource value preservation hierarchy:

R6 Reuse

# Intervention line:

Strengthening of knowledge and human resources

# CM5. Development of circular business models, technologies and processing innovations



Activity outcome:

Improved resource productivity
Higher material circularity
Improved business transformation assessment



Performance indicator:

Development of circular business models and technologies, and processing innovations promoted

# Descripti

Transitioning to a circular economy requires new models of cooperation, and new technologies and solutions, including innovations in recycling, especially for materials that are difficult to recycle.

As part of the action, it is planned to strengthen cooperation with the private business sector through regular communication, promoting innovation and the development and implementation of new solutions. Various activities are planned in general:

- setting up a platform for circular economy cooperation, including in digital format;
- organising cooperation events, such as the circular economy forum, in Riga;
- promoting of circular business models, including industrial symbioses;
- reducing of hard-to-recycle waste (including polystyrene foam, nappies, mirrors, tyres) and developing recycling innovations.

# Period:

2026-2030

# Institutions in charge:

REA — in charge of planning and implementing the action

# Source of funding:

Within the budget allocated by the RSCM, EU funding

# Global Sustainable Development Goals (SDG):

SDG 9 – Industry, Innovation and Infrastructure

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

SDG 17 — Partnerships for the Goals

SDG 13 - Climate Action

GHG emissions reduction forecast:

2004.1 t CO<sub>2</sub>e

Intervention line:

Strengthening of knowledge and human resources

# CM6. Fostering of circular economy tourism



Activity outcome:

Tourism offer created, based on the principles of the circular economy



Performance indicator:

Circular economy included in Riga's travel communication materials

# Description:

Riga has the potential to become a popular destination for sustainable and circular-economy tourism. As part of this action, it is planned to develop the provision of tourism that is compliant with the circular economy, integrating opportunities to participate in social activities such as outdoor clean-up events, repair workshops, the creation of urban gardens, or the renovation of street furniture, as well as promoting the availability of local, sustainably made products and services. At the same time, it is planned to include the topic of circular tourism in Riga travel communication materials: in brochures, on digital platforms and tourism routes, strengthening the image of the city.

# Period:

2027-2030

# Institutions in charge:

RITA — in charge of planning and implementing the action

# Stakeholders:

REA - cooperation in planning the action

# Source of funding:

Within the budget allocated by the RSCM

Global Sustainable Development Goals (SDG):

SDG 11 — Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

2.2 t CO<sub>2</sub>e

Intervention line:

# 3.5. Construction

# C1. Sustainable construction and development of the urban environment



# Activity outcome:

Principles of circular construction implemented in the municipality's projects at all stages of construction: from the design and construction of new buildings to rebuilds, selective demolition, and public outdoor space improvements.



# Performance indicator:

At least 4 projects implemented in total (new building, rebuild, demolition, improvements)

# Description:

The goal of the action is to ensure that the construction of new buildings, the reconstruction of existing buildings, the selective demolition, and the improvement of public outdoor spaces in Riga take place in accordance with the principles of the circular economy. The action will focus on life-cycle management, the efficient use of resources, and fostering the potential for reuse in construction, e.g., creating building material data sheets, using recycled materials, circular engineering design, using specialised systems for the demolition, adaptability and sustainability assessment of buildings (e.g., Level(s)), achieving high energy efficiency and renewable energy use.

#### Period:

2026-2030

# Institutions in charge:

RN, HED, PD, OMD, UDD, REA, RMA — in charge of adapting the principles for the construction and improvement projects the institution is responsible for

# Source of funding:

Within the budget allocated by the RSCM, EU funding

Global Sustainable Development Goals (SDG):

SDG 9 – Industry, Innovation and Infrastructure

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

9.6 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R1 Rethink

Intervention line:

# C2. Encouraging of empty space, land and building use



# Activity outcome:

Vacant properties and land plots owned by the municipality are utilised



# Performance indicator:

More premises, buildings and plots of land where businesses or social activities are started with the support of the municipality.

# Description:

From 2025–2027, the RNRC is conducting a co-financing programme to support businesses on the ground floors of buildings in Riga's historic centre. As part of the programme, existing and new companies can receive up to EUR 10,000 in assistance to adapt the premises for their business activities. For the future, it is planned to consider expanding the programme to other neighbourhoods that show an increase in vacant premises and have a high potential for reactivating the urban environment.

At the same time, the UDD plans to improve its approach to the temporary use of vacant properties, creating opportunities for short-term initiatives and social and innovative projects.

#### Period:

2026-2030

# Institutions in charge:

RNRC — in charge of consulting and providing co-financing

UDD - in charge of promoting temporary use

OMD - in charge of keeping records of degraded sites

# Stakeholders:

PD – participates in implementing the action

# Source of funding:

Within the budget allocated by the RSCM, EU funding

Global Sustainable Development Goals (SDG):

SDG 8 – Decent Work and Economic Growth

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

GHG emissions reduction forecast:

1050 t CO₂e

Circular economy resource value preservation hierarchy:

R1 Rethinl

Intervention line:

# 3.6. Energy

**DESCRIPTION OF ACTIONS** 

# E1. Assessment of heat recovery potential and the implementation of



Activity outcome:

Drafting of a financial investment plan for the solution and implementation of the solu-



Performance indicator:

Financial plan drafted

# Description:

Over the past decade, the generation of heating energy in the centralised heating system has mainly been based on the use of fossil fuels (natural gas accounting for more than 50% of the total fuel used) and two types of technologies: waterheated boilers and cogeneration plants. Following the climate targets set by the RSCM, new solutions are needed to meet the demand for heating among consumers in Riga.

A heating supply decarbonisation plan will be developed in conjunction with the RS, including solutions that take environmental, economic and other aspects into account. It is planned as a result of the project to prepare an investment plan for the implementation of decarbonisation solutions, and it is envisaged to assess the potential of recovering heat from various residual heat sources: industrial processes and data centres, including the recovery of heat from treated wastewater at the Daugavgrīva treatment plant and its integration into the centralised heating system.

# Period:

2024-2027

# Institutions in charge:

REA — in charge of implementing the action

# Stakeholders:

RS - participates in implementing the action

# Source of funding:

Within the budget allocated by the RSCM, EU funding

Global Sustainable Development Goals (SDG):

SDG 7 – Affordable and Clean Energy

SDG 9 – Industry, Innovation and Infrastructure

SDG 13 - Climate Action

GHG emissions reduction forecast:

2030 t CO2e

Circular economy resource value preservation hierarchy:

R1 Rethink

R9 Recover materials and energy

Intervention line:

# E2. Installation of solar panels onto municipal infrastructure (building roofs, degraded urban areas, etc.) and the development of renewable energy communities



Activity outcome:

Solar plants installed on municipal infrastructure, increasing the renewable electricity share.



Performance indicator:

Action implemented

#### Description:

The purpose of the action is to promote the production of renewable electricity for internal consumption in the city. The use of zero-emission RES will be encouraged as part of the action, especially solar energy, using the infrastructure available to the municipality (roofs of buildings, degraded urban spaces, etc.). This action involves technical solutions and procedural improvements, as well as information and education actions.

- assess the possibility of installing solar panels and other renewable energy solutions for local residents (energy communities, companies, etc.), using the infrastructure available to the municipal government (building roods, degraded city areas, etc.)
- install at least 1000 kW of solar panels in municipal facilities every year. Monitor the creation and operation of solar plants as part of EMS
- develop solutions for installing solar panels (e.g., let out roof areas with the guaranteed purchase of energy produced according to the energy exchange market price)
- assess the possibility of installing solar panels and other renewable energy solutions for local residents (energy communities, companies, etc.), using the infrastructure available to the municipal government (building roods, degraded city areas, etc.)
- promote the development of local resident and municipality energy communities by providing information and technical support

#### Period:

Starting in 2025

#### Institutions in charge:

REA – in charge of implementing, supervising and monitoring the action

#### Stakeholders:

UDD, HED, PD — involvement in the implementation of the actions

#### Source of funding:

Within the budget allocated by the RSCM, EU funding

Global Sustainable Development Goals (SDG):

SDG 7 – Affordable and Clean Energy

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

684 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R9 Recover materials and energy

Intervention line:

#### 3.7. Water consumption

#### W1. Promotion of the processing and recycling of sewage sludge



Activity outcome:

Construction of biogas production vats



Performance indicator:

Action implemented

#### Description:

With the expected amendments to the Directive of the European Parliament and of the Council concerning urban wastewater treatment, the EU aims to achieve climate neutrality in the municipal wastewater treatment sector. The amendments to this directive, to be implemented by 2028, will require energy audits of wastewater treatment plants and sewer systems, with the intention to use RES to cover the internal gross energy consumption of large wastewater treatment plants that treat 10,000 p.e. or more of wastewater, with the target of 20% covered by RES by 2030, 40% by 2035, 70% by 2040, and 100% by 2045.

Currently, up to 26% of the heating energy produced at the Daugavgrīva biological treatment plant through the combustion of biogas comes from RES.

In order to reduce pollution and foster the reuse of resources, the construction of biogas production vats is envisaged to start in 2024 in the 2040 Rīgas ūdens Sustainable Development Plan.

#### Period:

Starting in 2024

#### Institutions in charge:

RŪ – ensures the implementation of the action

#### Stakeholders:

MoCE – drafts regulations, supervises goal achievement, plans EU fund co-financing

#### Source of funding:

RŪ budget and EU funding

Global Sustainable Development Goals (SDG):

SDG 6 - Clean Water and Sanitation

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

750 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R9 Recover materials and energy

Intervention line:

## W2. Promotion of the collection, storage and use of water for utility purposes in municipal buildings and grounds



Activity outcome:

CSS load and use of drinking water in irrigation reduced



**Performance indicator:** Collection, storage and use of water for utility purposes in municipal buildings and grounds promoted

#### Description:

As part of the action, it is planned to promote the management of rainwater through technical and natural solutions in the municipality's buildings and grounds. Currently, the city's greenery is primarily irrigated using drinking water supplied by SIA Rīgas ūdens, which increases the consumption of not only drinking water but also of the resources used for its preparation. At the same time, it is essential to reduce the pressure on the centralised sewer system (CSS), the associated costs, and its negative impact on the environment. The following are to be considered as part of the action:

- creation of rainwater collection systems (tanks, drainage systems) in municipal buildings, green spaces, and other priority locations;
- promotion of the idea of reusing rainwater for utility purposes, e.g., watering greenery;
- creation of nature-based solutions (including storage ponds) to relieve the CSS system and reduce the risk of flooding, which also serve as biodiversity support elements;
- integration of green roof and wall systems on municipal buildings to capture rainwater.

#### Period:

2026-2030

#### Institutions in charge:

OMD — in charge of assessing and implementing appropriate solutions

UDD — in charge of promoting the reuse of rainwater

#### Stakeholders:

REA, RM,  $R\bar{U}$  — participate in planning the action and implementing it

#### Source of funding:

Within the budget allocated by the RSCM, EU funding

Global Sustainable Development Goals (SDG):

SDG 6 - Clean Water and Sanitation

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 - Climate Action

GHG emissions reduction forecast:

8.4 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R2 Reduce

R3 Reuse

Intervention line:

#### W3. Use of rainwater to wash the undersides of public transport vehicle



Activity outcome:

Use of rainwater for washing the undersides of public transport vehicles at washing facilities implemented

Drinking water consumption reduced



Performance indicator:

Total rainwater consumption at the washing facilities (m<sup>3</sup>/year)

#### Description:

New public transport vehicle washing facilities are being built at the RS bus depot. The preserved historic underground rainwater collection pond will be integrated into the vehicle washing system. Once the washing facilities are operational, rainwater from this pond will be used to wash the undersides of buses, thus reducing the consumption of drinking water. Water consumption will be recorded at the same time, registering rainwater and municipal drinking water separately.

#### Period:

Starting in 2025

#### Institutions in charge:

 ${\sf RS}-{\sf in}$  charge of implementing the action

#### Source of funding:

RS budget

Global Sustainable Development Goals (SDG):

SDG 6 - Clean Water and Sanitation

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 13 — Climate Action

GHG emissions reduction forecast:

12.1 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R2 Reduce

R9 Recover materials and energy

Intervention line:

## W4. Installation of free drinking water taps and access to them in public spaces



Activity outcome:

Improved access to drinking water in public spaces, reduced amount of waste from disposable products



Performance indicator:

Number of new free taps (per year)

#### Description:

Free drinking water taps are being installed and maintained in public places in Riga to provide access to high-quality drinking water for the city's residents and guests, to reduce packaging waste, and to encourage the sustainable consumption of water. So far, 24 free water taps have been installed across the city, including Vērmanes Garden, Ziedoņdārzs Garden, Esplanāde, Mežaparks, Dzegužkalns Park, and the Krišjāņa Barona Street Playground among others. In the future, it is planned to assess the need for more free water taps, especially in public facilities: museums, schools, hospitals, and other places with high visitor traffic.

#### Period:

2026-2030

#### Institutions in charge:

HED, RNRC — in charge of planning and implementing the action

PD, RŪ – ensure installation and operation

#### Stakeholders:

ECSD — participates in planning the installation of free taps

#### Source of funding:

Within the budget allocated by the RSCM

Global Sustainable Development Goals (SDG):

SDG 6 - Clean Water and Sanitation

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 3 - Good Health and Well-being

GHG emissions reduction forecast:

t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

A0 Refuse

R2 Reduce

Intervention line:

 $<sup>^{\</sup>rm 119}$  Drinking water refilling points. Available at:  $\underline{\rm riga.lv}$ 

#### W5. Promotion of the availability of free water taps in cafés and restaurants



#### Activity outcome:

Public awareness and confidence in the quality of tap water increased, amount of waste from disposable products reduced



#### Performance indicator:

Number of recognition labels issued or used (per year)

#### Description:

The parliament has considered the first reading of a bill <sup>118</sup> that would require food service establishments to provide, at the consumer's request, free drinking water from the water supply system, if it is available at the given location. Menus will also be required to include information about the availability of drinking water. Although a quorum was not reached in the initial vote, 47 parliament members supported the bill in the second vote, with two against and one abstention. There are two readings still left for this proposal, and no final decision has been made.

Although the regulatory changes are still in process, it is important to support this initiative at the level of the municipality and the public. It is necessary to encourage food service companies to participate, informing the public of the quality and safety of tap water, and awarding the companies that voluntarily offer free drinking water with a standardised label of recognition. This would make it easier for residents and guests to identify environmentally friendly dining venues and choose more sustainable alternatives.

#### Period:

2026-2030

#### Institutions in charge:

 $\ensuremath{\mathsf{REA}} - \ensuremath{\mathsf{in}}$  charge of planning and implementing the action

#### Stakeholders:

RITA, RNRC — cooperation in action planning and implementation

#### Source of funding:

Within the budget allocated by the RSCM, EU funding

#### Global Sustainable Development Goals (SDG):

SDG 6 - Clean Water and Sanitation

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

SDG 3 – Good Health and Well-being

#### GHG emissions reduction forecast:

0.8 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

A0 Refuse

R2 Reduce

Intervention line:

Reporting

<sup>120</sup> Free drinking water bill. Source: Parliament

#### 3.8. Mobility and transport

#### MT1. Increasing the use of milled asphalt in road construction



Activity outcome:

Milled asphalt is consistently used in the construction and maintenance of municipal roads, reducing the consumption of primary raw materials and production of construction waste.



Performance indicator:

Number of road sections requiring the use of milled asphalt in construction procurement documents increased (per year).

#### Description:

The purpose of the project is to increase the use of milled asphalt in the renovation, reconstruction and construction of roads by including appropriate requirements in procurement criteria. This approach encourages the use of recycled materials, reduces the need for new resources, and mitigates the impact of road construction on the environment. The inclusion of milled asphalt in these projects also helps optimise construction costs while ensuring quality and encouraging sustainable road solutions that meet modern requirements for sustainable development. The action includes setting such procurement requirements that prioritise the use of milled asphalt in the renovation of road surfaces and establishing supervision processes to ensure compliance with the requirements and to keep track of the amount of milled asphalt used.

#### Period:

Starting in 2026

#### Institutions in charge:

 $\ensuremath{\mathsf{OMD}}$  – in charge of planning and implementing the action

#### Source of funding:

Within the budget allocated by the RSCM, EU funding

Global Sustainable Development Goals (SDG):

SDG 9 – Industry, Innovation and Infrastructure

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

GHG emissions reduction forecast:

161 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R2 Reduce

R3 Reuse

Intervention line:

Reporting

## MT2. Inclusion of other recycled materials in road construction and renovation procurements



Activity outcome:

Use of recycled and alternative materials in road construction promoted



Performance indicator:

Action implemented

#### Description:

Within the road construction procurement process, it is essential to move away from the lowest price as the sole selection criterion, refocusing to high-quality, sustainable and circular-economy solutions. As part of the action, it is planned to include procurement criteria that promote the use of recycled raw materials, such as the use of rubber pellets from discarded tyres and ash in road construction.

Research by Riga Technical University (RTU) shows<sup>119</sup> that modifying bitumen with rubber pellets can significantly improve the durability of a road surface and extend its service life by up to 11 years. This makes it possible to not only reduce the consumption of primary resources and amount of waste produced, but in the long run, also lower maintenance costs.

As part of the action, it is planned to launch a pilot project involving the use of recycled materials, and assess its results to ensure that this practice is expanded to other road construction sites.

#### Period:

2026-2030

#### Institutions in charge:

 $\ensuremath{\mathsf{OMD}}$  – in charge of planning and implementing the action

#### Source of funding:

Within the budget allocated by the RSCM, EU funding

Global Sustainable Development Goals (SDG):

SDG 9 – Industry, Innovation and Infrastructure

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

GHG emissions reduction forecast:

1.7 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R2 Reduce

R3 Reuse

Intervention line:

Reporting

<sup>&</sup>lt;sup>121</sup> Bitumen modification study. Available at: <u>rtu.lv</u>

## MT3. Fostering of bicycle maintenance station development



Activity outcome:

Support infrastructure for cycling provided



Performance indicator:

[10] new public bicycle maintenance stations set up

#### Description:

Currently, there are only a few public bicycle maintenance stations in Riga, which limits cyclists in their ability to perform the necessary maintenance on the road. The goal of the action is to provide convenient access to infrastructure, making it possible for bicycles to be kept in good technical condition, thus improving the safety and comfort of cyclists. This action involves setting up new stations at strategic locations, in particular, as part of establishing existing mobility points at railway stations and near most-visited public facilities (including schools and shopping centres).

#### Period:

Starting in 2026

#### Institutions in charge:

OMD — in charge of implementing the action

#### Stakeholders:

CA – implements the mobility projects

UDD — in charge of planning the action

#### Source of funding:

EU funding

Global Sustainable Development Goals (SDG):

SDG 11 – Sustainable Cities and Communities

SDG 3 – Good Health and Well-being

SDG 13 - Climate Action

GHG emissions reduction forecast:

5379.1 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

A5 Refurbish

Intervention line:

## MT4. Sustainable mobility solutions for municipality employees



Activity outcome:

Effective recording and sustainable management of abandoned bicycles, supporting the reuse and recovery of materials promoted.



Performance indicator:

Concept developed and pilot project carried out

#### Descripti

In order to promote sustainable and convenient travel between meeting locations in RSCM institutions and reduce the environmental impact created by the transport sector, the RSCM plans to engage in a number of mutually supporting activities aimed at improving the travel habits of its employees, introducing clean technologies and improving infrastructure. As part of the action, it is planned to:

- conduct a survey of RSCM employees, with questions about travel habits (commuting as well as travel during working hours), and determine the most frequently used routes between institutions and meeting locations;
- draft a policy for encouraging the use of bicycles, public transport, and zero-emission vehicles among RSCM employees;
- develop a shared-use system concept, including parking space locations, technical solutions, maintenance model, and regulations for use;
- identify the municipality's functions that vehicles are used for and review the possibility of using low-emission vehicles for these functions;
- implement pilot projects to test the concept in practice in a selected area or group of institutions;
- assess the results of the pilot projects to determine the effectiveness, use intensity, and future expansion potential of the system.

#### Period:

2026-2027

#### Institutions in charge:

REA in conjunction with OMD — in charge of planning and implementing the action

#### Source of funding:

Within the budget allocated by the RSCM

#### Global Sustainable Development Goals (SDG):

SDG 3 – Good Health and Well-being

SDG 11 - Sustainable Cities and Communities

SDG 13 - Climate Action

GHG emissions reduction forecast:

101.8 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

A8 Move and repurpose

Intervention line:

Infrastructure

Strategy and roadmaps

## MT5. Recording and circular management of abandoned bicycles



Activity outcome:

Effective recording and sustainable management of abandoned bicycles, supporting the reuse and recovery of materials promoted.



Performance indicator:

Action implemented

#### **Description:**

Bicycles abandoned in public spaces negatively impact the visual appearance of the city, obstruct the movement of people, and create safety risks. In 2024, the RSCM implemented a pilot project, as part of which 120 long-abandoned bicycles were identified and inspected. The results of this project revealed the necessity to develop a permanent system for recording, assessing and managing such bicycles, in order to ensure the recovery of materials in them. As part of the action, it is planned to:

- propose amendments in laws and regulations providing the municipality with clear authority to seize abandoned bicycles;
- implement a single recording and management procedure, including the possibility to refurbish, provide for reuse, or recycle these bicycles.

#### Period:

Starting in 2026

#### Institutions in charge:

OMD, RMP — in charge of planning and implementing the action

#### Stakeholders:

RNRC, REA — cooperation in action planning and implementation

MSARD – ensures regulatory changes

#### Source of funding:

Within the budget allocated by the RSCM, EU funding

#### Global Sustainable Development Goals (SDG):

SDG 9 – Industry, Innovation and Infrastructure

SDG 11 – Sustainable Cities and Communities

SDG 12 - Responsible Consumption and Production

GHG emissions reduction forecast:

0.8 t CO<sub>2</sub>e

Circular economy resource value preservation hierarchy:

R3 Reuse

A5 Refurbish

R9 Recover materials and energy

Intervention line:

Infrastructure

Strategy and roadmaps

Strengthening of knowledge and human resources

<sup>&</sup>lt;sup>122</sup> On long-abandoned bicycles. Available at: <u>riga.lv</u>



# 4. PLAN IMPLEMENTATION AND SUPERVISION











The scope of topics related to the implementation of the RCEAP is all-encompassing, and the achievement of its goals requires not only the involvement of various departments but also a commitment to achieve amendments in laws and regulations at the municipal and national levels and to award funding to achieve these goals. Three-level coordination is used in the implementation of the plan: political support, involvement of executive authorities, and supervision and implementation.



Figure 28. Three levels of coordination

#### **Political support**

In Riga City Council, political engagement and the coordination of issues in various topics take place through the council's committees. Every committee is given a range of fields to take charge of, a goal, and council members assigned to it. The matters of climate policy, city waste management and environmental policy are within the responsibility of the Riga City Council Committee of Housing and Environment. <sup>123</sup> It also conducts the political supervision of REA's activities. The Committee of Housing and Environment is in charge of monitoring the implementation of the RCEAP and, if necessary, coordinating its updates, proposing amendments, and making decisions on the implementation of the goals and actions set.

### Involvement of and supervision by executive authorities

At the executive level, the Executive Director of the city coordinates, within the limits of their competencies, the work of the state city municipality's institutions, including the monitoring of REA activities and the achievement of the RCEAP goals and completion of its actions. The involvement of executive authorities is very important in the implementation of the RCEAP goals, as it is tied to the organisation of work at the municipality, such as holding public procurements, managing resources, or setting up innovation support programmes for municipal companies.

#### **Implementation**

REA is an institution responsible for coordinating the implementation of the RCEAP; it is also substantively responsible for pursuing the topics of the circular economy in the municipality, and it is subordinated to the Executive Director of the City of Riga.<sup>124</sup>

The implementation of RCEAP actions is the responsibility of the RSCM institutions and companies indicated as the institutions in charge of the action in question, in conjunction with other RSCM institutions, in line with their competencies and tasks defined in the plan. Once every two years (by 1 June), REA, working with the institutions specified as responsible for the implementation of the tasks included in the RCEAP, reviews its strategic goals and milestone results, and prepares a progress report on the implementation of the RCEAP. The report is examined and approved at the Committee of Housing and Environment and submitted to the Executive Director. In preparing each of the reports, the REA may set new goals to be measured as it receives new information. The REA must submit the RCEAP implementation report to the Committee of Housing and Environment by 15 September 2031.

#### Political engagement opportunities

During every term of the municipal council, its members may set up various working groups in addition to the existing committees in order to provide political

 $<sup>^{\</sup>rm 123}$  Riga City Council Committee of Housing and Environment. Source: Riga.lv

<sup>124</sup> Riga State City Municipality Statute (2023). Source: Likumi.lv

support for bringing certain matters forward to the executive authorities and to the public.

**Example:** there are currently a number of working groups in Riga City Council, including a Climate Neutrality Working Group and a Waste Reduction and Management Working Group. In the context of the implementation of the RCEAP, the Climate Neutrality Working Group operates as a supervisory entity, which makes sure that all subgroups carry out the planned activities, coordinates any future opportunities for cooperation, and organises additional discussions on the actions, the implementation of which has not been agreed upon in a subgroup. The Climate Neutrality Working Group is currently inactive.

If circular economy solutions become a political priority for achieving climate neutrality in Riga, then it will be necessary to set up a circular economy working group to strengthen political responsibility, as basing the achievement of climate neutrality goals solely on GHG emissions reduction actions will limit the ability to achieve these targets.

The main tasks of the working group are to:

- highlight the particular circular economy topic, explaining its influence on the climate neutrality and compliance goals set for Riga;
- make proposals to the responsible committee on the resources (including funding) needed to implement actions promoting the circular economy;
- if necessary, delegate the implementation of actions to other municipal institutions (for actions set in the action plan or additional actions needed

- for the action plan to help achieve the goal more effectively);
- provide information about changes in the law and regulations necessary to enable the RSCM to achieve the circular economy goals in the sector/ topic in question.

In order to coordinate political engagement in the context of the RCEAP, it is possible to use the existing Committee of Housing and Environment, or to create a separate council committee, tasked with reviewing the planning and allocation of investments necessary to achieve the circular economy goals. Without political support and sufficient funding, there is a risk that the vision previously discussed and the goals associated with it will not be achieved.

### Engagement at the highest level of political leadership

If the positions of vice-mayors will retain the current topic priorities of the committees, it would be best for the vice-mayor tasked with business and innovation assistance affairs to take over the circular economy as part of their area of responsibility. A similar practice is currently used for the political supervision of strategies in other cities (Prague and Tallinn). Such changes can be initiated by Riga City Council members, although it is the REA that must prepare the justification, upon request.



# 5. RCEAP IMPLEMENTATION RISK ANALYSIS











In the context of implementing the RCEAP, risks are defined as a concurrence of different negative circumstances or events that may affect the achievement of its goals. Managing these risks can mitigate or eliminate the barriers to implementation and future challenges.

Risks were assessed using the following risk categories and their descriptions:

Table 10. Risk assessment criteria

Risk impact	
<ul><li>High</li></ul>	Affects more than 80% of the planned goals and action plans.
<ul><li>Medium</li></ul>	Affects 40–79% of the planned goals and action plans.
Low	Affects less than 39% of the planned goals and action plans.
Recycling	
<ul><li>High</li></ul>	Manifestations of the risk have been identified, clearly defined or based on prior experience.
<ul><li>Medium</li></ul>	Manifestations of the risk have been identified, and actions to mitigate the risk have been initiated.
Low	Manifestations of the risk are theoretical, or the risk is easily manageable, and its impact is minimal.

Table 11. RCEAP risk analysis

Risk type	Risk description	Risk impact on RCEAP completion	Risk probability	Risk prevention actions
Operational risks	Low competence and awareness; insufficient interest among the staff of different units of the RSCM make it difficult to implement circular economy actions.	<ul><li>Medium</li></ul>	Low	Provide consistent training and hold regular coordination meetings; prepare internal guideline materials on the circular economy.
	Projects associated with the topics of the circular economy are not coordinated by the REA, creating risks for the systematic achievement of the goals set.	Low	<ul><li>Medium</li></ul>	Introduce a centralised project management mechanism and establish regular cross-departmental working groups for coordination.
Financial risks	Riga City Council members do not allocate funding for the activities that critically need funding to achieve their goals: thus, insufficient funding causes the reality of falling short of the vision that the REA has undertaken to achieve.	● High	● High	Prepare financial feasibility studies and diversify funding sources (EU funds, public-private partnerships, grants), set up a reserve fund.
	Municipal companies are unable to implement circular economy projects due to a lack of funding, thus failing to achieve any of their goals.	<ul><li>Medium</li></ul>	<ul><li>Medium</li></ul>	Prepare joint investment plans with the companies and conduct project pre-selection as part of obtaining co-financing.

Risk type	Risk description	Risk impact on RCEAP completion	Risk probability	Risk prevention actions
Legal risks	The laws and regulations are not amended as envisaged for implementing circular economy solutions, due to which the strategic goals (in areas such as construction and the circular use of municipal resources) cannot be realistically achieved.	<ul><li>High</li></ul>	<ul><li>Medium</li></ul>	Monitor changes in laws and regulations and actively participate in consulting work groups, making proposals for improvements.
Political risks	There is no more political support for achieving climate neutrality targets in Riga.	● High	<ul><li>Medium</li></ul>	Maintain dialogue across political factions and regularly provide information about the progress of the plan; pursue the involvement of the public and the media.
Sustainability risks	Loss of competence or a failure to transfer knowledge can affect the continuity of circular economy initiatives in terms of compliance and politics.	● High	<ul><li>Medium</li></ul>	Establish a knowledge management system and ensure continuity by documenting the processes and training new staff members.

As part of the risk assessment, it is critical for the REA to work on the availability of funding, using the financial options described in the justification. It is important to obtain systematic financial support for projects aimed at bringing resources back into circulation.

The implementation of the RCEAP will require a revision of various internal policies, including that of how work is organised in the municipality. At this stage, each policy planning document is examined in order to assess if the policy impact entity affects the macroeconomic and business environment, the administrative burden and the costs associated with it, the social aspect, the environment and territorial development, national and local budgets, the functions and human resources of governance institutions, the system of laws and regulations, and Latvia's international obligations, as

well as human rights, in particular, the right to privacy (in the processing of personal data).

It must be noted that the RCEAP influences all of the above. Such an influence may be considered negative in the short run; however, in the long term, the impact of the RCEAP will be assessed as positive, with the potential to add value to each of the aspects listed above.



# 6. MUNICIPAL BUDGET IMPACT ASSESSMENT











The actions for implementing the circular economy are largely to take place within the scope of the functions and responsibilities of the participating institutions and the institutions in charge, because these actions are associated with activities for which these institutions are already responsible. Thus, RCEAP provides the vision necessary for adapting sectoral actions for the successful implementation of the circular economy and facilitates the coordination of planning as well as monitoring activities.

It is envisaged that the actions and tasks included in the plan will be implemented within the existing budget whenever possible, with additional financing being obtained from EU funds and other sources, depending on the nature of the action.

However, it should be emphasised that, essentially, RCEAP aims to meet the prerequisites for the

implementation of the circular economy, for which reason the completion of many of the plan's actions is related to the introduction of better governance practices and the improvement of governance and monitoring systems and tools that can be planned within the available budget.

The preparation of the budget took place in close cooperation with all responsible institutions, ensuring a coordinated and thought-out approach to financial planning. Every participating institution was able to identify and indicate the additional funding necessary for the successful implementation of the activities that lie within the remit of that institution. This approach made it possible to draft a realistic and well-justified budget that represents actual needs and ensures an efficient division of resources between various priority fields and projects.

Table 12. Risk assessment criteria

Action area, task					Additional funding necessary				
Action code	Action name	Institution in charge	Implementa- tion period	2026	2027	2028	2029	TOTAL (EUR)	
AA1. Mu	nicipal amenities and	public open							
MPO3	Installation of separate waste bins on the work premises of municipal institutions	HED	2026	35,000	0	0	0	35,000	
MPO5	Developing a circular economy training programme and self-assessment tool	REA	2026	25,000	0	0	0	25,000	
MPO6	Analysis of material streams and monitoring of circular economy targets	REA	2026–2028	20,000	15,000	12,000	0	47,000	
MPO8	Transition from bottled water to filter systems in municipal buildings	REA	2026	35,000	0	0	0	35,000	
AA1. Circular economy points									
CEP1	Ensuring the functioning of the Sadarbnīca space, its further development, and awareness-raising among the public	REA	Ongoing	25,000	25,000	25,000	50,000	125,000	

Action area, task				Additional funding necessary					
Action code	Action name	Institu- tion in charge	Imple- mentation period	2026	2027	2028	2029	TOTAL (EUR)	
CEP2	Creation of circular economy points and their development in neighbourhoods	REA	2026– 2030	80,000	100,000	80,000	120,000	380,000	
AA3. W	aste management							-	
AA2	Development of the availability of waste sorting bins in public outdoor spaces	HED	2026	30,000	0	0	0	30,000	
AA4	Implementation of sustainable food service practices and reduction of food waste in education facilities	REA, ECSD	2027-2028	0	30,000	25,000	0	55,000	
AA3	Creation of 8 sorted waste collection sites and reusable product exchange stations	HED	Until 2029	0	426,437	1,129,487	706,948	2,262,872	
AA7	Exploring of opportunities in small-scale collective composting and its implementation in apartment building courtyards	REA	2026- 2030	15,000	25,000	30,000	50,000	120,000	
AA3. W	aste management								
CM1	Development and implementation of guidelines for sustainable public events	REA	2026	8,000	0	0	0	8,000	

Action area, task				Additional funding necessary					
Action code	Action name	Institu- tion in charge	Imple- mentation period	2026	2027	2028	2029	TOTAL (EUR)	
AA5. C	onstruction								
B5	Encouraging of empty space, land, and building use	RNRC, UDD, OMD	2026-2027	40,000	40,000	40,000	120,000	240,000	
E1	Assessment of heat recovery potential and implementation of solutions	REA	2024-2027	140,000	0	0	0	140,000	
E2	Installation of solar panels onto municipal infrastructure and development of renewable energy communities	REA	Starting from 2025	200,000	180,000	150,000	250,000	780,000	
AA7. Wo	ater consumption								
W2	Implementation of water management solutions in water services	OMD	2026-2029	250,000	400,000	450,000	400,000	1,500,000	
AA8. Mobility and transport									
MT4	Sustainable mobility solutions for municipality employees	REA	2026–2027	100,000	100,000	100,000	100,000	400,000	
TOTAL	FOR ALL ACTIONS			1,003,000	1,341,437	2,041,487	1,796,948	6,182,872	



# 7. ANNEXES











ANNEXES 132

## 7.1. LET'S GO CIRCULAR! Pilot Activity

#### One Circular makers initiative

A hands-on community workshop where Riga residents build personalised modular waste sorting furniture for their homes using free materials. Families work together to construct practical sorting units while learning about circular economy practices, creating both a useful household tool and an engaging entry point into sustainable living. The workshops combine DIY skills-building with environmental education, making waste separation more accessible and enjoyable while strengthening community connections around circular economy goals.

#### **Key Elements:**

- Guided instruction
- Family-friendly building activity
- Take-home sorting furniture
- Social media community engagement
- Entry point to broader circular practices

This pilot directly supports Riga's Integrated Action Plan by addressing a fundamental barrier to circular economy transition: the gap between policy intentions and individual household participation. Many residents remain disconnected from circular practices due to perceived complexity, lack of accessible infrastructure, or insufficient motivation to change established waste habits. The pilot recognises that effective circular economy implementation requires active citizen engagement beyond traditional policy tools like pricing mechanisms.

The workshop approach provides citizens with tangible, hands-on experience in building modular sorting furniture, giving them both practical skills and a sense of agency in creating solutions for their own homes. This moves beyond passive compliance with waste policies to active participation in creating circular solutions. The pilot hypothesis suggests that providing an engaging, supported introduction to waste sorting can increase willingness to participate long-term, potentially transforming temporary workshop participation into sustained circular behaviours.



Figure 29. Example of a call-to-action post

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By bringing families together in workshop settings, the pilot creates opportunities for social interaction, knowledge sharing, and community building around sustainability practices. The documented "smiles and family participation" indicates the activity serves social and emotional needs alongside environmental goals. Rather than overwhelming citizens with complex circular economy concepts, the pilot provides a simple, concrete first step. Building a sorting unit with free materials removes financial barriers while creating a physical reminder and enabler of circular practices in the home.

The modular sorting units address the "accessible infrastructure" component of the action plan by literally placing circular economy tools directly in citizens' homes, making waste separation more convenient and visible in daily life.

The pilot's measurement of social media reach (100+people) and community engagement demonstrates how individual workshops can generate broader awareness and motivation for circular practices across the community. The documented shares, reactions, and comments suggest viral potential for expanding circular behaviour adoption. By testing whether handson activities can bridge the gap between municipal

policies and household behaviour, the pilot provides evidence for how circular economy action plans can move beyond regulatory approaches to include community-based, participatory interventions.

#### **Results and Citizen Impact**

- Tangible progress: Physical sorting units that make circular practices easier
- Social validation: Community recognition and support for sustainable choices
- Knowledge and confidence: Skills and motivation to continue circular practices independently

The pilot demonstrates that effective circular economy implementation requires more than infrastructure and policies—it needs active citizen engagement strategies that make circular practices accessible, enjoyable, and socially rewarding. By documenting both quantitative reach and qualitative engagement, the pilot provides a replicable model for scaling circular behaviours through community-based activities that benefit citizens while advancing municipal sustainability goals. The planned inclusion in the action plan and pursuit of additional funding indicates recognition that such citizen-centred approaches are essential for achieving circular economy transformation at scale.



Figure 30. Example of an end result