

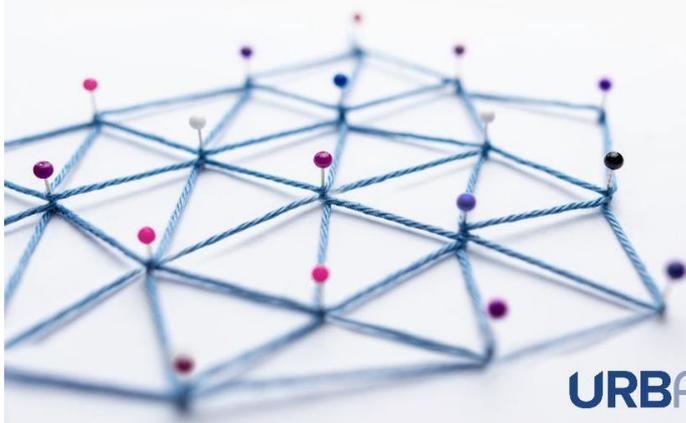
URBACT



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LET'S GO CIRCULAR!

Paving the way for a circular transition of cities



URBACT



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BASELINE STUDY

MUNICH – GUIMARAES – LISBON – GRANADA – RIGA – CLUJ NAPOCA – MALMO – OULU-
CORFU – TIRANA

DECEMBER 2023

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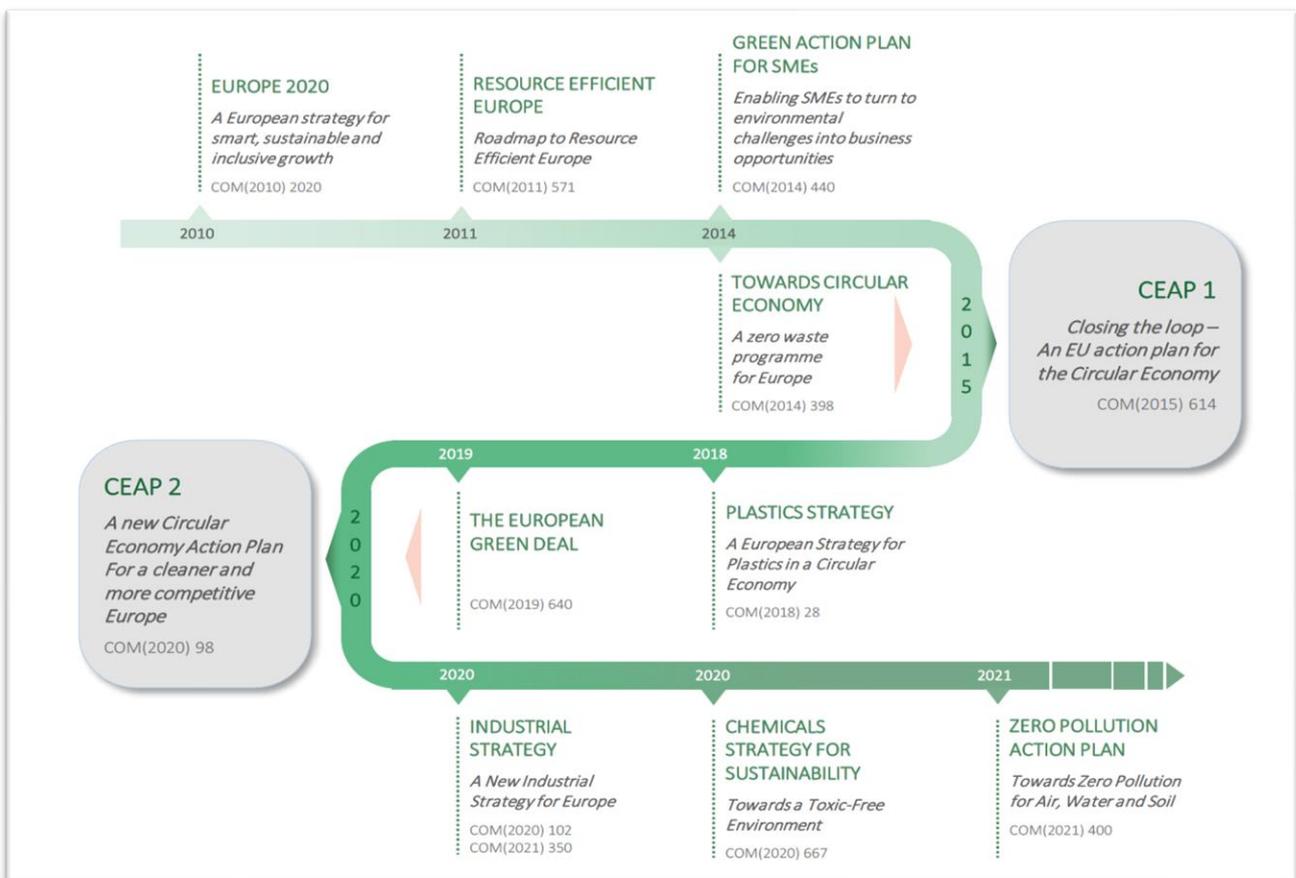
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SECTION I: STATE OF THE ART

1. Introduction

Circular economy is defined as “an economy, where the value of products, materials and resources is maintained for as long as possible and the generation of waste is minimized and goes far beyond simply recycling materials” [1]. One of the chief proponents of the circular economy is to orient systems towards restorative use of resources, leaving the traditional linear consumption model fade away as this entails significant losses in the value chain [2]. The question remains as to how it might be possible to implement this restorative system. Since 2008, the European Commission has been systematically working to tackle this challenge, as the circular economy is perceived to be instrumental in supporting the EU’s commitments on sustainability.

Most recently, in 2020 and in line with the Communication on the European Green Deal [3], the European Commission adopted the **new Circular Economy Action Plan (CEAP 2)** [4]. The ultimate goal is to **stimulate markets for climate-neutral and circular products and services, modernize the EU’s economy and reap the benefits of the transition in the EU and beyond**. The European Union has put in place the strategic framework depicted below.



Infographic 1: EU strategic framework on CE

To this end, the **URBACT “Let’s Go Circular – paving the way for a circular transition of cities” network** is particularly aiming to improve the capacity of the participating cities’ ecosystem to design integrated action plans. It addresses all issues relevant to a holistic strategy of circular city ecosystems, fostering innovative solutions.

The aim of this section is to present a broad picture of the current state of play relating to circular economy.

1.1 Circular economy action plan: policy context

CEAP 2 announces initiatives **along the entire life cycle of products**. It targets how products are **designed**, promotes circular economy **processes**, encourages **sustainable consumption** by supporting the right to repair, and aims to ensure that **waste is prevented** and the resources used are kept in the EU economy for as long as possible. It introduces legislative and non-legislative measures targeting sectorial areas where action at the EU level brings real added value. Measures introduced under the new action plan aim to:

- Make sustainable products the norm in the EU
- Empower consumers and public buyers
- Focus on the sectors that use most resources and where the potential for circularity is high such as electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, food, water and nutrients
- Ensure less waste
- Make circularity work for people, regions and cities
- Lead global efforts on circular economy

Since 2020, the Commission has started systematically **mainstreaming the sustainability requirements for circular product and production design** in its legislative proposals, such as:

- A proposal for a sustainable product policy initiative [5]
- A proposal for a common charger solution and a system to reward consumers for returning their old devices under the circular electronics initiative [6]
- A proposal for a revision of the Industrial Emissions Directive [7], including the incorporation of circular economy practices into upcoming 'best available techniques' reference documents (BREFs)
- A review of the 2011 Restriction of Hazardous Substances Directive [8] and guidance to clarify its links with the 2006 regulation on the registration, evaluation, authorization and restriction of chemicals (REACH) [9] and Ecodesign requirements

In February 2021, the Parliament adopted a **resolution on the CEAP 2** demanding additional measures to **achieve a carbon-neutral, environmentally sustainable, toxic-free and fully circular economy by 2050**, including tighter recycling rules and binding targets for materials use and consumption. In this context:

- Products should be designed in a way that reduces waste, harmful substances and pollution, and protects human health
- The consumer benefits of a circular economy should be made clear
- Science-based binding 2030 EU targets for materials use and consumption footprint, covering the whole lifecycle of each product category placed on the EU market, should be harmonized
- Comparable and uniform circularity indicators for material and consumption footprints should be introduced
- The scope of the Ecodesign Directive to include non-energy-related products should be broader; this should set horizontal sustainability principles and product-specific standards so that products placed on the EU market perform well, are durable, reusable, can be easily repaired, are not toxic, can be upgraded and recycled, contain recycled content, and are resource- and energy-efficient
- Championing the EU Ecolabel as a benchmark for environmental sustainability; strengthening the role of Green Public Procurement by establishing minimum mandatory criteria and targets; mainstreaming circular economy principles into member states' national recovery plans

In March 2022, **the first package of measures** to speed up transition towards a circular economy, include boosting sustainable products, empowering consumers for the green transition, the review of the construction product regulation, as well as a strategy on sustainable textiles.

As of the end of 2022, with the exception of a new directive covering **common chargers** [10], which is due to be applied from December 2024, the legislation governing these initiatives was still in the process of being adopted. In February 2023, the Commission published its **Green Deal Industrial Plan**, which refers to the Circular Economy Action Plan in connection with their shared aim of setting the framework for the transformation of the EU's industry for the net-zero age [3].

Strategies related to CEAP 2

- [EU strategy to reduce plastic waste](#)
- [How textile production and waste affects the environment](#)
- [E-waste facts and figures](#)
- [Farm to Fork Strategy](#)
- [New EU rules for more sustainable and ethical batteries proposed by Parliament](#)
- In January 2023, Parliament [voted on its position regarding waste shipment rules](#)
- [New EU-wide rules on packaging](#)
- [how the EU wants to develop carbon sinks](#)
- (COM/2022/140 final) extending the [Ecodesign Directive](#) to non-energy-related products and creating Digital Product Passports
- [New consumer agenda](#)
- [Proposal for a Directive on common rules promoting the repair of goods](#)

1.2 Relevant cross cutting issues

1.2.1 Circularity as a prerequisite for climate neutrality

European Climate Law, raises the EU's target of reducing net greenhouse gas emissions at least 55% by 2030 (from the current 40%) and makes climate neutrality by 2050 legally binding. The Climate Law is part of the European Green Deal, the EU's roadmap towards climate neutrality. In order to achieve climate neutrality, the **synergies between circularity and reduction of greenhouse gas emissions need to be stepped up**. The Commission will:

- Analyse how the impact of circularity on climate change mitigation and adaptation can be measured in a systematic way
- Improve modelling tools to capture the benefits of the circular economy on greenhouse gas emission reduction at EU and national levels
- Promote strengthening the role of circularity in future revisions of the National Energy and Climate Plans and, where appropriate, in other climate policies

Next to reducing greenhouse gas emissions, achieving **climate neutrality will also require that carbon is removed from the atmosphere, used in our economy** without being released, and stored for longer periods of time. Carbon removals can be nature-based, including through restoration of ecosystems, forest protection, afforestation, sustainable forest management and carbon farming sequestration, or based on increased circularity, **for instance through long term storage in wood construction**, re-use and storage of carbon in products such as mineralisation in building material.

To incentivise the uptake of carbon removal and increased circularity of carbon, in full respect of the biodiversity objectives, the Commission will explore the development of a regulatory framework for **certification of carbon removals based on robust and transparent carbon accounting to monitor and verify the authenticity of carbon removals**.

1.2.2 Getting the economics right

Accelerating the green transition requires careful, yet decisive measures, to steer financing towards more sustainable production and consumption patterns. The Commission has already taken a series of initiatives in this respect, including **integrating the circular economy objective under the EU Taxonomy Regulation** [22], and carrying out preparatory work on **EU Ecolabel criteria for financial products**. The **Circular Economy Finance Support Platform** will continue to offer guidance to project promoters on circular incentives, capacity building and financial risk management. EU financial instruments, such as SME guarantees under the current framework and InvestEU as of 2021, mobilise private financing in support of the circular economy. The Commission has also proposed **a new own resource** for the EU budget based on the amount of non-recycled plastic packaging waste. In addition, the Commission will:

- Enhance disclosure of environmental data by companies in the upcoming review of the non-financial reporting directive
- Support a business-led initiative to develop environmental accounting principles that complement financial data with circular economy performance data
- Encourage the integration of sustainability criteria into business strategies by improving the corporate governance framework
- Reflect objectives linked to the circular economy as part of the refocusing of the European Semester and in the context of the forthcoming revision of the State Aid Guidelines in the field of the environment and energy
- Continue to encourage the broader application of well-designed economic instruments, such as environmental taxation, including landfill and incineration taxes, and enable Member States to use value added tax (VAT) rates to promote circular economy activities that target final consumers, notably repair services (on going legislation)

1.2.3 Driving the transition through research, innovation and digitalisation

European businesses are frontrunners in circular innovations and cities are important supporters of these. The European Regional Development Fund, through smart specialisation, LIFE and Horizon Europe will complement private innovation funding and support the whole innovation cycle with the aim to bring solutions to the market. Horizon Europe will support the development of indicators and data, novel materials and products, substitution and elimination of hazardous substances based on “safe by design” approach, circular business models, and new production and recycling technologies, including exploring the potential of chemical recycling, keeping in mind the role of digital tools to achieve circular objectives. Marie Skłodowska Curie Actions can in addition support development of skills, training and mobility of researchers in this area.

Digital technologies can track the journeys of products, components and materials and make the resulting data securely accessible. The **European Dataspace for Smart Circular Applications (EDSCA)** for achieving the objectives of the Green Deal will provide the architecture and governance system to drive applications and services such as product passports, resource mapping and consumer information. The EDSCA is planned to first assist in the creation of [Digital Product Passports](#) for electronics and batteries and then to expand to textiles and building materials.

The European Institute of Innovation and Technology will coordinate innovation initiatives on circular economy in collaboration with universities, research organisations, industry and SME’s within the Knowledge and Innovation Communities.

2. Monitoring framework for the circular economy

In 2023, the Commission updated the **Monitoring Framework for the Circular Economy** [11] previously adopted in 2018. In line with the European Green Deal and the 2020 Annual Sustainable Growth Strategy [12], the new monitoring framework **includes a new dimension on global sustainability and resilience**, which adds to the already existing four dimensions of the previous monitoring framework (production and consumption; waste management; secondary raw materials; competitiveness and innovation). The new monitoring framework includes **new indicators**, in particular: **material footprint, resource productivity, consumption footprint, greenhouse gas emissions from production activities and material dependency**.

Overall, relying on European statistics as much as possible, **new indicators take account of the focus areas in this action plan and of the interlinkages between circularity, climate neutrality and the zero pollution ambition**.

Table 1: Indicators included in the EC Circular Economy monitoring framework

Key areas	Indicators
Production & consumption	1. EU self-sufficiency for raw materials 2. Green public procurement 3. Waste generation <ul style="list-style-type: none"> a. Generation of municipal waste per capita b. Generation of waste excluding major mineral waste per GDP unit c. Generation of waste excluding major mineral waste per domestic material consumption unit 4. Food waste
Waste management	5. Recycling rates <ul style="list-style-type: none"> a. Recycling rate of municipal waste b. Recycling rate of all waste excluding major mineral waste 6. Recycling/recovery for specific waste streams <ul style="list-style-type: none"> a. Recycling rate of overall packaging waste b. Recycling rate of plastic packaging waste c. Recycling rate of wooden packaging d. Recycling rate of electrical and electronic waste (e-waste) e. Recycling of biowaste per capita f. Recovery rate of construction and demolition waste
Secondary raw materials	7. Contribution of recycled materials to raw materials demand <ul style="list-style-type: none"> a. End-of-life recycling input rates b. Circular material use rate 8. Trade in recyclable raw materials
Competitiveness/ innovation	9. Private investments, jobs and GVA related to circular economy sectors <ul style="list-style-type: none"> a. Gross investment in tangible goods b. Number of persons employed c. Value-added at factor cost 10. Number of patents related to recycling and secondary raw materials
Global sustainability and resilience	11. Global sustainability Consumption footprint (index 2010=100 and times the planetary boundaries is transgressed) GHG emissions from production activities (kg per capita) 12. Resilience Material import dependency (%) EU self-sufficiency for raw materials (%)

2.1 Recommendations by the EU partnership on circular economy

The Partnership on Circular Economy proposes three vertical themes and one horizontal theme for further investigation. The themes cover the whole loop and reflect the most important aspects from a city perspective. The following themes have been selected.

Table 2: Themes selected the EU partnership on circular economy

Theme	Sub-themes
Urban resource management	Urban resource efficiency-including mapping of resource (e.g. biomass) Value chains of materials –identifying, separation, logistic, treatment etc. Resource management, including recycling Buildings (repair and reuse) Water as a resource (incl. water/wastewater re-use and management of waste water)
Circular Business Enablers and Drivers	Promote eco-design concept Sustainable buildings incl. renovation and re-use space Industrial symbiosis (cluster development, innovation parks, business incubator centre/programs and platforms for knowledge sharing) Innovative business models (such as promoting the sharing economy/ services) Valorising urban bio-waste and wastewater into high-value bio-based products-a bio-based economy Circular Public Procurement to Enforcement / apply public procurement legislation Lifecycle approach Requirement for use of secondary materials
Circular Consumption	Private procurement Eco-labelling and other consumer awareness building Eco-design (awareness, education) Sustainable food consumption (food waste prevention and urban farming) Prevent excessive resource use (food and beverages, clothing, packaging and consumer electronics) Other waste prevention and diversion from the waste stream through preparation for reuse Retail (e-commerce) Sharing economy in various sectors Increasing reuse and repair Public consumption in production of services to their citizens.
Governance	Integrated/holistic and systematic governance approaches Urban themes and activities with circular potential and inherent links and inter-dependencies How can the key stakeholders in the circular economy work better together(e.g. on administration, business, media, civil society and citizen level) Circular planning and policy making Circular regulation and incentives Circular knowledge management and sharing Circular financing Circular development monitoring and reporting Improved coordination of stakeholders (e.g. within EU (Different DGs, Parliament, Council), Member States, cities and across multiple levels of government

2.2 SDGs and the EC framework for monitoring circular economy

At the heart of the “2030 Agenda for Sustainable Development” lay the 17 Sustainable Development Goals, (SDGs) which are an urgent call for action by all countries in a global partnership. In this context circular economy is recognized for its importance towards eliminating waste and the continual use of resources as it aims to keep products, equipment and infrastructure in use for longer, thus improving the productivity of these resources. CE and SDGs are both relevant pillars for sustainable development. Based on the scientific work of Schroeder et al. (2018), indicators included in the SDG framework have been classified according to their ability to address circular economy. The classification has been made using the following categories: (1) direct/strong contribution of circular economy practices to achieve each SDG (2) indirect contribution (3) progress on SDG drives the uptake of circular economy practices (4) weak or no link

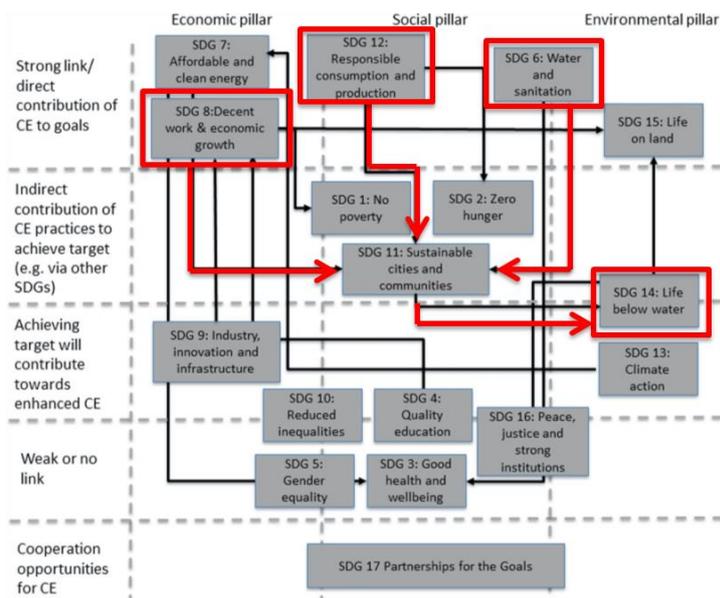


Figure 1: Interaction between SDGs and CE practices, Schroeder et al. (2018)

and (5) synergistic opportunity to promote circular economy practices. Although circular economy is closely related to SDG 12 Sustainable Consumption and Production, CE practices and principles are transversal. The strongest relationships and synergies between CE practices and SDGs **lie within SDG 6 Clean Water and Sanitation, SDG 7 Affordable and Clean Energy, SDG 8 Decent Work and Economic Growth, SDG 12 Sustainable Consumption and Production and SDG 15 Life on Land**. Taking into consideration the classification of SDGs according to their ability to address circular economy practices, the SDGs have also been grouped according to economic, social, and environmental pillar they reflect, results are depicted in Figure 1, where the red arrows between the SDGs indicate the main interactions and connections between the SDGs in relation to circular economy practices.

2.3 Circular economy monitoring results

In 2016, an EEA report openly communicated that for most countries, circular economy means better waste management [13]. This **misinterpretation of the notion**, among other reasons, such as lack of investments, insufficient use of economic instruments and incentives, lack of integrated policy, has been the most important **leading to the gap in circular economy principals' implementation in the EU**.

The lacking behind is depicted in the [Sankey diagram](#), showing the flows of materials as they pass through the economy and are eventually discharged back into the environment or re-fed into the economic processing. Materials are extracted from the environment to produce products and assets, or as a source of energy; they accumulate in societal stocks and they are eventually discharged to the environment as residuals. Imports and exports, which are flows of products with other economies, are also shown in the Sankey diagram. The Sankey diagram shows that **67 % (5.44 Gt) of raw materials processed in the EU (8.09 Gt) originate from domestic extraction, 20 % from imports (1.62 Gt) and 13 % from recycling and backfilling (1.03 Gt), while 58 % of raw materials processed were used to make products (4.72 Gt)**. The rest were mainly exported or used for producing energy.

2.3.1 Circularity rate (CMUR)

The monitoring framework for circular economy [11] included **the 'circular material use rate' indicator**, also known as the **circularity rate**, which measures the share of material recycled and fed back into the economy. Some international organisations and national authorities view it as a proxy for countries' overall progress. The Commission itself used this indicator for setting the CEAP 2 target for 2030 and in its annual country reports to show member states' success in achieving the circular-transition objectives.

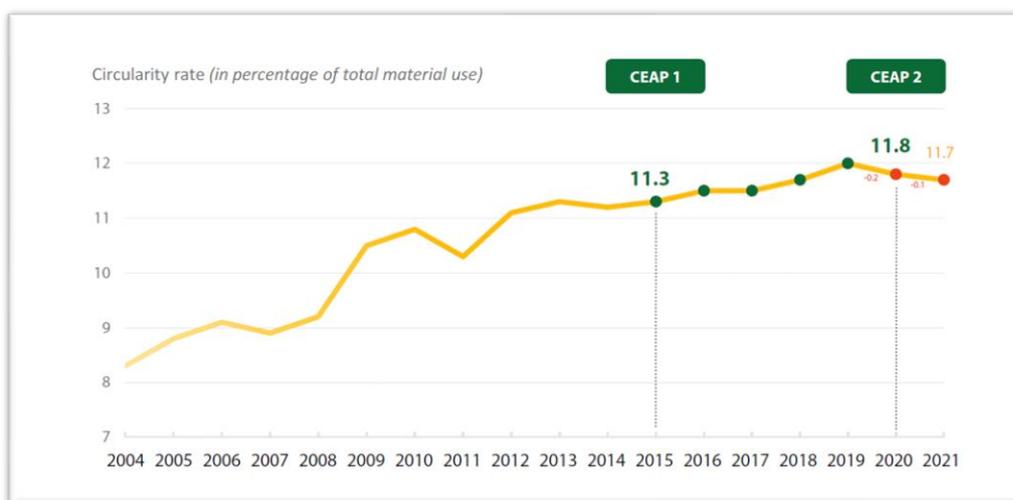


Figure 2: [EU-27 progress towards a circular economy](#)

Figure 2 shows that between 2015 and 2021, the average circularity rate for all EU member states (the 'EU-27') increased by only 0.4%.

While the Commission's CEAP 2 objective is to double the 2020 circularity rate by 2030, the actual circularity rate has declined slightly since 2019.

The 2021 EU circularity rate of 11.7% is higher than the most recent global circularity rate which stands at 7.6%, down from 9.1% in 2018.

Figure 3 shows that there is significant variation in circularity rates among member states – some use many times more recycled materials than others. It also shows the progress made by each member state between 2015 and 2021, and the amount of waste generated. Seven member states regressed during this period.

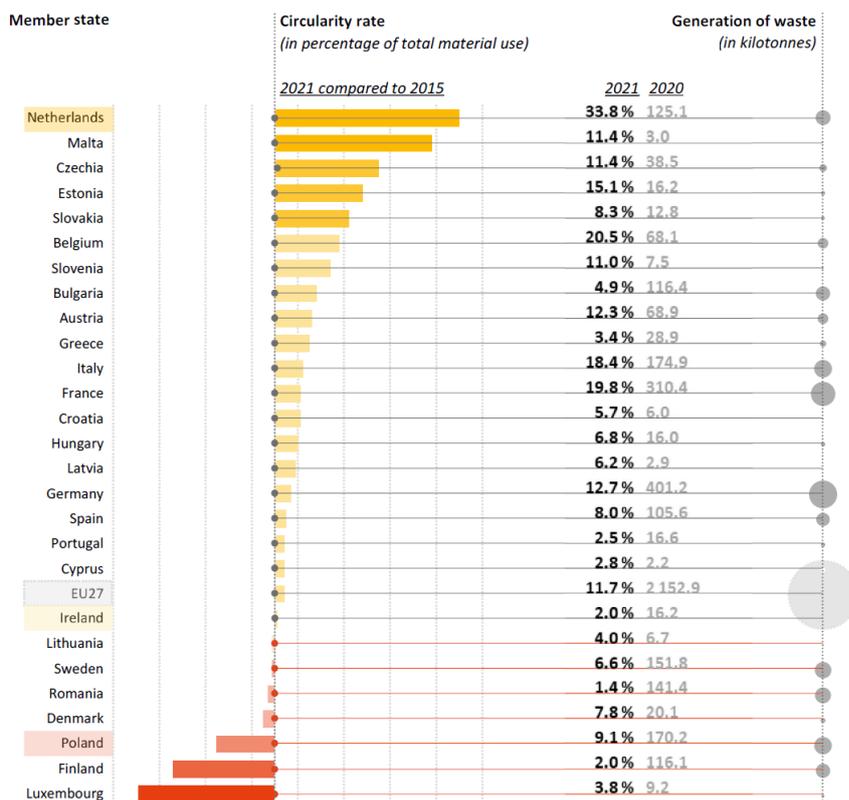


Figure 3: Eurostat circular material use rate and Generation of waste

2.3.2 Life Cycle assessment by JRC

The European Commission has developed an assessment framework to monitor the evolution of the overall consumption. The consumption footprint responds to key challenges posed by the need of a systemic and holistic assessment of transition towards sustainability and represent a key set of indicators to support the ambitions of the European Green Deal.

This assessment framework is built on a consumption-based perspective, in which environmental impacts

Contribution of areas of consumption
European Union 27 - 2021 - single weighted score

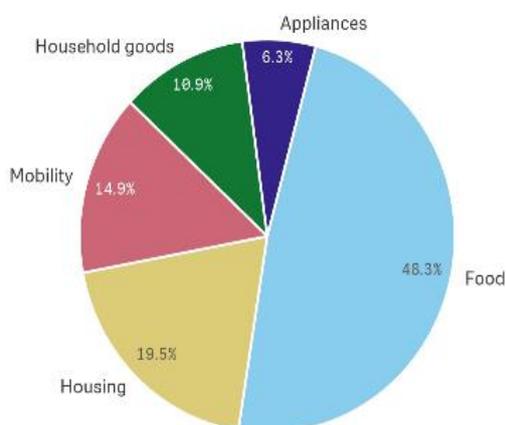


Figure 4: Contribution of areas of consumption, 2021 [14] and own

of the entire product life cycle (raw material extraction, production, use phase, re-use/recycling and disposal) are allocated to the country where the product is consumed. The consumption footprint indicator is a Life Cycle Assessment (LCA)-based set of indicators for assessing the environmental impact of EU consumption aiming at monitoring progress towards EU policy ambitions, such as circular economy (Circular Economy Action Plan), zero pollution (Zero Pollution Action Plan), sustainable food production (Farm to Fork Strategy) and biodiversity conservation (EU Biodiversity Strategy for 2030). The importance of a consumption and supply-chain perspective as well as the relevance of environmental footprint information regarding consumption

and products have been reiterated in new environmental policies under the European Green Deal.

Moreover, assessing the environmental impacts of consumption of goods and services is crucial for achieving the Sustainable Development Goal on responsible production and consumption (SDG 12). While the consumption footprint indicator focuses on country performance as well as at the performance of the EU as a whole, the **domestic footprint indicator focuses on the environmental impact of territorial activities of domestic production and consumption** [15]. Both indicators can be employed for policy support. Further reading: [consumer footprint calculator](#).

2.3.3 Impacts of consumption through the lens of SDGs

Contribution to SDG 12 (single weighted score) by individual SDG
European Union 27 - 2021

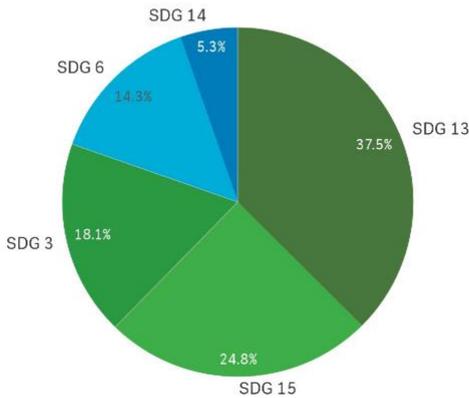
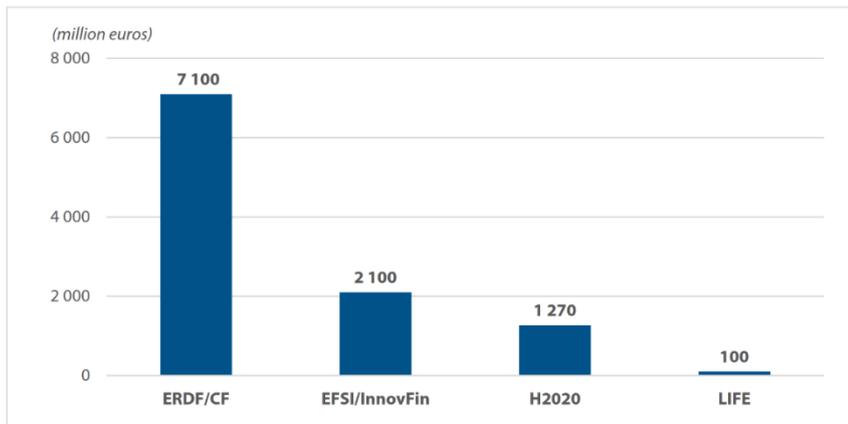


Figure 5: Contribution of areas of consumption EU-27 (2021)

The Consumption Footprint assesses the environmental impacts of consumption and production patterns. The single weighted score of the indicator allows to observe **trends in relation to SDG12** on ensuring sustainable consumption and production. **Circular economy strategies, by aiming to retain the value and extend the life of products, can reduce resource consumption and consequently reduce the impacts on the environment and climate.** Meeting the target of doubling the CMUR would mean an increase from 11.7% in 2021 to 23.4% by 2030 and the average CMUR growth rate of 2011-2021 would have to increase sixfold [16].

3. Contribution of EU funds

The Commission committed to promoting the use of the range of EU funding, by including actions in CEAP 1 relating to the targeted outreach for the cohesion policy funds and EFSI and advancing innovation through Horizon 2020 under the “Industry 2020” topic. According to the 2019 CEAP 1 implementation report [17], the **EU planned more than €10 billion in funding for the transition to a circular economy** (to invest in innovation and support adaptation of the industrial base) between 2016 and 2020 period. The bulk of this funding was provided via the cohesion policy funds (ERDF and Cohesion Fund).



Source: ECA, based on the 2019 Commissions Implementation Report of CEAP 1.

Figure 6: Planned EU funding for circular economy by 2020

The Cohesion Fund generally funded for environmental projects relating to sustainable development and energy, mainly waste management infrastructure, whereas the ERDF supported research and innovation and environmentally friendly production processes.

According to the 2019 CEAP 1 Commission implementation report, 75% of the planned €7.1 billion in cohesion policy fund spending on circular economy related to the implementation of EU waste legislation. In CEAP 2, the Commission stated that it would ensure that all regions would benefit from the transition to a circular economy by offering them support to implement their strategies and projects, through the cohesion policy funds, the new Just Transition Mechanism and urban initiatives.

The 2021-2027 Common Provisions Regulation (CPR) sets five policy objectives, the first two of which also refer to the transition to a circular economy. In addition, there are specific objectives for each fund: the ERDF and the Cohesion Fund support the transition to a circular economy under two specific objectives. However, **the monitoring indicators and enabling conditions for the 2021-2027 period, as set out in the CPR and supporting legislation, are limited to waste collection and processing; the monitoring system does not provide any specific information on circular design nor require cohesion policy funding to be targeted at the relevant investments.**

3.1 Horizon

The lack of systematic monitoring of Horizon 2020 funding and of projects' contribution to the circular transition made it difficult to assess their effectiveness [18].

The successor to Horizon 2020 for the 2021-2027 period is **Horizon Europe with a budget of €95.5 billion.** The circular economy is referred to, directly or indirectly, in **four of Horizon Europe's six themes or 'clusters'** (cluster 1 'Health', cluster 4 'Digital, industry and space', cluster 5 'Climate, energy and mobility', and cluster 6 'Food, bioeconomy, natural resources, agriculture and environment'). Circular design is covered mainly by cluster 4, with expected impacts including eco designed products and services and sustainable-by-design advanced materials and technologies.

In the 2021-2022 Horizon Europe work programme, around 25% (€900 million) of the final budget for cluster 4 and around 14 % (€315 million) of the final budget for cluster 6 contribute to the circular economy. This two-year work programme therefore provides for almost as much circular-economy investment (€1215 million) as the entire Horizon 2020 programme (€1332 million).

The Horizon Europe strategic plan 2021-2024 [19] refers to the issue of large-scale deployment of EU-funded research solutions. However, solutions relating to circular product design may often require further development because of their relative immaturity and the additional investment needed before they can be used by businesses. The solutions may also be affected by the limitations in downstream synergies between Horizon 2020 and Cohesion policy programmes.

3.2 LIFE programme

As was also the case with Horizon 2020, the lack of systematic monitoring of LIFE funding and of projects' contribution to the circular economy made it difficult to assess their effectiveness in contributing to CEAP objectives for circular design. **The 2021-2027 LIFE programme is intended to complement public and private innovation funding for the transition to a circular economy.** Its 'circular economy and quality of life' sub-programme, which specifically but not exclusively finances projects on circular economy, has an overall budget of €1345 million, of which €700 million has been allocated for the period until 2024. The priority topics for 2021 and 2022 and the related calls under this sub-programme included investments relating to circular design (i.e. implementation of 'design for the environment' solutions, including circular design, to improve durability, reparability, reusability, upgradability, recycling and use of recycled content in new products).

3.3 InvestEU

For 2021-2027, the EFSI has been succeeded by the new InvestEU programme [20], that refers to the circular economy as an area for investment, particularly **prioritising key sectors that have the most potential for circularity.** Although this legal framework is more specific than the EFSI's framework about supporting

projects relating to the design and production phases of circular economy, the uptake of these instruments still depends on market demand, which is stimulated by the EIB's and Commission's targeted outreach and advisory activities.

3.4 ERDF

In the programming period 2014-2020 around € 22.9 billion of the ERDF (Table 3) was used to support projects related to the development or adoption of circular economy technologies, and more eco-friendly business models (12% of total ERDF). Circular economy projects associated directly with the development or adoption of technologies to support a more efficient use of resources (e.g. waste reduction, re-use of by-products and resource optimization) represent 67% of total ERDF circular economy-related projects (€15.4 billion) [21] The total corresponds to the sum of the regional values, excluding projects without Nuts 2 level localisation and located in extra-regions.

Table 3: ERDF projects in circular economy by category [21]

Category	EUR - EU funds	
Circular economy (Total ERDF)	22,894,079,300	12%
<i>Circular economy by typology:</i>		
• Technology-related	15,451,148,625	67%
• Non-technology-related	7,442,930,675	33%
• Research & Innovation	3,301,948,009	14%
• Non-Research & Innovation	19,592,131,291	86%
• Inter-regional collaboration	1,174,239,392	5%
• Non-inter-regional collaboration	21,719,839,908	95%
<i>Circular economy by sectors or project-related activities:</i>		
• Textile	641,726,403	3%
• Construction	12,939,234,723	57%
• Energy-intensive industries	1,076,834,881	5%
• Other economic activities	8,236,283,293	35%

Where do we stand?

Meeting the target of doubling the CMUR, meaning increase from 11.7% in 2021 to 23.4% by 2030, is rather unlikely, considering the very slight increase in the CMUR in the previous decade, no increase at all between 2020 and 2021 and projections by the OECD predicting an increased future demand for materials in the EU by 2030. The latter is important, since **increasing recycling alone will not allow the EU to achieve the target. Increased recycling coupled with reduced material use would be required.** Reducing the use of heavier material groups like non-metallic minerals and metals has a greater potential for increasing the CMUR. However, since material extraction has different environmental impacts, measures should also focus on **reducing the consumption of fossil energy materials and increasing the sustainability of biomass production** in view of reducing environmental pressures.

In addition, there are weaknesses in the monitoring framework of circular economy.

Key facts

- The EU generates more than 2.5 billion tonnes of waste a year. TEU exports of waste to non-EU countries reached 32.7 million tonnes in 2020. The majority of shipped waste consists of ferrous and nonferrous metal scrap as well as paper, plastic, textile and glass wastes and mainly goes to Turkey, India and Egypt
- Electronic and electrical waste, or e-waste, is the fastest growing waste stream in the EU. Less than 40% is recycled
- An estimated 20% of food is lost or wasted in the EU
- Packaging waste in Europe reached a record high in 2017
- Construction accounts for more than 35% of total EU waste
- More than 20% of energy consumed in the EU comes from renewable sources
- [77% of EU consumers would rather repair their goods than buy new ones](#), but ultimately have to replace or discard them because of the cost of repairs and lack of service provided
- Sectors not covered by the current Emissions Trading System – such as transport, agriculture, buildings and waste management – still account for about 60% of the EU's overall emissions
- In 2021 alone, existing ecodesign requirements saved consumers €120 billion. The rules have also led to a 10% lower annual energy consumption by the products in scope
- EU forests absorb the equivalent of nearly 7% of total EU greenhouse gas emissions each year

Forthcoming targets

- Cutting of emissions in sectors covered by the Emissions Trading System to 62% by 2030, from 2005 levels
- Parliament backed the Commission proposal of zero CO₂ emissions for cars and vans by 2035 with intermediate emissions reduction targets for 2030 of 55% for cars and 50% for vans
- Parliament is working on rules for the energy performance of buildings with the aim of reaching zero-emission building stock by 2050
- The EU will create a Carbon Border Adjustment Mechanism applying a carbon levy on imports of certain goods from outside the EU. It will cover goods from energy-intensive industries such as iron, steel, cement, aluminum, fertilizers and hydrogen
- The EC proposed emissions from sectors not covered by the current Emissions Trading System should be cut 40% by 2030 compared to 2005
- EC approved new rules governing the land use, land use change and forestry sector, increasing EU carbon sinks 15% by 2030

The new rules aim to raise the share of renewables in the EU's final energy consumption to 42.5% by 2030, while EU countries should aim for 45%. By 2030, the new framework can lead to 132 mtoe of primary energy savings, which corresponds roughly to 150 bcm of natural gas, almost equivalent to EU's import of Russian gas.

4. Cities and circular economy

4.1 Why are cities important?

Cities are at the centre of key decisions determining economic growth, social well-being and environmental benefits. Despite taking up just 2% of global landmass, our urban centres consume more than 75% of natural resources, are responsible for over 50% of solid waste, represent almost two-thirds of global energy demand [24] and emit up to 60% of greenhouse gases, contributing to pollution, climate change and biodiversity loss [25]. Also, a total of 80% of food is consumed in cities [27].

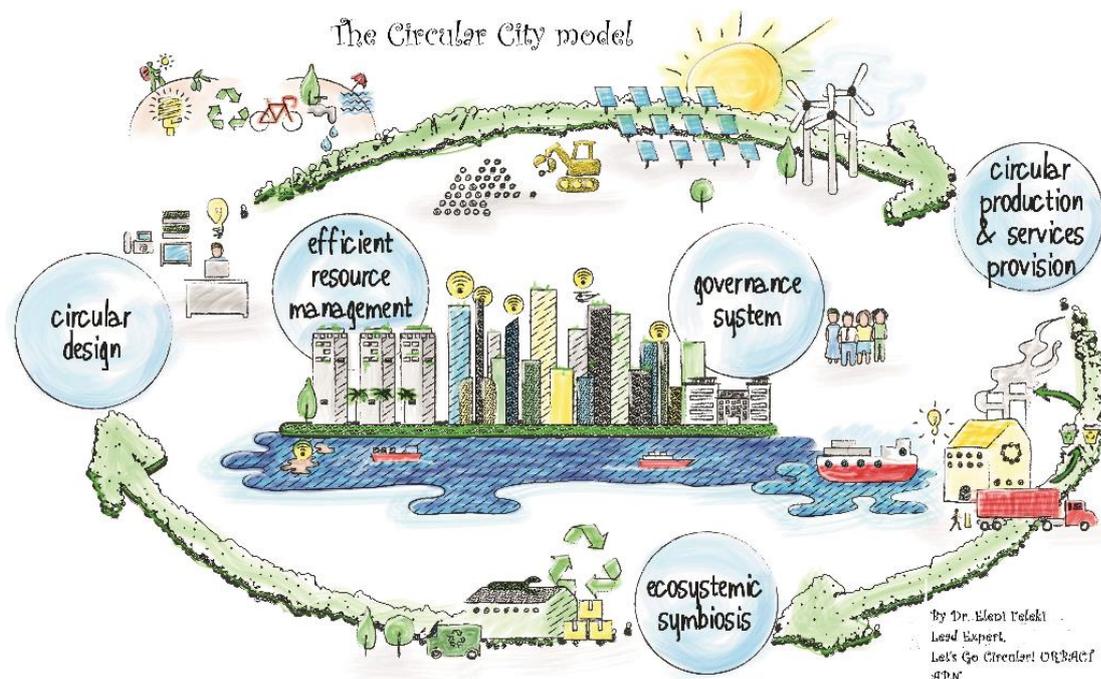
By 2050, the global population will reach 9 billion people, 55% of which will be living in cities, high-density places of at least 50000 inhabitants. The pressure on natural resources will increase, while new infrastructure, services and housing will be needed. It is estimated that globally by 2050, the levels of municipal solid waste will double. At the same time, water stress and water consumption will increase by 55% by 2050 [28].

Acknowledging the challenges, developments in circular manufacturing, fashion, transport, food and procurement are already being led from urban areas. Now is the time to take full advantage of the wealth of opportunities in cities to create a system that can work long-term for the economy, society, and the environment.

4.2 What is a circular city?

A circular city has embedded the principles of the circular economy across the entire urban area and the important sectors and value chains. It is operating within an interconnected network of systems that are designed to enable maximum use of resources, regenerate nature and decrease pollution. In a circular city, collaboration between citizens, authorities, research facilities, and businesses is achieved.

Products, services, infrastructure, buildings, and vehicles are designed to be durable, adaptable, modular, easy to maintain, share and repurpose, and locally sourced and serving consumption. A circular city is



powered by renewable energy, everything can be composted, reused, or recycled while nature is flourishing, abundant, and used as design inspiration.

In cities underpinned by circular economy principles, urban policy levers work to enable:

- Waste and pollution to be designed out of products and urban systems
- Materials to be kept in use and maintain their value
- Natural systems in and around cities to regenerate

From an impact point of view, the circular economy in cities and regions is expected to reduce negative impacts on the environment through pollution decrease, increased share of renewable energy and reduction of raw materials, water, land and energy consumption [31] while potentially increasing resilience and enhancing opportunities for economic growth and jobs.

The importance of creating responsible consumption and production and taking a new approach to materials and value in line with circular economy principles is also identified in the Sustainable Development Goals. SDG 11 Sustainable Cities and Communities and SDG 12 Responsible Consumption and Production are closely linked. The International Resource Panel has noted that circular economy is key to achieving SDG 12 Responsible Consumption and Production, and that success in this area will have positive benefits for the wider SDGs and can help to mitigate many trade-offs. Similarly, circular economy is being embraced as a key framework for delivering climate objectives.

4.3 What is the role cities can play in boosting circular economy?

Both the OECD Principles on Urban Policy [29] and the OECD Principles on Rural Policy [30] mention the circular economy respectively as a means to encourage more efficient use of resources, and more sustainable consumption and production patterns, in large, intermediary and small cities, including at the neighbourhood level, and to strengthen the social, economic, ecological and cultural resilience of rural communities.

Being the places where people live and work, consume and dispose, cities play a fundamental role in the transition to the circular economy. As such, cities can promote the systemic shift, whereby: services (e.g. from water to waste and energy) are provided making efficient use of natural resources as primary materials

and optimising their reuse; economic activities are planned and carried out in a way to close, slow and narrow loops across value chains; and infrastructures are designed and built to avoid linear lock-in (e.g. district heating, smart grid, etc.). Even more significantly, local authorities can teach and enhance industrial symbiosis, especially by practicing and communicating their paradigm of urban symbiosis.

Moreover, cities (and regions) hold core competencies for most policy areas underlying the circular economy; city governments can engage, incentivize, manage, and introduce a regulatory framework that sets the enabling conditions for cities fit for the 21st century to emerge. They can set a direction of travel, a local urban agenda and a roadmap in line with national and European goals. By embedding circular economy principles into urban policy levers, cities can bring about changes to the use and management of materials in cities; and urban priorities around access to housing, mobility and economic development can also be met in a way that supports prosperity, jobs, health and communities.

Changes to material choices, uses and management, can also open up local production opportunities. For solid waste, cities exercise powers in collection, treatment, cleaning, as well as in communication and information.

Most importantly, local authorities can raise the awareness of the citizens at any age, educational level or background about the principles of circular economy and pave the way for every citizen to have access to circular solutions. In this respect, local authorities can play a fundamental role in educating entrepreneurs, especially the ones involved in the seven important sectors identified by the CEAP 2. Moreover, change of mindsets and behaviour of citizens towards more sustainable choices is definitely an area that local authorities can thrive.

5. Barriers (indicative list)

Technology related

Various tools exist, supporting the minimization of waste during construction activities. Such tools are waste management plans and guides, waste data collection tools, waste estimation tools, environmental assessment tools, material passports and GIS (geographic information system). Tools, such as Building Information Modelling (BIM) technology can deliver to the construction sector the ability for multidisciplinary collaboration between architects, engineers and construction teams as well. However, research conducted via stakeholder surveys, however, reveals that these tools are not sufficiently integrated into the construction process. Also, studies show that the largest percentage of construction and demolition waste occurs during this preconstruction phase, because of inadequate planning, which leads to design changes later on, lack of knowledge on alternative materials and dimensional coordination. Awareness raising initiatives tend to stress the importance of design phase, but concrete tools for the integration of all stages and processes are needed to tackle the issue.

Market related

Low prices of raw materials, combined with limitations in the market for secondary materials pose a challenge for construction and demolition waste reuse and recycling, as the quantities produced might not be absorbed by the market. In Sweden for example, the low cost of building materials compared to the high labour cost cause extra volumes of materials to be ordered to prevent construction delays. Such delays would translate into higher costs for contractors, having to pay for workers waiting for materials to be delivered. The unused materials are then often sent to landfills. Increasing taxes on landfills, as well as facilitating waste audits and quality assurance methods are needed to foster market demand for secondary materials. Short time profit is also a barrier for sustainable building.

Regulatory challenges

The legislation level regarding construction and demolition waste varies across the Member States with some having mature legislative frameworks and optimising their circular economies, and others lacking concrete legislation and compliance enforcement. This also involves the lack of economic incentives and lack of developed recycling local network. One of the main obstacles for the estimation of construction and

demolition waste is the lack of reliable demolition waste data. Past data mostly refers to unsegregated waste, which has been collected as general waste. Existing tools do not account for detailed material information or building methodology, which makes them inaccurate. The European Demolition Association (EDA) quotes the lack of solid data for the branch as one of the most pressing issues for the industry. Data from the broad construction sector might not be directly applicable to the demolition industry. More demanding and detailed reporting criteria on a legislative level could help improve the situation. In any case circular economy in the building sector lacks support by regulators as legal barriers exist, blocking the transformation of circular construction.

6. Good practices identified

Category/ sub category	Good practice identified
Roamaps and strategies	
Urban metabolism tools	Brussels, Charlotte, Glasgow, São Paulo, and Sorsogon have all used variations of urban metabolism tools to develop their circular economy roadmaps [33]
Sector-based approach	Vancouver is an example of a city that has developed a bespoke circular economy plan in the fashion and textiles sector. Rotterdam has developed a vision of a future bio-based port that builds on circular economy principles [34]
Integration of policies	London is integrating circular economy principles into its 'draft' London Plan and Venlo has integrated circular economy principles into its Spatial Structure Plan to provide a guideline for area development. Paris' Circular Economy Plan also identified urban planning, and public procurement, as key areas into which to integrate circular economy principles in order to achieve Paris' 2017-2020 circular economy plan. Circular economy principles are being recognised as key to delivering on cross-cutting policy objectives such as resilience strategies, as is the case in Rome, and climate action plans. [35-39]
Awareness raising	
Using communication campaigns to encourage new habits	For Ljubljana, communication was core to achieving a 61% separated collection rate for different material streams in 2014. The public waste management company launched the "Get used to reusing" campaign and organised media field trips to help encourage waste reduction, reuse, and responsible consumption. Other campaign examples include Amsterdam's "Amsterdam makes a difference" and London's "Love not landfill", "Recycle for London", and "Love food hate waste" [40-42]
Sharing information on local services and needs to support circular economy Practices	New York City created the DonateNYC website, connecting stakeholders to donate and receive donated goods. As part of Make Fashion Circular, New York City, fashion brands, collectors, and recyclers, have joined forces to engage residents to encourage them to return their unwanted clothes through various routes. The "wearnext" campaign shares an online map created that guides people to more than 1,000 locations across the city where they can take clothes they no longer wear. Gothenburg has co-launched a digital Smart Map that informs residents of where they can rent, share, borrow, give, and exchange. Vienna raised the profile of local high-quality repair services by helping to establish and run a digital network. Kirklees helped establish a platform for the sharing of space, services, and skills – benefiting from a reduction in waste and an increase in local economic activity and community engagement. [43-47]
Developing projects that can inspire and showcase the potential of a circular economy	Aarhus contributed to the development of Dome of Visions 3.0, an experimental modular building that could showcase new material consumption and construction techniques. Guided tours and open days at Venlo's City Hall showcase the opportunities that cradle-to-cradle (C2C) design and circular public procurement can achieve. Other C2C projects within the city can be explored via bicycle tours with an accompanying information app. In the Hague and Copenhagen, city recycling centres have been designed using circular economy principles to showcase the potential of material reuse, and support learning about recycling and repair. [48-52]
Capacity building	
Developing tailored capacity building programmes for local businesses and entrepreneurs	In Paris, Paris&Co, offers a circular economy business advice programme to stimulate the transition to and scaling of circular economy business models among local innovators and enterprises. London's Advance London Accelerator programme offers bespoke circular economy advice to qualifying small and medium-sized enterprises. [53-54]
Developing material marketplaces and	The city of Austin has developed a Materials Marketplace that creates a market for businesses to sell used and unneeded materials to businesses who can use them as new input materials. Putting in place a materials marketplace also sparked the idea to build local entrepreneur capacity by

skills for new material applications	developing the [Re]verse Pitch Competition. Every year a new set of participants is challenged to find innovative, scalable, and profitable reuse solutions for the residual waste [55-56]
Supporting physical community innovation and repair hubs	Halle2 in Munich is a municipality initiative that is both a reuse lab and a second-hand store where different groups of society come together to share knowledge, innovate, and sell their recycled, repaired, reused, and upcycled products. [57]
Skills development	Within Brussels' Be Circular initiative, the city supports skills development programmes that include various training modules in the construction sectors. [58]
Public procurements	
Using circular economy criteria in the public procurement of products	In Ghent, the local government procured cradle-to-cradle 'bronze' certified cleaning, hygiene and polishing products for all of its buildings and facilities, and packaging was made to be recyclable and contained recycled materials. [59]
Using circular economy criteria in the renovation and maintenance of city-owned buildings and infrastructure	Brummen needed to procure an extension to their city hall, with a life-span of 20 years, that kept their original historic building intact but also allowed them the flexibility to adapt the site to future requirements.. The extension was designed for disassembly and reuse, and made use of high-quality, renewable, and prefabricated materials. In Eindhoven, circular public procurement is being piloted in the construction and renovation of schools. [60-62]
Using public procurement to encourage the use of circular business models	The city of Zurich is among several to lease printing equipment rather than buying it outright, thus only paying per page printed and incentivising better printer performance and energy use. The city of Herring made use of a service-based model to lease uniforms for their operations department. The uniforms were designed for longevity, repairability, reuse, and recycling. When it comes to large-scale construction projects, city governments can make use of public-private partnership performance frameworks or Design-Build-Finance-Operate (DBFO) procurement models DBFO service business models can lend themselves well to managing large-scale circular economy construction projects. [63-66]
Fiscal measures	
Tax breaks to stimulate circular economy	Milan has introduced a 20% discount on waste tax for businesses that donate their food waste to charities. In combination with other measures, Milan has already managed to significantly exceed the EU target of 50% recycling rate for organic waste by 2020. [67-68]
Changes and tariffs to incentivise behaviour change	Singapore introduced a pay-as-you-use road pricing system. An in-vehicle-unit sets a flexible rate depending on vehicle type, road driven, traffic levels, and time of day. Congestion charges have also emerged in other cities including Athens, London, Milan, Oslo and Stockholm. Pay as you throw practices, waste collection fees on residents varying according to the number of bags thrown away, taxes on waste that cannot be recycled, are practices used by cities [69-70]
Fines to discourage the under-use of assets or to discourage harmful, polluting activities	Catalan government implemented a law that allowed Barcelona and more than 100 municipalities to fine banks with properties on their books that have been empty for more than two years. In Turin, the local government has used penalties to help incentivise businesses that do not sort their waste effectively. Penalties are, for example, given to businesses that abandon waste or throw away recyclable and compostable items. [71-72]
Legislation and regulations	
Shaping bylaws that stimulate circular economy in the city	In Amsterdam the city is considering setting up circular zones within the city where localised circular economy urban developments can take place with supportive regulation. Several cities, have issued an ordinance stating a building permit can only be given if a Waste Management Plan has been submitted demonstrating "maximum reuse and recycling of debris and other waste generated during demolition, new construction, roofing, landscape, and other construction projects" [73]
Reviewing and updating existing bylaws to manage unintended consequences	Amsterdam currently allows residents to rent out their homes for a maximum of 30 nights per year. Berlin is substituting the cap on short-term rents with the requirement that owner/occupiers rent less than 50% of the area of the home, and second homes can only be rented for a maximum of 90 days a year; beyond these limits a permit is required. Paris has introduced a cap on short-term rents and hosts are required to be registered so that compliance can be monitored. [74-75]
Using bans to prohibit the circulation of goods and materials that are problematic or harmful to society and the environment	In Scotland, a ban on the landfilling of biodegradable municipal waste is put into effect from January 2021, with one of the aims being to stimulate the recovery and recycling of food waste in cities. Amsterdam has increasingly been introducing stricter regulations with respect to environmental urban zones. Polluting vehicles such as diesel lorries, delivery vans, buses, and taxis are currently banned from entering low emission zones. Oslo, Paris, Athens, and Madrid have scheduled a ban on diesel vehicles. [76-78]
Financial support	

Direct funding for research and development	Amsterdam established a ten-year partnership with the Amsterdam Institute for Advanced Metropolitan Solutions to help further the development of knowledge around the circular economy. In Brussels, the public agency INNOVIRIS funded the Brussels Circular Economy Transition (BRUCETRA) research project. [79]
Co-financing to support circular economy incubator and investment programmes	The Advance London programme provides advisory support for qualifying small and medium-sized enterprises. It is complemented by an investment programme that includes various funds of which the London Waste and Recycling Board (LWARB) and the Greater London Authority are co-investors. Another example is Phoenix's Resource Innovation and Solutions Network (RISN) incubator. [80-83]
Co-financing to support the development of circular economy related projects	Examples include co-financed low-carbon development and retrofit projects in Amsterdam, and co-funded public bicycle sharing systems in Copenhagen. Co-financing has been encouraged in Hamburg where the Hamburg Investment and Development Bank, an institution owned by the city, provides financial support to businesses that invest in resource efficient measures. [84]
Public-private investment funds for financial support for higher risk projects	Lappeenranta, in partnership (EUI project) with stakeholders, has made use of the fund to establish the Urban Infra Revolution Project. [85]

6.1 EC initiatives - The Circular Cities and Regions Initiative

The Circular Cities and Regions Initiative (CCRI) is an initiative of the European Commission, launched by the Directorate-General for Research and Innovation as part of the EU Circular Economy Action Plan 2020.

It contributes to the policy objectives of the EU Green Deal, including the 2050 climate neutrality target, and the EU Bioeconomy Strategy. The CCRI is funded by Horizon 2020 and Horizon Europe.

Combining knowledge sharing, technical and financial support, the initiative assists stakeholders across Europe's cities and regions, including regional and local authorities, industry representatives, research and technology organizations and civil society. It provides comprehensive support over the whole life cycle of local and regional circular economy initiatives.

The CCRI specifically targets EU cities and regions, and supports them in improving circularity in their economic sectors, value chains and services. They are the closest governance level to Europe's citizens and sources of innovation, socio-economic transformation and circular ecosystems. They are thereby well placed to drive change towards a sustainable, regenerative and inclusive circular economy.

Many cities and regions are already drawing up their own plans to improve circularity in their economic sectors, value chains and services. Research and innovation initiatives are also helping improve circularity in local systems and economies. While policy tools and funding instruments already exist, there remain many gaps in knowledge, information, skills and awareness.

The following diagram illustrates the CCRI Support Scheme, including the support provided by the CCRI, the CCRI-CSO and collaborating organizations and initiatives. The CCRI-CSO is responsible for facilitating the implementation of the CCRI. Its international team of circular economy experts offers practical, tailor-made support to speed up circular economy implementation in cities and regions. Further details on the work of the CCRI-CSO can be found [here](#).

The Circular Cities and Regions Initiative (CCRI): A Multi-stakeholder Collaboration & Support Scheme



Figure 7: The CCRI initiative

The insights of the CCRI methodology will be taken into consideration for the design and implementation of the IAPs. As an example, the circular systemic solutions that are included in the methodology will be discussed in the frame of the communities of practices in the transnational meetings.

6.2 Previous URBACT networks and initiatives

URBACT participates in the Circular Economy Partnership, as a participating partner in the following actions: Circular City Portal; Roadmap for Circular Resource Management in Cities; Collaborative Economy; Knowledge Pack and Manage the re-use of buildings and spaces in a circular economy.

Relevant URBACT Networks: [CSI-Europe](#), [2nd-chance](#), [USEAct](#), [Refill](#), [Bluact](#), [Tropa-verde](#), [URGE: Circular Building Cities](#)

Relevant on-going projects (non-exhaustive list)

Synergies will be created during the implementation of the project with other projects and networks dealing with the same challenges that will be reflected in the exchange and learning methodology.

Cinderela: New Circular Economy Business Model for More Sustainable Urban Construction	Itncircuit: Circular European Economy Innovative Training Network
Circuit: The European Portal for Energy Efficiency in Buildings	Pop Machina: Collaborative production for the circular economy; a community approach
Circular-city-project	Cityloops: Closing the loop for urban material flows
REFLOW: Phosphorus REcovery for Fertilisers from dairy processing Waste	BIOREGIO: Regional circular economy models and best available technologies for biological streams
ProCirc	SinCE-AFC
Blueprint to circular economy	Circular PP
CITYCIRCLE	CIRCULARPLACE Interreg BSR
Closing the loop for urban material flows	

More Horizon 2020 projects related to circular economy (2015 and onwards)

- [Horizon projects success stories](#)
- [Research projects database](#)

Other important knowledge providers

EU Circular Economy Stakeholder Platform	Includes relevant practices, innovative processes and 'learning from experience' examples.
Circular economy good practices	Circular economy case studies by country and sector.
Circular Cities Declaration	Circular Cities and Regions Initiative's project development assistance (CCRI-PDA)

Platforms and Tools

Metabolism of cities Data Hub	The Metabolism of Cities Data Hub serves as a central repository for a wide variety of information pertaining to urban metabolism in cities around the world. As an ongoing project, this tool is continuously improved through crowdsourcing uploads of new data and information sources
Stocks and Flows Database Schema (STAFdbs)	Open source, urban metabolism web platform has been storing and sharing urban metabolism data in order to better understand the metabolism of urban systems. Over the years, the way data has been uploaded and used has changed with a number of iterations to cater different purposes and users.
Online material flow analysis tool	The Online Material Flow Analysis Tool (OMAT) is a free, open source tool that can be used to undertake a Material Flow Analysis (MFA).
Global Urban Metabolism Data	Database of indicators

7. The role of the URBACT LET'S GO CIRCULAR! network

The potential of the circular economy to support sustainable cities still needs to be unlocked and the "LET'S GO CIRCULAR! – Paving the way for a circular transition of cities", funded by the URBACT programme aims

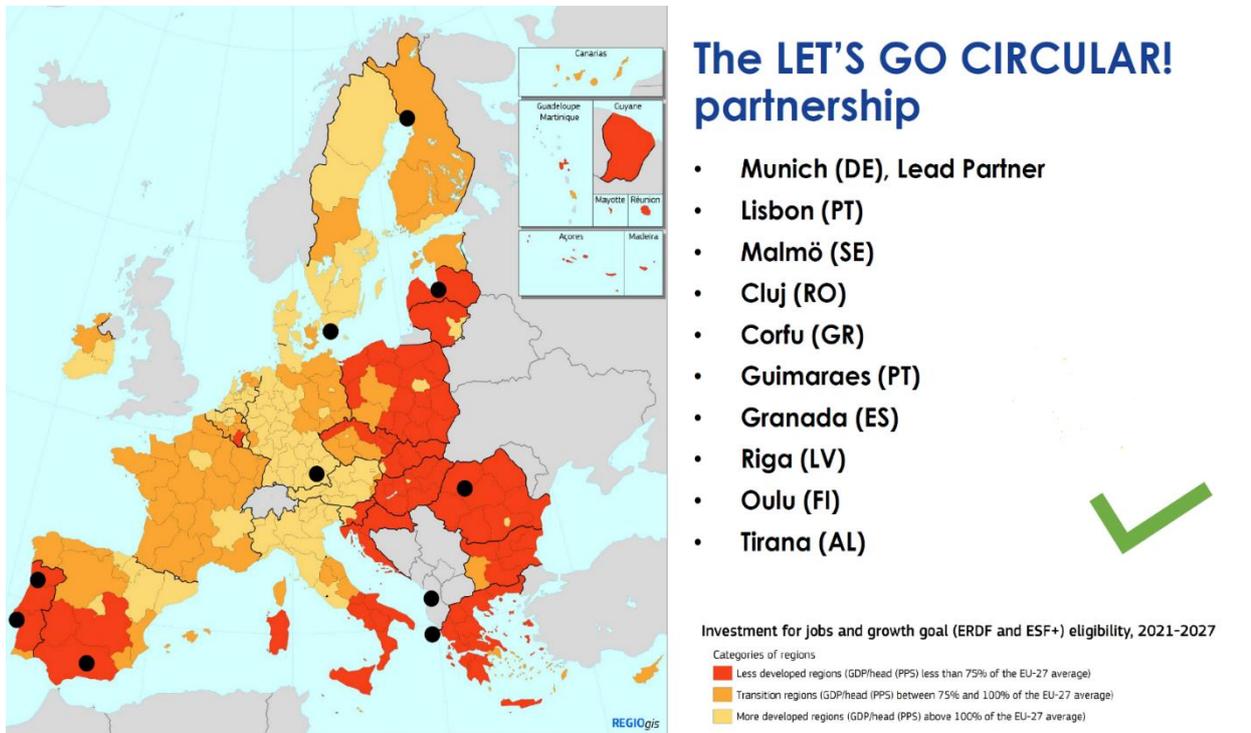


to act towards this direction. With Munich as lead partner, the cities that compose the network, met in the frame of the Let's Get Started! Transnational meeting 25-27 September hosted by Munich and shaped a common understanding on the role they can play in boosting circularity in their areas and beyond. The synthesis of the discussions is illustrated here, while the results have been taken into consideration for the exchange and learning methodology and roadmap of the network, presented in Section 3.

SECTION 2: PARTNER PROFILES

1. Introduction

The LET'S GO CIRCULAR! partners bring in different prerequisites and pilots, ranging from waste management to sustainable tourism. The transnational cooperation of ten cities listed below will result in a deeper understanding as well as new insights and experiences to be shared on local and EU level. Jointly, the partner cities discuss the crucial elements of Integrated Action Plans (IAPs) following an agreed methodology for their elaboration. Each city (with their ULG) will develop such an IAP as a substantial and



committing lead document for city leaders and also the public to understand and tackle the necessary policy change towards Circular Economy.

The LET'S GO CIRCULAR! partners are involved in the following EU initiatives and will build on these in the URBACT network.

The EU's Circular Cities and Regions Initiative (CCRI)

In 2022, the cities of Munich and Guimarães have been selected as CCRI pilot. The city of Lisbon also applied for the initiative. The LET'S GO CIRCULAR! will build on the CCRI methodology for the elaboration of IAPs in cities and discuss and test its implementation on the ground.

The EU Mission "100 Climate-Neutral and Smart Cities"

Six of our network cities (Munich, Guimarães, Lisbon, Riga, Cluj and Malmö) have been selected for the EU Mission "100 CNSC" and will create strong links between the elaboration of their "Climate City Contracts" (as integral part of the Mission) and their IAPs. Further, they will feed in the Mission tasks and experiences into the project activities.

The Covenant of Mayors and the Green City Accord

Five of the network cities (Munich, Cluj, Guimaraes, Riga and Malmo) signed the Green City Accord and almost all network cities are part of the Covenant of Mayors, allowing the network activities to build on these initiatives.

New European Bauhaus (NEB):

Munich won a NEB demonstrator project in 2022 (Creating NEBourhoods Together) and will feed the NEB concept into the transnational network activities. As circularity is one of the basic principles of NEB, Munich's NEB project includes a specific action on this topic (led by Munich Technical University) and will thus also be involved in Munich's ULG.

The Circular Cities Declaration of ICLEI

The partner cities Malmo, Tirana, Oulu and Guimaraes are signatories of ICLEI's Circular Cities Declaration which will give valuable guidance for the network activities fostering a cross-thematic, silos breaking approach.

The partner profiles of the URBACT LET'S GO CIRCULAR! network are synthesized below, as a result of the partner profiles that have been elaborated between the lead expert and each ULG coordinator before, after and during the city visits, conducted between July and September 2023.

2. Riga, Latvia

Key generic data

Riga is the capital and largest city of Latvia. The city lies on the Gulf of Riga at the mouth of the Daugava river where it meets the Baltic Sea. Riga's territory covers 307.17 km². Home to 614987 inhabitants (beginning of 2023, Source: Central Statistical Bureau of Republic of Latvia), the city accounts for a third of Latvia's total population (45% male and 55% female). Riga is the largest city in the Baltic states, and one of the key economic and financial centres, though its population has decreased from just over 900000 in 1991. Notable causes include emigration, low birth rates and urban sprawl. Riga's historical centre is a UNESCO World Heritage Site. Riga has a GDP per capita that amounts 25895 EUR (2020). Roughly half of all the jobs in Latvia are in Riga and the city generates more than 50% of Latvia's GDP as well as around half of Latvia's exports. The biggest exporters are in wood products, IT, food and beverage manufacturing, pharmaceuticals, transport and metallurgy. Riga Port is one of the largest in the Baltics with a potential for future growth. Tourism is also a large industry in Riga.

The local challenge, existing strategies and local development plans

Local challenge is **to boost circularity rate** that is low and decreasing over the last years (4.2% in 2020). Other related challenges include:

- ✚ High and growing material consumption per capita
- ✚ Low recycling rates for municipal waste
- ✚ Significant amount of waste produced by industries, leading to negative impacts on the environment and public health

Other local challenges include air quality (according to the [EEA report on the air quality in EU cities](#), the air quality in Riga is considered as “moderate” based on the PM_{2.5} annual mean concentration being in a range of 10 - 15 µg/m³ in 2021 and 2022) and lack of e-transportation, high energy consumption in the housing sector – low use of RES and energy efficiency measures.

Strategies and local development plans at national level:

- ✚ Latvia's Action Plan for the transition to a Circular Economy 2020-2027
- ✚ National Energy and Climate Plan 2021-2030
- ✚ State Waste Management Plan 2021-2028

Strategies and local development plans at local level:

- ✚ Sustainable Development Strategy of Riga 2030
- ✚ Riga Development programme 2022-2027
- ✚ The Sustainable Energy and Climate Action Plan of the city of Riga until 2030
- ✚ Integrated Action Plan for Transition to a Circular Economy in the Construction Sector in Riga City Municipality
- ✚ Integrated Action Plan for Transition to a Circular Economy in the Construction Sector in Riga City Municipality 2022-2027
- ✚ Zero waste management plan – is not in place yet and will be part of the IAP in the frame of the URBACT LET'S GO CIRCULAR! network
- ✚ Streets' redesign plan – Street typology guidelines that will be presented as a website – are currently under development
- ✚ Neighbourhood master plan – under development
- ✚ Viduslatvija Regional Waste Management Plan 2023-2028 (draft, planned adoption by 31/01/2024)

Housing policy will be finished by the end of this year and the master plan for the city centre is under development.

Ambitions and aspirations for local change

"We need to work with circular economy and sustainability with both hands. It is time to work with the waste producers, not with the ones that use waste", Alise Pizika Advisor in the field of Climate Neutrality.

Riga's ambition is to be the **leader and pull the topic of circular economy forward at national level**. Moreover, Riga's ambition is to develop a zero-waste plan and focus on reduction and better separation of source of household waste, food waste and biowaste, and reduction of nappies and other hygiene products. In terms of infrastructure, Riga envisions the **construction of eight new waste sorting points** and focus on **electronics** as well. Finally, apart from the understanding of the trade-offs between circular economy and climate neutrality, Riga envisions to **swift people from driving car and enhance micro-mobility**. There is the ambition to have a low emission zone, to decrease the pollution in the city centre, working by 2027.

Baseline situation of existing actions

Currently, there is an **action plan for the enhancement of circular economy specifically in the building sector**, developed through the previous round of URBACT APN in the frame of the URGE: circular building cities. The IAP has been approved by the City Council and the actions are under implementation. In terms of us of circularity in other business sectors there is not much to be reported yet.

Barriers identified so far

- ✚ **Small industrial market**, since the economy is mainly based on IT and other services, leading to scarcity of secondary materials – difficulty to satisfy market demand
- ✚ **Lack of infrastructure** to ensure sufficient and effective flow of secondary materials. Urban resource centres and repair shops are fragmented and self-initiated activities across the city. In addition, collection and management of **biowaste** is a huge issue due to lack of infrastructure
- ✚ Lack of **funding** for hard investments
- ✚ **Inefficient household waste collection system**; separation at the source is not working well in the households. Previously Riga had only 14% separate collection while now it is up to 30% and the goal is to reach more than 40%
- ✚ **Lack of awareness and education** about the circular economy principles, sustainable waste management practices and climate neutrality, among citizens and businesses. Especially:
 - lack of understanding of the whole spectrum of circular economy concept, apart from recycling, reusing, recovering; lack of emphasis on reducing emissions, energy consumption, food waste, refusing use of natural resources and their importance for climate neutrality
 - lack of understanding of the term "efficiency" i.e "efficiency" in sorting of waste streams, "efficiency" in the design of menus, "efficiency" in energy consumption, "efficiency" in the use of transportation means
 - lack of understanding of the societal aspect of circular economy: innovation can be put forward by former prisoners, unprivileged citizens, older people etc
 - lack of understanding of the links between healthy dietary habits and healthy life style in general, with circular economy (i.e. use of soft mobility measures impact positively the reduction of CO₂ emissions)
 - lack of good understanding of integration of circular economy principles in architectural design (starting with small builders might be more productive at the end)
- ✚ **Misleading focus on waste management** instead of circular economy
- ✚ **Lack of policies and incentives** to promote sustainable production and consumption practices in the industrial sector; lack of specific objectives about circular economy

- ✚ Lack of long-term political certainty
- ✚ Difficulty to prove the **financial benefits** of circular economy
- ✚ Lack of experience in the **development of circular procurements** and overloaded municipal staff
- ✚ **Low demand of secondary materials for the construction sector**, whereas demand can be higher by small builders, or owners of properties that hold renovation activities

Integrated and participatory approach are applied to important extend in Riga, thanks to the previous experience of the city with URBACT. In general, in the past ten years the city of Riga has become a **very active player in influencing policies on energy and climate issues**, and in **engaging and motivating various stakeholders** including businesses, universities, civil society organizations, NGOs to learn, share the expertise in Latvia and on international scene. Riga possesses the **organizational and operational capacity** to co-create the IAP and raise funding for the implementation of actions. The risk which is difficult to tackle is the political commitment, especially, on the state level. It is hard to predict on which direction it can change and affect significantly some regulations related to PPPs, procurements or even strategic priorities.

Consolidation of the URBACT local group

Riga has consolidated a ULG, following respecting the integrated approach. The themes of discussion will follow the exchange and learning methodology. The composition of each ULG meeting will depend on the topics discussed. The **ULG Coordinator** is Ieva Kalnina, senior expert in Riga Energy Agency. The political supporters are Councilor Mairita Lūse (for waste management), Councilor and Head of the Housing and Environment Committee Selīna Vancāne (for climate- neutrality). Technical supporter is the Advisor in the field of Climate Neutrality, Alise Pizika. The analytic composition of the ULG is annexed.

Contributions, learning and capacity needs and contributions

Contributions:

- ✚ Guidelines on circular construction (URBACT/ URGE)
- ✚ (Soon to be) launched the first design procurement for the circular reconstruction
- ✚ (Soon to be) launched circular dismantling of the building (partially dismantling) to test the circular procurement of deconstruction and sharing of secondary materials
- ✚ Ongoing Horizon (NEB) project DESIRE – about citizen engagement in circular spatial planning
- ✚ Calculating CO₂ emissions and waste in the frame of an event that took place for one week in Riga
- ✚ Knowledge about healthy eating, commuting
- ✚ Knowledge on procurements for general waste from households
- ✚ First experience in the development of circular design

Synergies that can be built with other projects are annexed.

Learning and capacity building needs:

- ✚ System for material circularity in the municipality
- ✚ How to measure circularity
- ✚ How to prove financial benefits using LCA, LCC
- ✚ Circular alternatives in different fields

Focus of the URBACT Integrated Action Plan

Riga is initially interested in the following themes:

Theme	Details	Stream/ chain	R strategy
Education, Information, Capacity Building for circular consumption patterns	Collaboration with other municipal departments dealing with health, culture, education, labour and leisure, procurements, environmental inspectors even, business and external relations department, city department, to connect the dots and exploit synergies, but also to map the big players		
	Information campaigns for the reduction of hygiene waste	Household	REDUCE
Development of methodologies and tools	System for better sorting of household waste at source	Household	REUSE, RECYCLING
	Management scheme (collection, process, analysis and disposal) of biowaste	Green	RECOVERY
	Mapping of existing infrastructure/ points/ facilities that serve circular economy in Riga: waste sorting points, urban resource centers, second hand shops, repair cafes etc.		
	Operational and financial plan for the creation of resource centers/ circular economy centers in the Municipality, providing parallel activities for the citizens, like repairing and also for future start ups		REPAIR, REUSE, REMANUFACTURE, REDESIGN
	Methodology linking climate neutrality and circularity		
	Platform depicting all points that serve CE at urban and peri urban level		
Governance (policies, strategies, regulations, monitoring, financial incentives, funding fiscal measures)	Alignment of important waste management actors: CLEAN-R, EKO BaLTiA VIDE, Lautus Vide, Free Riga, Zero Waste Latvia and Riga Municipality, to bring systematic change		
	Use/ reuse of public space and municipal assets to serve CE principles	Municipal assets and public space	
	Organisation and holding of public events serving the CE principles	Tourism and Culture	
	Heat recovery from wastewaters, circularity principles in district heating, circular renovation	Energy	
	Integrated approach with SECAP measures for reduction of CO2 emissions	Mobility, food recipes	
	Construction, reconstruction, selective demolition serving CE principles	Constructions	
	Management of streams and compliance to CE principles (handling of streams: furniture, electronic and electric appliances, textile, plastic, paper and cardboard, use of natural resources (energy, water), mobility, food)		10R
Infrastructure	Creation of urban resource centers / circular economy centres		

Riga intends to pilot activities. **Indicative list of pilot actions:**

1. Selective demolition of buildings: involvement of society. Citizens will be informed that they can mark the materials they would like to take and use. There will be a survey, to understand where these materials will be used

1. Reconstruction of an old, unused dormitory-type building for municipal rental apartments, two day care centres (one for kids and one for adults with severe mental disorders), and premises for community needs and for demonstration of circularity and sustainability solutions used in the building. There is already €14 million foreseen in the investment plan for this building and partly these funds will be



- raised by EU grants. A procurement including CE criteria, will be launched anytime now and the redesign will be done by February 2025. With the reconstruction municipality will pilot several innovations, such as: Circular procurements (both: design and construction), Self-sufficient green on-site energy production, Circular prefab insulation panels, LCA, LCC and sustainability assessment of the building, Design for disassembly and adaptability (ISO 20887), Social innovations,
2. Cultural Park in the area of a municipal library in a neighbourhood in Riga
 3. Bring back life in a (small) market and development in a circular way – inclusion of an urban resource center

3. Granada, Spain



Key generic data

Granada is a historic city located in southern Andalusia, at the foot of snowy Sierra Nevada and half an hour away from Mediterranean coast. The city is known for its UNESCO World Heritage sites: Alhambra, Generalife and Albaicín neighborhood. The Population of 228682 inhabitants (2022) decreasing during last 10 years at an average rate of -0,4% per year. Local economy is based mainly on service sector (72%), with minor importance of industry (12%), construction (11%) and agriculture (5%). GDP per capita is 21784 €/year. The total area covers 88.06 km² with the urban area covering 19.3 km². There's no foresee expansion, since the new urban masterplan is keeping same limits in its preliminary phase yet. In metropolitan terms, Granada is the centre of an area of 34 towns, 541465 inhabitants and 972.6 km². It's the main focus of work, educational and administrative activities.

The local challenge, existing strategies and local development plans

The city faces challenges nowadays, mainly linked to the **combination of the preservation of a millennial Heritage with the visit of more than 5 million people per year**. Moreover, Granada is a city with few urban and suburban transport options, with little development in terms of recycling and resource efficiency. Pollution due to **high traffic** in the metropolitan area (half million people all together) is significant, leading to **bad air quality** in Granada, being the 3rd worst in Spain.



Specific challenges:

- ✚ The collection of resources in Granada (and its surroundings) to enable circularity
- ✚ Recycling of urban waste is still deficient and could be improved by **waste separation at source**
- ✚ **Measuring and monitoring** at local level
- ✚ Shift towards a circular mindset among citizens and entrepreneurs for effective development in relation to the efficiency of resources

At the national level, the "[PERTE de Economía Circular](#)" is aimed right to this and is part of a global plan for economical recuperation and transformation. Recently, a new law has been approved from the regional government (Junta de Andalucía) devoted to Circular Economy (Ley 3/2023 de Economía Circular de Andalucía). Granada is **fully committed to SDGs** and focused as well to the **improvement of life of its citizens**. Granada is implied in concrete actions meeting the 2021-2027 priorities and aligned to the objectives of the Urban Agenda. Moreover Granada, with its Urban Agenda, has a recently settled global strategy to strengthen and to be activated towards promoting improvement as a **green and healthy city**. Actions are divided in four main fields: **Green, Circular Economy, Mobility and Governance**, and are supported by regional, national and European funds.

Regarding **Circular Economy**, recent works have been carried out, such as the URBACT-URGE Project (devoted to CE in construction, 2019-22) and the City Council Plan for CE (related to the competences of City Council itself, 2023). The IAP developed in the frame of URGE covers the period 2023-2030.

Ambitions and aspirations for local change

Circular Economy is now in the focus of the local role model and the City Council must play to catalyze it. Circular Economy is not enough in the urban debate. The mission of the City is **to put circular economy on track**. The ambitions are:

- ✚ The transformation of the city and province towards another economic, environmental, and human model. This implies changes in the way of consuming, using and recycling resources/waste by companies and citizens.
- ✚ Getting everyone to think in terms of reduction and circularity. The problem is not only the inefficiency of the life cycles of products and packaging, but also the excessive production and placing on the market.
- ✚ Significant increase in separation at the source and proper preparation to re-utilization of waste is a common desire, including biological waste (this will certainly decrease land disposal of waste).

Baseline situation of existing actions

Several circular economy related actions are already in place, through the URGE: Circular building cities IAP, developed in the frame URBACT III.

Barriers identified so far

- ✚ Measuring and monitoring are big challenges, due to the fact that competence on waste management is regional
- ✚ Lack of regional-city **collaboration**; there is a need to spread and get a whole local agreement, in which all external forces would commit to Circular Economy (so far, work is mainly devoted to sources available at the City Council competence)
- ✚ **Lack of personnel** in the municipality to develop projects
- ✚ **Lack of smart city solutions** that provide quality information
- ✚ Lack of waste inventories (DATA) and agencies to help develop industrial symbiosis strategies at a metropolitan level including the small villages.
- ✚ Lack of strategies to strengthen the **repair sector**
- ✚ No regulatory order or comprehensive vision in plans, regulations, and strategies regarding **environmental conservation** at the local or metropolitan level
- ✚ **No metropolitan governing body** has been established, although it is known that the majority of our environmental and economic problems belong to this scope
- ✚ **Lack of infrastructure** (eco-points), and of space in the city to put the bins (which raises the need for an effective source separation and for PAYT system)

Integrated and participatory approach is applied to important extend in Granada, thanks to the previous experience of the city with URBACT, but important steps are still needed. After ten years of instability, political stability is now established in the city of Granada that has recently introduced a new department internally, for Sustainability, Urban Agenda and European Funds, in order to maintain open communication with external players and break silos internally.

Consolidation of the URBACT local group

Granada has consolidated a ULG, following respecting the integrated approach. The themes of discussion will follow the exchange and learning methodology. The composition of each ULG meeting will depend on the topics discussed. The **ULG Coordinator** is Angel Luis Benito Pérez, City Architect and Technical Director of Sustainability, Urban Agenda and European Funds Department (former coordinator of URBACT-URGE

Project as well), who has the support of Vito Episcopio, Councilman for Smart city, Innovation and Digitalisation and Ana Agudo, Councilor of Sustainability. The analytic composition of the ULG is annexed.

Focus of the URBACT Integrated Action Plan

The initial focus of the city is depicted below.

Theme	Details	Stream/ chain	R strategy
Governance (policies, strategies, regulations, monitoring, financial incentives, funding fiscal measures)	Agreement of collaboration at provincial level (and bringing on board the tourism association that is under the responsibility of the province) and fostering collaboration at metropolitan level		
	Participation of citizens and entrepreneurs		
	Greening of the city : green belt and urban jungle initiatives («3-30-300 Strategy: all citizens should see 3 trees from their homes, we should provide with 30% of green cover or tree tops to every neighborhood, and that from every home a citizens shouldn't walk more than 300m to reach a public green space.)	Green	
	Expanding the low emission zone from the city centre to the city outskirts (by establishing transfer stations and improving public transportation)	Mobility	REFUSE, REDUCE
	Procurement of eco vehicles for collection of waste - This can be done at metropolitan level, after an agreement	Mobility	REDUCE
	Quality assessment of the tenders for the new waste collection contractor, taking into consideration circularity		
Development of methodologies and tools	PAYT system		
	Rewarding of SMEs that install systems to improve their waste management plans		
	Establishment of a territorial sustainability observatory (this can be done at metropolitan level after an agreement and in collaboration with the University)		
	Evaluation of the efficiency of the current waste collection and management plan and proposals to improve it, operationally and in terms of infrastructure		
	Mapping of flows (This can be agreed to be done at metropolitan level)		
	Understanding metabolism to create new business models		
	Apps to exchange information		
Infrastructure	Green points		
Education, Information, Capacity Building and Awareness for circular consumption patterns	Education of students as agents to educate also their families		
	Organisation of contests between schools, between neighborhoods, between municipalities to reward recycling/ reusing		REWARD, RECYCLING, REUSE
	One stop shop to support SMEs, collect their needs and find ways to overcome the obstacles they face		
	Establishment of an eco-point for information		
Fostering of Innovation and Entrepreneurship	Hackathon to trigger start ups share their ideas on how to reuse products or byproducts in collaboration with the associations and the university		
	Innovation acceleration program		

Granada possess the **organizational and operational capacity** to co-create the IAP and raise funding for the implementation of actions. The risk is to establish collaboration with regional and national levels and raise funding. Granada intends to pilot activities in the frame of the project. These are indicatively listed below:

- ✚ **Circular tourism:** The most important sector of Granada must be involved and relevant measures must achieve redesign and recycling. The City Council Tourism Department is now working on the confection of a white book / guidebook for circular practices focused on HoReCa and local events promoters. The aim is to provide with know-how to local service sector SMEs, which are the majority and don't have specific departments devoted to sustainability or innovation.
- ✚ **Circular Quality Seal:** A network of local companies, shops and professionals involved with CE to add value to their business and global awareness.
- ✚ **Circular Procurement Guidebook:** To put together all acquisitions and contract norms to be adopted by relevant companies and administrations.
- ✚ **Improvement of waste collection:** Physical and logistic reorganization of the system, for a better and more efficient management of local wastes.
- ✚ **Good practices:** Best cases can be showcased in annual meeting, in which some prizes or public recognition can take place.
- ✚ **Last mile delivery and collecting:** Creation of small-size logistic centers to decrease traffic downtown and improve efficiency on transportation.
- ✚ **Co-creation:** All strategies should be implemented on a base of participation and co-design together with citizenship, so that they can think on every initiative as their own one
- ✚ **Education:** CE must be considered as well as a work niche to be exploited, not only at degrees level, but also related to vocational training.

Learning and capacity needs and contributions

Contributions:

- ✚ Water treatment - state of the art technology used
- ✚ R&D for construction materials
- ✚ Involvement of vulnerable citizens for better housing
- ✚ Territorial approach for CE issues
- ✚ Identification of parties involved
- ✚ "Green Ring" project
- ✚ Governance: administration change to have a specific department

Learning and capacity building needs:

- ✚ New technological solutions to minimize the necessary resources, energy/reagents/water, to carry out the activity.
- ✚ Waste management system, including source separation in households and in tourism companies.
- ✚ Information management/collection and monitoring of data to see the evolution.

4. Guimaraes, Portugal



Key generic data

Guimarães is a medium-sized city in Portugal. 156830 inhabitants populate the city with population density of 651 inhabitants/km², which is higher than continental country's average of 112 inhabitants/km², reflecting the high urbanization of the municipality. There has a polycentric model of development, with 48 parishes (small local administration sites, each one has an elected president) managed by the mayor. There are also nine villas (bigger parishes). Guimarães is one of the most industrial municipalities in Portugal. Its primary industries are textiles, shoe industry and metalomechanics. While the city is maintaining its original secondary sector industries, such as textiles, shoe industry and cutleries, in the present day, creative industries in the central area are gaining importance. In 2019, a turnover of around €5,700 million characterized the sector, of which about €2400 million corresponded to the manufacturing industry. The functional urban area is 240955 km²

The local challenge, existing strategies and local development plans

Guimarães is considered to be a "diffuse territory, and one third of the population is located on the urban area, the generation of municipal solid waste (MSW) per capita increased between the past years. Waste management is typically a local competence; therefore, local actions are critical for effectively implementing the EU Waste Strategy. 445 kg per person per year of waste generated in 2021, accounting for a total volume of 58000 tonnes generated, whereas 371 kg per capita came from the unsorted collection. In 2022, MSW, has decreased steeply, so **Guimaraes needs to develop a strong strategy to reduce the MSW production, improve biowaste collection and reduce food waste in restaurants and in households.**

Strategies and local development plans at national level:

- ✚ National Action Plan for Circular Economy that is being updated at this moment
- ✚ National Action Plan for Circular Economy

Strategies and local development plans at local level:

- ✚ Agenda 2030 and created a shared vision of 'A greener Guimarães', encouraging public involvement and establishing a climate ambition through a new Governance model: Governance Ecosystem Guimarães 2030 (GEG)
- ✚ Diagnosis and Action Plan for Environmental 2030
- ✚ Circular Economy field of action is firmly anchored in the overall policy for a climate-neutral Guimarães by 2030
- ✚ Zero Waste Guimarães
- ✚ Climate neutrality measures in the frame of the EU Mission "100 Climate-Neutral and Smart Cities by 2030"
- ✚ RRRICLO - Strategy for Circular Economy that integrates three domains – Innovation, Waste and Resources, Citizens' awareness and Mobilization
- ✚ Commitment to become Zero Waste Certified, process provided by Mission Zero Academy
- ✚ Action plan for Biowaste

Guimaraes is signatory of the Green City Accord and the Circular Cities Declaration, and selected for be pilot city in the Circular Cities and Regions Initiative (CCRI).

Ambitions and aspirations for local change

Guimarães has signed the commitment to **become the first Zero Waste Certified Cities in Portugal**, undergoing the Zero Waste Cities Certification process provided by the European organisation Mission Zero Academy (MiZA), and powered by Zero Waste Europe, together with the national NGO ZERO – Associação Sistema Terrestre Sustentável.



“I believe this commitment to become the first Zero Waste Certified Cities in Portugal, undergoing the Zero Waste Cities Certification process will be a valuable contribution to the challenges that we are facing, such as reducing pollution to zero, as well as in the areas of air quality, noise control, and sustainable use of water and soil, but it will also help strengthen our strategies for circular economy and biodiversity conservation. The ambition of Guimarães to become carbon neutral by 2030, also encouraged by its selection for the “Missão Cidades” project, needs nonetheless to ensure those ambitious goals are set in the areas of circular economy and waste management. We firmly believe that this commitment will support our goals by endorsing our vision of Guimarães as a territory with a high quality of life, being able to promote itself locally, nationwide or internationally”, Domingos Bragança, mayor of Guimarães.

The municipality's **commitments** focus on:

- ✚ Reducing the unsorted waste stream to reach a target value of 120 kg per person / year by 2030
- ✚ Reducing the total amount of waste generated to 362 kg per person / year by 2030
- ✚ Extending the separate collection of bio-waste to the 100% of its territory
- ✚ Collecting 75% of recyclables and extending the PAYT system to the whole territory
- ✚ Reduce landfill to 10% by 2035
- ✚ Establishment of a proficient separate collection system by 2030
- ✚ Reduction of bio-waste and recyclables found in the unsorted waste stream (residual waste)

Other goals to be achieved by 2025: sustainable public events, reusable packaging options in public markets and collection of textile waste in small industries to promote Circular Economy in new products, making citizens responsible for waste management in their proximity but also actively engaged in recycling, reduction of biowaste and recyclables in residual waste.

Through its commitments Guimaraes will help Portugal to reach its 2025 recycling and reuse targets of 55%.

Barriers identified so far

Guimaraes faces problems in the regulatory framework, low level of collaboration with local stakeholders, lack of funding. Additionally, Guimaraes faces problems with the declassification of waste, in order to order to resource them as a resource.

Focus of the URBACT Integrated Action Plan

The initial focus of the IAP of Guimaraes is depicted below.

Theme		Stream/ chain	R strategy
Education, Information, Capacity Building for circular consumption patterns	Awareness raising and citizens' engagement – community driven development		
	Improvement of perception and if possible classification of end-of-life waste		
Fostering Innovation and Entrepreneurship	Introduction of acceleration programmes / hackathons to harness young talented entrepreneurs to put forward innovative ideas for efficient transformation of secondary materials into new products		
	Valorisation of secondary resources - boosting of innovation – research and development through collaboration with the private sector		
Development of methodologies and tools	Improvement of waste collection and management, in the Heritage Historic Centre (zero waste historic centre)	Tourism and Culture	REDUCE
	Collection of used textile to promote Circular Economy in new products	Textile	REDESIGN, RENEW
	Management of secondary materials from the construction sector, plastic and metal to link supply and demand - Building one stop shops through ICT tools to link supply and demand of resources	Constructions, plastic	
	Mapping of the agri and industrial flows	Agri sector	
	Digital transformation in public and private sectors (<i>more info needed here</i>)		
Governance (policies, strategies, regulations, monitoring, financial incentives, funding fiscal measures)	Strategy for prevention of waste generation to the maximum extent (focus on refuse and reduce steps)		REFUSE, REDUCE
	Influencing regulation and CE criteria in public procurements		
	Organisation and holding of public events serving the CE principles	Tourism and Culture	
	Public markets	Packaging	
	Increase biodiversity to capture CO ₂	Biodiversity	
	Management of green leafs and green waste	Green	
	Decrease of food waste	Food	
Infrastructure	Establishment of repair stations in the premises of currently unused newsstands throughout the municipality.		REPAIR

Integrated and participatory approach are applied to important extend in Guimaraes thanks to the Mission structure. Guimaraes has the **organizational and operational capacity** to co-create the IAP and raise funding for the implementation of actions. Guimaraes intends to hold pilot activities. Indicative list of pilot actions. Indicative pilot actions are:

- ✚ Inclusion of GPP criteria in public tenders
- ✚ Testing of efficiency of actions in the frame of “District C”: social experiment for neighborhood development based on culture, knowledge and creativity as a testing ground for zero-carbon policies

Guimaraes has the **organizational and operational capacity** to co-create the IAP and raise funding for the implementation of actions. Guimaraes intends to hold pilot activities. Indicative list of pilot actions. Indicative pilot actions are:

- ✚ Inclusion of GPP criteria in public tenders
- ✚ Testing of efficiency of actions in the frame of “District C”: social experiment for neighborhood development based on culture, knowledge and creativity as a testing ground for zero-carbon policies

Consolidation of URBACT local group

The ULG coordinator is **Dalila Sepúlveda** Director of the department of climate and environment. There is strong political backing across all parties of Guimarães City Council to implement the Circular Economy strategy. The councilor for environment and climate action Sofia Ferreira. Members of the ULG are annexed.

Learning and capacity needs and contributions

The **strong points** of Guimaraes which can be contributed to the network are listed below:

- ✚ “Guimarães 2030 Governance Ecosystem” (GGE) that:
 - Is working to bring academia, private sector and citizens to city’s main challenges
 - Has a climate team that is multidisciplinary team able to solve short- and long-term challenges, prepare solutions, and support-decision-makers
 - Has in place specific programs to raise awareness, engage, mobilize and educate citizens such as PEGADAS Program as a pillar in Environmental Education and Green Brigades.
- ✚ RRRCICLO - Strategy for Circular Economy (<https://rrrciclo.pt/en/about/>)
- ✚ Development of SECAP
- ✚ Waste management plan for higher education institutions in developing countries: The Continuous Improvement Cycle model
- ✚ Development of strategy for PAYT implementation (Reduced taxes by 30% for people that participate in PAYT in the historic city centre)
- ✚ Environmental diagnosis to show the areas that are important and municipal waste mapping
- ✚ Action planning for sustainable development (first in 2015, second in 2018, and updated every two years)
- ✚ Monitoring of municipal performance using the Guimarães Ecological Footprint and Bio capacity calculation, Carbon Disclosure Project, Energy performance and CO₂ emissions and evaluation of projects’ circularity impact methodology.
- ✚ Green waste valorization: bioplastic production, soil remediation, plastics, chewing gums and cigarette butts recovery and valorization, a strategy for PAYT implementation, and projects to promote social circularity under the G4CE
- ✚ Environmental Education Programme implemented in 80 schools
- ✚ Establishment of Green Brigades: volunteer group of citizens already covering 79% of the territory with civil society initiatives
- ✚ Data sharing through the Circular Economy Strategy website
- ✚ Promotion of sharing economy (i.e. sharing of clothes by joining a private initiative, promoting Circular Economy and small businesses municipal contracts)
- ✚ Reporting of emissions, scope 1 and 2
- ✚ Experience through the Interreg project called “Risk AquaSoil
- ✚ Informative manual for citizens, provision of compost bins to citizens, in the frame of the Circular Economy Strategy
- ✚ Under the CC Declaration knowledge and experience on waste valorization, bioplastic production, soil remediation, plastics, chewing gum and cigarette butts’ recovery and valorization
 - valorization of forestry and green residues G4CE program
 - “Agrowaste” and “Soil Remediation”, are also innovative projects developed in Guimarães for the production of bioplastics and improve soil’s quality, promoting the reduction of heavy metals and other toxic compounds
 - Refood”, answers to another important concern from Circular Economy Action Plan, promoting the reduction of food waste and also contributing to social programs,

- "Paper4food" and CONSIGO: a way to promote a reduction of waste and at the same time allow a reuse of various equipment, such as the crutches, wheelchairs and articulated beds
- ✚ Guimarães promotes an initiative of the Food Bank: "Paper for Food" campaign. The citizens collect and recycle paper that will be exchanged for food destined for solidarity institutions.
- ✚ Incentives: giving a domestic compost bin to anyone who has space to install it
- ✚ Door to door collection of sorted waste
- ✚ Municipal events regulation: CARE - reusable cups to replace disposable plastic cups in City's events
- ✚ Citizens survey with the support of university, about sustainability

Synergies that can be built with other projects are annexed.

In terms of **learning and capacity needs**, Guimaraes is eager to learn from other cities in the URBACT LET'S GO CIRCULAR! network and improve its performance in the areas of focus that are previously illustrated.

5. Lisbon, Portugal

Key generic data



Lisbon is the capital and largest city of Portugal, with an estimated population of 548703 within its administrative limits in an area of 100.05 km. About 2.9 million people live in the Lisbon metropolitan area, which extends beyond the city's administrative area. The population density of the city itself is 5445.7/km². Over the last few decades there has been a decrease in population numbers, however the amount of people entering the city to work or visit generates a daily population increase estimated at 70% in relation to its residents. The Lisbon region has a higher GDP PPP per capita than any other region in Portugal. Its GDP amounts to US\$110.3 billion and thus \$39,434 per capita. Lisbon's economy is based primarily on the tertiary sector. The Lisbon metropolitan area is heavily industrialized, especially the south bank of the Tagus river (Rio Tejo). The Lisbonite industry has very large sectors in oil, as refineries are found just across the Tagus, textile mills, shipyards and fishing. Automobile manufacturers have erected factories in the suburbs. Lisbon has 354000 companies (of which 111000 are located in the city). The city has also an important tourism sector. Finally, it has an important students' community, three science and technology parks in the Region and 15 business incubators.

The local challenge, existing strategies and local development plans

Mobility/ transportation, air quality, high urban density and tourism flows, inadequate exploitation of solar energy, low exploitation of water and secondary materials, low exploitation of urban-rural synergies are among the **biggest challenges in Lisbon**.

At national level, Portugal has a National Action Plan for Circular Economy that is being updated at this moment: [National Action Plan for Circular Economy](#). At regional level, a wide range of studies and analysis were developed to support the strategy for the circular economy in the region: [Regional studies](#). There is a regional agenda 2019, focused on productive cycle, agri-food sector, and on construction. **At metropolitan level** there is an initiative to link 18 municipalities working together to implement sustainability (exploitation of urban-rural synergies, **focused on short supply chains and minimization of food waste**). Within the scope of the national initiative "Cidades Circulares" over the last month, the [Action Plan for the sustainability and circularity of Lisbon's food systems](#) was concluded.

Ambitions and aspirations for local change

Lisbon does not yet have a formal Action Plan for the circular economy. However, in recent years Lisbon has been investing in circular strategies in the areas of **energy, mobility, water, and materials**. All of them are fully aligned with the Climate Action Plan.

A sustainable Lisbon must pass through a **renewed public space**, through the reinforcement of the **fruition of the green spaces**, in the conformation of the centralities of the neighborhood and in the **promotion of a universal accessibility**. Lisbon must take the lead in local **climate action** and be an example in implementing broader measures and projects that accelerate the energy transition **carbon neutrality**, the sustainable expansion of



renewable energies, climate adaptation, environmental protection, safeguarding natural capital and ecosystem services and the circularity of materials.

The ambition of Lisbon in terms of circularity are:

- ✚ Formalization of a working group internal to municipal management and with all relevant organizations in which the municipality has an active participation
- ✚ Build a **circular strategy** for the city with all relevant actors by promoting their involvement in a participatory manner and in a spirit of co-creation
- ✚ Identify and work on circularity in all matters relevant to the sustainability of the territory and to meet the objectives set to achieve carbon neutrality, to which the city is committed

Baseline situation of existing actions

Lisbon has made significant steps in the field of circularity in public procurements. Also, Lisbon has adopted an action plan for the sustainability of food systems.

Barriers identified so far

Given the scope of the Circular Economy theme and the responsibility being shared by a significant group of councilors, who are part of the administration of the municipality of Lisbon, **there is no single designated political leader**. This fact is the main reason why there is not yet a formal document that reflects the city's strategy in this matter, but this does not mean that there is already a diverse set of initiatives and projects under development that contribute to the city's transition process to a more circular economic model.

Integrated and participatory approach will be applied to important extend in Lisbon through the ongoing collaboration of E-Nov agency with different departments of the Municipality, as well as other actors from regional and national level, industry, academia and citizens. Lisbon has the **organizational and operational capacity** to co-create the IAP and raise funding for the implementation of actions.

Consolidation of URBACT local group

The ULG coordinator is **Eugenia Santa Barbara**. The need and commitment to develop a Strategy for the city's circularity is identified both in the Activity Plan of Lisboa E-Nova and in the Municipality's Major Political Options (outlined in the 2027-time horizon). The entities that will take part in the ULG are annexed.

Focus of the URBACT Integrated Action Plan

The following potential focus of the IAP of Lisbon draws actions from the Action Plan for Sustainable Food.

Theme		Stream/ chain	R strategy
Governance (policies, strategies, regulations, monitoring, financial incentives, funding fiscal measures)	Dissemination of energy production units for self-consumption, along with the installation of photovoltaic plants as well as the adoption of highly energy-efficient solutions and technologies in buildings, equipment, fleet and municipal services, which reduce energy consumption and the energy bill exploiting the massive solar potential.	Energy	
	Redefining the parking offer, improving the conditions for smooth mobility with more information, safety, comfort and functionality	Mobility	

	Create a municipal initiative project, based on the principles of circular economy, for the use and reuse of materials from cultural organizations and schools.	Tourism and Culture	
	Create the Lisbon Materials Bank, as a repository for construction, ornamental and heritage materials of relevant cultural, patrimonial and architectural interest, promoting the circular economy through the reuse of materials in rehabilitated buildings, in conjunction with various municipal services.	Constructions	
	Construction and management of public space in a more circular way	Municipal assets and public space	
	Operationalization of a Covered Vegetable Garden in the Hub Criativo do Beato	Agri sector	
	Expansion of the Network of Horticultural Parks in the Municipality - Urban farmers - Feed Lisbon	Agri sector	
	Lisbon Composting	Food	
	Improve water consumption efficiency in city markets	Water	
	Development of a holistic bottom-up, city strategy for CE, based on the pilot case's results and in line with the regional strategy		
	"Roadmap for Circular Lisbon", in line with the strategic pillars of action and the goals to implement a circular economy model in the city by 2030.		
	Municipal Strategy for Sustainable Public Procurement transversal to City Council services.		
	Provision of incentives to the industrial and agricultural sector to cooperate (energy community)	SHARING ECONOMY	
	PAYT Project		
Education, Information, Capacity Building and Awareness for circular consumption patterns	Short chain consumption awareness campaign to citizens		
Development of methodologies and tools	Construction of a platform that mobilizes citizens, companies, schools, NGOs and other agents around common commitments		
	Selective Collection in Lisbon: "Green Waste from residential gardens"	Green	
	Observatory to calculate, monitor and improve citizens' consumption at city level (to provide data driven decision making and to make citizens aware of the current situation) ; also including air quality.		
	Update of mapping of industrial flows (for energy and water) and expansion to monitor flows (from agri and construction sectors) that are not monitored to date		
	Industrial symbiosis model for stronger urban-rural relation		
	Collection of organic waste in the residential sector in Lisbon – 2nd phase		
Fostering Innovation and Entrepreneurship	"Clean Future" acceleration programme		
	Creative Hub of Beato Food Balance		
	Promote the sale of short-chain products in a number of municipal markets	Food	

Potential pilot actions:

- ✚ Pilot project/ experimentation: School Meals Footprint measurement and creation of indicators
- ✚ Pilot case to test CE practices at schools' community

Learning and capacity needs and contributions

Contributions

The **strong points** of Lisbon that can be contributed to the network are listed below:

- ✚ Mapping of flows (for water and energy)
- ✚ Clean tech and start ups' support, Hackathons
- ✚ Public Procurements (ISO 24000 certified) - good practice for school meals
- ✚ Short chains, horticulture gardens
- ✚ Observatory (for monitoring of wastewater management, emissions, mobility) at city level
- ✚ Food Action Plan for the sustainability and circularity of Lisbon's food systems
- ✚ Collection of organic waste in the residential area
- ✚ Selective Collection in Lisbon: "Green Waste from residential gardens"
- ✚ Community composting (good practice with involvement of population)
- ✚ Treatment and Recycling unit
- ✚ Resource management infrastructure
- ✚ Several initiatives in the area of innovation and entrepreneurship carried out by the area of Economy and Innovation of the Municipality and Startup Lisbon.
- ✚ Recycling of water

Learning and capacity needs:

Lisbon is very interested in learning from similar experiences of other partners and starting to **improve the areas of construction and management of public space** in a more circular way and in **improving the population's sensitivity levels** to the transition processes towards more circular economic systems.

6. Malmö, Sweden



Key generic data

Population in Malmö is estimated to reach 360,000 residents during 202 and almost half is under 35 years old. There is a great mix, of 185 nationalities in Malmö, equally balanced in terms of gender. 73% of the population between 20-64 years are professionally employed. 12.3% of population aged 16-64 years old are unemployed. Relatively high rate, but it has decreased last decade and a half. The functional urban area is



just under 80 km². The economy of Malmö was traditionally based on shipbuilding and construction-related industries, such as concrete factories. The region's leading university, along with its associated hi-tech and pharmaceutical industries, is located in Lund about 16 km to the north-east. Malmö had a troubled economic situation following the mid-1970s. Between 1990 and 1995, 27,000 jobs were lost, and the budget deficit was more

than one billion Swedish krona (SEK). In 1995, Malmö had Sweden's highest unemployment rate. However, during the last two decades, there has been a revival. One contributing factor has been the economic integration with Denmark brought about by the Öresund Bridge, which opened in July 2000. Malmö has had one of the strongest employment growth rates in Sweden, although a high proportion of jobs created are taken by workers from outside Malmö. The number of start-up companies is high in Malmö. Especially strong growth is in the gaming area. Among the industries that continue to increase their share of companies in Malmö are transport, financial and business services, entertainment, leisure and construction.

Malmö is also **highly engaged at EU level**. It is among the cities selected for the EU Mission "100 Climate-Neutral and Smart Cities by 2030" and also a Pilot City in NetZeroCities, the EU Mission Platform for Climate Neutral and Smart Cities. Malmö is a member of ICLEI and have signed the Circular Cities Declaration and also the Green City Accord.

The local challenge, existing strategies and local development plans

The growing population of (it is expected that the number will increase by about 50,000 new residents by 2030) in combination to the city's goal to become climate neutral by then, represents a big challenge for the city. In addition, **health inequality is high**. There is a thorough work and investigation that lead to a 10-years report, depicting that between different areas in Malmö there is up to 8 years difference in the life expectancy within Malmö. Also there is a relatively **high unemployment rate**, the highest in Sweden, reaching 13%. Specifically related to the circular economy topic challenges are to:

- ✚ **Change the norm**, which is still to shop and consume, not reduce and re-use. Since Sweden has a functioning waste collection system this makes the citizens believe that it is sustainable to continue to consume as long as they recycle the waste.
- ✚ Increase **utilisation of recycled textile**
- ✚ Focus on **emission reduction activities** together with the local industry in this sector, by implementing industrial and urban symbiosis.
- ✚ Identify the key leverage points for the continued circular transition and engaging multiple actors within the city organisation as well as businesses and other stakeholders
- ✚ Extend **public procurements** and circular economy criteria especially in construction and infrastructure development

At national level there is an [Action Plan for Circular Transition](#), a [Circular Economy Strategy](#) and an [Action Plan for plastics](#).

At the local level, there is the [Environmental program 2021-2030](#) that is the main steering regulatory document, adopted by Malmö City Council in 2021 and sets 12 ambitious goals regarding climate, with some with connection to Circular Economy: greenhouse gas emissions reduction – both geographical area and for consumption, a net zero emission municipal organisation and 100% renewable and recycled energy and



Malmö must undergo a transition to a more Circular Economy - increased resource efficiency. The Environmental Barometer has been the main tool for monitoring the development of the Environmental Programme, present and former. The indicators used are constantly overseen and developed to better illustrate the progress. City of Malmö also report their progress yearly through the international CDP-system. In addition Malmö has a [Waste and Eco Cycle plan 2021-2030](#) and a strategy for climate neutral construction which is realized through the Local Roadmap for Climate Neutral Construction sector 2030. According to the Waste and Eco Cycle Plan municipal and company waste should decrease (30%) and the reuse within the municipal organisation should increase by 2030.

“Climate Transition Malmö” is the City of Malmö's gathering of forces to mobilize public activities, business, academia, civil society and Malmö residents to increase the pace of climate change. Within the framework, actors collaborate on prioritized transition areas where there is potential to reduce Malmö's climate impact: Circular Economy, Climate Neutral Construction, Net Zero Organization, Climate Smart Consumption, Mobility, Electricity and Heating.

Ambitions and aspirations for local change

Increased consumption is causing the Earth's resources to be consumed at an ever-increasing rate, and Malmö's ecological footprint needs to be reduced. Malmö must undergo a transition to a more circular economy where spillage and waste is minimised and energy efficiency is facilitated. Products, materials and resources must be fully utilised, re-used where possible and finally recycled.

The Malmö City Council has the Climate Transition process and reaching the climate goals as one of the most important focus areas or the municipality to undertake. City Council's goal is that Malmö should be a forerunner in climate work and contribute to the Paris Agreement's 1.5-degree goal.

In view of the above:

- ✚ Municipal and company waste should decrease and the reuse within the municipal organization should increase by 2030
- ✚ Greenhouse gas emissions needs to be reduced – both at geographical area and for consumption, a net zero emission municipal organization and 100% renewable and recycled energy city needs to be created
- ✚ Resource efficiency needs to be increased
- ✚ Decrease of the amount of energy produced by incineration in order to keep materials longer into the economy

- ✚ A **startup district** is also politically envisioned

With Circular Economy as an appointed transition area, the Environment Department aims to develop a roadmap for the Circular Economy or in other words a “Circular onomy Action Plan” (CEAP). The Municipality’s role for a more circular transition is to Mobilise, Inform and guide, Manage and administer, Create incentives, Regulate.

Baseline situation of existing actions

Sweden has a functioning waste collection system. All household waste in Malmo is collected **and 98% is reused or recycled into new material or energy**. Waste separation and recycling are commonly practiced amongst residents. More than 140000 tonnes of new textiles are put on the Swedish market per year, but only just under five percent are recycled as material. The first national automated textile sorting machine is situated in Malmo, but the challenge is to find the best way to actually recycle the material coming out. The **greenhouse gas emissions** from the industry and energy sector are dominant in both Swedish and Malmo-local emission statistics.

Barriers identified so far

- ✚ Contradicting goals within and outside the municipal administration – i.e. more growth vice versa reduced use of resources
- ✚ The regulatory framework and laws are not adapted for a circular economy
- ✚ Lack of knowledge on the topic, lack of competence of public administration employees
- ✚ The present national government has a low political interest in circular economy

Integrated and participatory approach is applied in Malmo, through the collaboration with industrial players, different departments of the Municipality, citizens and academia.

Malmo has the **organizational and operational capacity** to co-create the IAP and raise funding for the implementation of actions. There are a lot to build on, but also some challenges. The strategy is to build capacity alongside with the coproduction of the IAP and to then utilize these relationships and supporting structures to implement actions. Malmo intends to hold **pilot activities**. Indicative pilot actions will be defined.

Consolidation of URBACT local group

The ULG coordinator is **Malin Norling**. **Political supporters** are Sofia Hedén, Chairman of Environment Committee and Deputy Major of Environment and Internal Services (other CE issues), Katrin Stjernfeldt Jammeh, Major and Chairman of City Executive Committee (focus sustainable and circular procurement). The entities that will take part in the ULG are annexed.

Focus of the URBACT Integrated Action Plan

The initial focus of the IAP is depicted below.

Theme		Stream/ chain	R strategy
Governance (policies, strategies, regulations, monitoring, financial incentives, funding fiscal measures)	Collaboration with other municipal departments dealing with health, culture, education, labour and leisure, procurements, environmental inspectors even, business and external relations department, city department, to connect the dots and exploit synergies, but also to map the big players		

	Increasing of reusing/ utilising recycled textile	Textile	
	Increasing of circular procurements, especially in construction activities	Constructions	
Innovation and Entrepreneurship	Collaboration with local industry (and energy) actors to boost symbiosis Discussions with the industrial players to make them understand the added value to engage them.		
Education, Information, Capacity Building and Awareness (for circular consumption patterns)	Training/ awareness raising about circular design principles (for companies)		
	Awareness raising of citizens towards a new norm, different from the consumption of new materials and towards the reduction and reusing practices / change of the mindset from the consumption of new products to the reduction and reusing of existing products, materials and sources – give and communicate an alternative definition of what is “new”.		
Development of methodologies and tools	Estimated CO2- emissions from resource use and level of circularity within a city – decision on the indicator to measure circularity.		
	Data driven decision making: using the collected resource data to show different scenarios.		
	Investigations and autopsies to understand which are the streams that can be used in a symbiotic model/ Mapping and measuring of resource flows and increase symbiosis at urban and industrial level		
Infrastructure	Establishment of a Resource Hub for companies to explore and utilize each others' resources more efficiently		

Learning and capacity needs and contributions

The **strong points** of Malmo are listed below:

- ✚ Waste collection system
- ✚ Textile facility state of the art (SYSAV)
- ✚ Holistic management of resources including recycling, incineration, biowaste, energy recovery (SYSAV)
- ✚ District heating
- ✚ Mobile recycling, disposal, exchange points – PopUp-ReTuren.
- ✚ Carbon black
- ✚ Baseline analysis for Circular Economy
- ✚ Malmö Upcycling Service
- ✚ Governance: contract of players with Malmo city
- ✚ Swop Shop business model (Buying, selling and donating is the past. Renting, exchanging, repairing is the future)
- ✚ Procurements, for people that work in the Municipality incl. for school canteens, maintenance
- ✚ Hyllie district
- ✚ Innovative social enterprises, Yalla Trappan and food rescue organisation Matmissionen
- ✚ Walkable city centre attractive for all ages
- ✚ Augustenborg neighbourhood
- ✚ Building of new district with the theme of sharing and for affordable and climate smart living
- ✚ Testing and implementing sharing possibilities for citizens
- ✚ Digital education model

Learning and capacity needs

- ✚ Mapping and measuring of resource flows, estimated CO₂- emissions from resource use and level of circularity within a city
- ✚ Using the collected data to show different scenarios, co-identify actions to rethink, reduce, reuse, recover and recycle these resources within the city/region and therefore increase Malmö's level of circularity and decrease greenhouse gas emissions
- ✚ Creation of a methodology for measurement and monitoring of CE that can be used as inspiration for future standardization
- ✚ Integrating circular economy data and actions with other environmental / climate related actions
- ✚ Identify the key leverage points for the continued circular transition
- ✚ Engaging multiple actors within the city organization as well as businesses and other stakeholders
- ✚ Going from strategy to action

7. Oulu, Finland

Key generic data



Oulu is a city, municipality and a seaside resort of about 210000 inhabitants in the region of North Ostrobothnia, Finland. It is the most populous city in northern Finland. Population in Oulu is 211848 (31.12.2022), with a middle age of 39.4 years, gender balanced. The GDP per capita was 39 669€ in 2020. Unemployment rate is 12.1%. Most significant economic sectors are services, industry and commerce. Functional Urban area 2975 km² (land area). Oulu is also

considered one of Europe's "living labs", where residents experiment with new technology (such as NFC tags and ubi-screens) on a community-wide scale. Despite only ranking in the top 2% universities, the University of Oulu is regionally known in the field of information technology. Once known for wood tar and salmon, Oulu has evolved into a major high-tech centre, particularly in IT and wellness technology. Other prominent industries include wood refining, chemicals, pharmaceuticals, paper, and steel.

City of Oulu was among the first to sign the circular economy cities declaration in Europe. Circular economy has been taken into account in some of the construction projects implemented by City of Oulu.

The local challenge, existing strategies and local development plans

In Oulu, the **challenges** are the following:

- ✚ Growth in urbanization and need for new residences. Approx. 2 % annual growth in city plan area
- ✚ Growing repair debt
- ✚ Logistical challenges caused by long distances
- ✚ Big unemployment rate

Specifically, in terms of environmental impact, soil masses are transferred long distances, in order to be reused or stored.

Relevant national strategies and development plans are the listed below:

- ✚ [Finland's RoadMap to the circular economy 2.0](#)
- ✚ [Finland's Strategic program to promote a circular economy](#)
- ✚ [Circular Economy Green Deal](#)
- ✚ [Oulu Region's Smart Specialisation 2021-2025 - Council of Oulu Region \(pohjois-pohjanmaa.fi\)](#)

At local level, the City Board has approved the **2021 Oulu's RoadMap towards circular economy**, which covers the year 2021-2030. In addition, Oulu has a City Strategy, Environmental Program and Sustainable Energy and Climate Action Plan.

Ambitions and aspirations for local change

The City of Oulu wants to be carbon neutral by 2035. The vision as identified in the CE Roadmap: Oulu's vision for 2030: *Oulu is the **most learning circular economy city**. We develop and implement **sustainable lifestyles** in cooperation with companies, residents and other stakeholders.*

The goal is to raise and educate **eco-social individuals**, who want to create a sustainable future for themselves and others. The municipality role in order to advance circular economy is to inform and educate citizens and entrepreneurs, to regulate material flows and to enable easy transfer of circular economy principles to entrepreneurs.

Baseline situation of existing actions

Oulu has drafted a Roadmap for circular economy and has implemented actions towards mapping of flows, Investigation of material and mass flow and Material and mass recycling management plan, digitalization of water utilities and waste water digitalization.

Barriers identified so far

Legislation doesn't support the circular economy sufficiently, especially in the reuse of waste in land construction. In addition, **citizens' attitude** is a challenge in promoting the circular economy. Furthermore, insufficient funding has been allocated to effectively promote the circular economy.

Integrated and participatory approach are applied already; the coordination group of previous CE RoadMap is mobilized and meets regularly. The ULG group is based on coordination group of our Circular economy RoadMap 2021.

Focus of the URBACT Integrated Action Plan

The initial focus of the IAP is displayed in the following table:

Theme	Stream/ chain	
Governance (policies, strategies, regulations, monitoring, financial incentives, funding fiscal measures)	Procurements	Energy, Constructions, Municipal and public assets, food
	Sharing economy	Energy, Constructions, Municipal and public assets, food
	Land use planning	Energy, Constructions, Municipal and public assets, food
	Sustainable and resource efficient built environment	Energy, Constructions, Municipal and public assets, food
Education, Information, Capacity Building and Awareness (for circular consumption patterns)	Education and communication	Energy, Constructions, Municipal and public assets, food
Methodologies and tools	Mapping of flows	

Oulu has the **organizational and operational capacity** to co-create the IAP and raise funding for the implementation of actions. The capacity has been built during the design of plans like CE RoadMap, City Strategy, Environmental Program and Sustainable Energy and Climate Action Plan. Indicative pilot actions will be defined.

Consolidation of URBACT local group

The ULG coordinator is **Petteri Tuuttila**, Circular economy expert, member of the Urban and Environmental Services of the City of Oulu. Political supporter is the City Board and there is a strong intention to approve the action plan. The entities that will take part in the ULG are annexed.

Learning and capacity needs and contributions

The **strong points** of Oulu are listed below:

- ✚ RoadMap towards circular economy
- ✚ Strong ICT sector, very fast in wireless technology, piloting 6G
- ✚ Välimaa circular economy area was finished in 202. Built and financed by the city of Oulu, for businesses of for waste management and recycling activities
- ✚ Tahkokangas –circular economy in building a residential area
- ✚ Radiopark
- ✚ Utilization of large-volume industrial side streams and masses of soil generated from infrastructure construction
- ✚ Mass and material coordination operating model for the city of Oulu (Schedule: 1 August 2022 30 April 2024).
- ✚ "Learning Stream for Sustainable Future " which takes us to the know-how and lifestyle of a sustainable future. There is a "circular economy" theme of education, designed from early childhood to upper secondary school students.
- ✚ Top knowledge of hydro power, wind power, bioeconomy, nuclear power (Northern Ostrobothnia produces nearly 50% of Finnish wind power); Top knowledge in hydrogen production
- ✚ Steel industry
- ✚ Oulu innovation alliance strategy 2021-2027and ecosystem agreement
- ✚ MetaCity Oulu
- ✚ CE Cluster
- ✚ AC cluster (automotive)
- ✚ InSteams Hub
- ✚ Oulu station centre

Learning and capacity needs

Oulu needs support on how to move from strategy to action and how to measure realization of actions.

8. Cluj-Napoca, Romania



Key generic data

Cluj-Napoca or simply Cluj, is the second-most populous city in Romania and the seat of Cluj County in the northwestern part of the country. As of 2021, 286598 inhabitants lived within the city limits (making it the country's second most populous at the time, after the national capital Bucharest). The Cluj-Napoca metropolitan area had a population of 411379 people. The boundaries of the municipality contain an area of 179.52 km². Cluj experienced a decade of decline during the 1990s. Today, the city is one of the most important academic, cultural, industrial and business centres in Romania. Among other institutions, it hosts the country's largest university.



The Circular Economy field of action is already firmly anchored in the NetZeroCities Action Plan, but specifically connected with waste management, an approach that needs to change and set up an integrated vision of the Circular Economy, as also planned in the Romanian National Strategy.

The local challenge, existing strategies and local development plans

Biggest challenges in Cluj are **transportation, air pollution, cost of living**, due to internal migration; a lot of people from Romania move to **Cluj for better quality of life** (green places, culture, security). Cluj is the first choice for Romanians and this is also justified through a published survey. This, alongside with the fact that Cluj hosts 80000 University students, brings a lot of **pressure on infrastructure and on the housing sector**, and also affects the cost of living (€2500/ m² in Cluj, €1400 / m²) in Bucharest.

Although the municipality has **up-to-date urban planning documents**, many of them do not place climate neutrality as a central pillar of urban development. Moreover, the policy tools are not sufficiently based on the scientific evidence developed within the academic/RDI institutions or regional clusters.

Another important challenge is linked to the **reduced capacity for action among individuals and citizens** of all communes, due to **the lack of a unified** understanding, incentives and a common vision on climate-neutrality (including CE).

Specifically **in terms of circular economy**, Cluj-Napoca faces at metropolitan level some challenges concerning the urban "culture" of **disregarding the concept** of circularity and resources to be reused or used in a responsible matter, **decreased administrative capacities** of the surrounding communes and the behavioral tendencies of the inhabitants of the area.

The municipality does not have **data** on the average level of knowledge and/or competence of citizens and the local ecosystem, to identify the know-how entry point to use in stimulating pro-climate-neutrality behaviors.

Related to **infrastructure**, there is room for improvement in the waste sector, due to current barriers such as: **insufficient practices for the selective collection of waste**. Another related challenge related to the communes, is the illegal dumping.

Finally, the concept of circular economy and everything related to Green Deal is **not popular** to the 19 communes that surround Cluj (apart from Floresti). The small villages need a lot of investments. The

communes do not have financial and human resources to invest on digital, green. However, as there is tendency lately to leave Cluj due to high cost of living, people that are slowly moving to the rural areas are more aware and demanding, they have different mindset.

Another challenge is the ability to **change the mindset of people in Romania**, especially concerning the **“reduce” strategy**. People nowadays tend to consume more, in order to balance the effects of communism, as during those times, Romanian people suffered from lack or restriction of use of common goods.

The **national strategy** ROMANIA’S STRATEGY FOR THE TRANSITION TO A CIRCULAR ECONOMY (ROCES) 2020-2030 was adopted in 2022. The first Urban Policy of Romania was adopted in 2021, transposing the New Leipzig Charter through its 4 objectives (green and resilient, just and inclusive, competitive and productive and well-governed cities): Romania Urban Policy.

At **metropolitan level**, the Integrated Urban Development Strategy for Cluj-Napoca Metropolitan Area 2021-2030 (IUDS) is the key programmatic document outlining the investments planned for 2021-2030-2050.

Energy and Climate Action Plan 2022-2030 (SECAP) is a **strategic document**, elaborated according to the methodology of the Covenant of Mayors on Climate and Energy and including a Climate Change Adaptation Action Plan which contains a dedicated chapter for “Sanitation system and waste management”.

The role of the Cluj Metropolitan Area is to **help the communes build a vision** integrating the aspects of circularity, build capacities, raise awareness, enhance synergies and provide them with policy tools and regulations that will foster circular economy.

Ambitions and aspirations for local change

The ambitions of Cluj-Napoca is to become climate neutral by 2050 and to replace all public transportations vehicles with non-polluting vehicles by 2030. Moreover, Cluj-Napoca aims to improved energy efficiency for at least 40000 apartments, and public areas around apartment blocks, which are rehabilitated to reduce car usage and make transport by foot, bike and public transport more attractive. There is also a strong motto of the Mayor of Cluj, that **“investment in education never fails”**.

Other ambitions and aspirations:

1. **Improved** health by reducing pollution caused by waste
2. **Better air quality**, with energy transition program,
3. More **beautiful** and more valuable urban environment
4. Adaptation to climate change, through **decrease of GHG emissions** mainly through more sustainable mobility and energy efficiency
5. **Better waste management** in a circular way; increase reuse and recycling, prevent waste generation and diversion from landfills
6. **Knowledge enhancement**, training, awareness raising about CE, good practices regarding the involvement and engagement of population, how they did to engage people, policy regulations

At cross cutting level, the ambition of Cluj Napoca is to **reduce the rural-urban gap and deal with social aspects** (desegregation, preventing gender violence).

Baseline situation of existing actions

Although the city has not implemented actions on circular economy yet, Cluj-Napoca undertakes several actions that belong to the wider spectrum of the concept of circular economy. The city is one of the 100 mission cities, having signed the contract to achieve climate neutrality by 2030. The fleet has been replaced

by e-buses to serve public transportation. Moreover, the city respects the 3-30-300 rule that focuses on the crucial contributions of urban forests and other urban nature to health and wellbeing, as well as climate change adaptation. The rule of thumb provides clear criteria for the minimum provision of urban trees in urban communities: 3 trees from every home, 30 percent tree canopy cover in every neighborhood, 300 metres from the nearest public park or green space.

Barriers identified so far

The **barriers** that are identified so far are listed below:

- ✚ Illegal dumping in communes
- ✚ Link of CE simply to waste management
- ✚ Reduced capacity for action among individuals and citizens, due to the lack of a unified understanding, incentives and a common vision on climate-neutrality (including CE)
- ✚ Lack of monitoring; the municipality does not have data on the average level of knowledge and/or competence of citizens and the local ecosystem, to identify the know-how entry point to use in stimulating pro-climate-neutrality behaviors
- ✚ Room for improvement of infrastructure in the waste management sector (ie organization of exchange point for construction materials, mapping of points for exchange of textile, mapping of repair cafes and communication / promotion of these places to the citizens)
- ✚ Insufficient ecological islands (smart containers for selective waste collection) for the selective collection of waste

Integrated and participatory approach are applied already, in the frame of the Climate Neutral Action Plan. In general, there is a tradition in collaborative design and co-creation processes with Cluj Metropolitan Area applied through different projects i.e REFLOW, STARDUST.

The **URBACT local group** is consolidated. ULG coordinator will be **Violeta Irimies**. The Mayor of Cluj is committed towards the support of the concepts of Circular Economy, climate neutrality, Green Deal and NEB. The entities that will take part in the ULG are annexed.

Focus of the URBACT Integrated Action Plan

The initial focus of the IAP of Cluj-Napoca is illustrated in the following table.

Theme		Stream/ chain	R strategy
Governance (policies, strategies, regulations, monitoring, financial incentives, funding fiscal measures)	Creation of a local policy integrating the adopted strategies and plans and adaptation of this policy by all communes, putting climate neutrality at the centre of the planning and policy documents		
	Motivate and engage stakeholders through incentives for reuse, recycling, prevention of waste generation, repairing, remanufacturing, repurposing		REUSE, RECYCLING, REFUSE, REPAIR, REMANUFACTURE, REPURPOSE
	Enhance synergies with the ecosystem (Agro Transylvania Cluster, startup for reusing plastic, Industrial park, innovation zone etc)		
	Integrated policy leading to regulatory transformation (ie in terms of mobility)	Mobility	

Education, Information, Capacity Building and Awareness for circular consumption patterns	Enhance knowledge of municipality employees and citizens of the different communes about the impacts of inappropriate waste management practices (dumping, burning)		
	Proper communication of selection at the source and of the proper way to dispose the different streams (colours of the bins)		
	Inform, raise awareness of vulnerable communities		
	Communication/ promotion of the economic benefits of the implementation of the R strategies (even related to “reduce” or “refuse”) in order to fight the resistance of people that tend to link those strategies to the practices of the communism times.		REUSE, RECYCLING, REDUCE, REFUSE, REPAIR, REMANUFACTURE, REPURPOSE
Development of methodologies and tools	Improve waste management monitoring		
	Improvement of sorting, diversion from landfills		

Cluj-Napoca has the **organizational and operational capacity** to co-create the IAP and raise funding for the implementation of actions. The capacity has been built through the design and implementation of infrastructure projects, involving stakeholders from different levels of governance and sectors, focusing on NEB, Green Deal, climate neutrality. **Pilot actions** will be identified.

Learning and capacity needs and contributions

The **strong points** of Cluj-Napoca are listed below:

- ✚ Infrastructure projects that will improve mobility: peripheral road and subway
- ✚ Strong academic sector: department dedicated to CE
- ✚ Strong cluster community
- ✚ Working with vulnerable people
- ✚ Recycling facility
- ✚ Existence of a popular network of second-hand stores
- ✚ Existence of traditional circular practices in rural areas (almost no food/vegetable waste)
- ✚ Older generations practiced the selective collection in the communist period
- ✚ Strong willingness of citizens to apply circular practices in a structured, easy, accessible and comprehensible manner; people used to buy many kinds of second-hand products
- ✚ Strong ICT sector
- ✚ Electrical appliances free (pickup from home) collection system
- ✚ Free municipal site for construction waste – reusable materials given for free to citizens
- ✚ Food bank – food action plan
- ✚ Second hand and antique market – municipal site
- ✚ Water treatment plant

Cluj-Napoca **is strongly interested in** developing and using a measuring and monitoring methodology for waste management, in collaboration with the new contractor.

9. Tirana, Albania



Key generic data

The population of Tirana in 2023 is 863,694 from 850,530 in 2020 which reflects a 1.5% change. The population is well balanced with 50.1% of female population and 49.9% of male. 17.5% of the population are young (0-14 years old); 70% of the population are of working age (15-64 years old); 12.5% of the elderly population (65+ years). Population density reaches 777 inhabitants/km². The General Local Plan TR030 defines 32625391 m² of urban surface in which the boundaries of the urban area of Tirana Municipality lie, which has an administrative territory of 1120912341 m² (statistics generated by the GIS platform of PPV TR030).

The local challenge, existing strategies and local development plans

The **general challenges** faced by the city are listed below:

- ✚ Waste Management
- ✚ Infrastructure Development
- ✚ Consumer Awareness
- ✚ Regulatory Framework
- ✚ Funding

In terms of strategic and development plans, there is a relevant **National Sectoral Plan for Management of solid waste** and the **Document of Strategic Policies and National Plan of Integrated Waste Management**. (2020 – 2023). Till **today there is not a documented plan or policy specifically centered on enhancing circularity at the local level**. However, having acknowledged specific challenges and problems that exist, hindering the practical implementation of circular economy initiatives, the Municipality is committed to addressing them.

Ambitions and aspirations for local change

From the perspective of the Municipality of Tirana, while the city may currently lack a documented plan or policy specifically centered on enhancing circularity at the local level, the ambitions remain steadfast. These ambitions are aligned with the vision for a **more sustainable, resilient, and thriving city**.

The Municipality is committed to **advancing the circular economy agenda**, promoting sustainability, and creating a brighter future for the city and its residents. The Municipality aspires to bolster resource efficiency through **waste reduction and sustainable consumption**, stimulate local economic growth by supporting circular businesses, prioritize environmental sustainability, and reduce environmental impact.

Towards this direction the role of the city involves leadership, advocacy, education, and partnership-building to realize these goals, ultimately creating a more circular and prosperous Tirana for the residents and future generations.

Baseline situation of existing actions

There are several plans that are relevant to CE, under design, such as: **local waste management action plan**, climate change action plan, air quality plan. There are also some private initiatives that are related to circular economy in the city, like **repair and second-hand shops, cafes** and restaurants. In the first 6 months of the year, the sector of Environmental Management, Circular Economy and Energy Resources worked for the identification and creation of a map of businesses that are potential for inclusion in Circular Economy projects, businesses such as (shoemaker, tailor).



Barriers identified so far

Here's how the city plans to approach these challenges:

1. **Regulatory Framework:** The Municipality is working on enhancing the regulatory framework to support circular economy practices. This includes developing policies and regulations that facilitate circularity, such as waste reduction targets and more.
2. **Political Interest and Engagement:** The Municipality is actively engaging with local political leaders to raise awareness about the benefits of the circular economy. The Municipality aims to align circular economy initiatives with the city's political priorities and secure the necessary support and resources.
3. **Funding:** While the Municipality may face budget constraints, the decision makers are actively exploring diverse funding sources, including grants, public-private partnerships, and international funding, to support circular economy projects and initiatives.
4. **Knowledge and Competence:** The Municipality is investing in capacity-building programs for public administration employees to enhance their understanding of circular economy principles and practices. This will enable them to better contribute to circularity efforts.
5. **Entrepreneurial interest:** The Municipality is engaging with local entrepreneurs and businesses to promote circular business models and educate them about the economic advantages of embracing circularity.
6. **Collaboration with local stakeholders:** The Municipality is actively fostering collaboration with various stakeholders, including businesses, academia, and civil society organizations, to create a thriving circular economy ecosystem in Tirana.
7. **Resistance to change:** The Municipality recognizes that change can be met with resistance. To address this, the decision makers are developing comprehensive public awareness campaigns to educate and engage residents in adopting circular practices.

The Municipality of Tirana will benefit from the URBACT LET'S GO CIRCULAR! network to further develop the **organizational and operational capacity** needed in order to co-create the IAP. Indicative pilot actions will be defined.

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The **URBACT local group** is consolidated. **ULG coordinator will be Ester Likaj**. The ULG is already mobilized, through the members' participation in the "Tirana City Talks" environmental forum. The entities that will take part in the ULG are annexed.

Focus of the URBACT Integrated Action Plan

The initial focus of the IAP of Tirana is summarized in the following table.

Theme		Stream/ chain	R strategy
Governance (policies, strategies, regulations, monitoring, financial incentives, funding fiscal measures)	Reduction of cleaning fees for circular design businesses		
	Design and signing of a resolution, between all parties involved, to create engagement towards the common vision		
	Regulations and policies that promote circular economy practices, such as extended producer responsibility (EPR) laws, waste reduction targets, and eco-labeling.		
Education, Information, Capacity Building and Awareness (for circular consumption patterns)	Awareness raising of citizens towards a new norm, different from the consumption of new materials and towards the reduction and reusing practices / change of the mindset from the consumption of new products to the reduction and reusing of existing product		
	Collection and communication of existing good practices within Albania		
	Training of the use of recycling bins and of infrastructure in general that is installed for separate collection and communication of the results from recycling		Recycling
	Launch public awareness campaigns to educate residents and businesses about the benefits of the circular economy and how to participate.		
Development of methodologies and tools	Reduction of cleaning fees for Circular Design businesses		
	Mapping of all players that can drive change: a) businesses operate within the principles of CE b) schools c) communities of people		
	Mapping of potential synergies and symbiotic models between businesses		Reuse, Recycling, Remanufacture
	Monitoring of illegal actions in relation to water (illegal pumping from wells)	Water	
	Waste collection and management of household waste		
	Collection and management of green residues	Green	
	Collection and management of secondary materials from constructions	Constructions	
	Food management and collection schemes, with schools and University	Food	
	Norms for waste packaging	Packaging	
Infrastructure	Investment in recycling facilities, composting sites, and other infrastructure necessary for effective waste management and recycling.		Recycling, Recover
Fostering of innovation and entrepreneurship	Provision of support and incentives for businesses and startups that develop innovative circular economy solutions.		

The **political supporter** for this initiative is the Mayor and the Municipality of Tirana as a whole. With decision of the National Council of the Territory (no. 02, 27/07/2022), the document of the Review of the Local General

Plan of the Municipality of Tirana was approved, in which the territories of the urban area were expanded with reference to the IAP development and implementation.

Learning and capacity needs

The City of Tirana needs to get knowledge on how to change the mentality of citizens and businesses towards a more circular environment, but to do this, the waste management processes need to be improved as well. Information and awareness raising campaigns are needed, as well as measuring (indicators for recycling) and monitoring procedures and policing.



Key generic data

The island is part of the Corfu regional unit, and is administered by three municipalities with the islands of Othonoi, Ereikoussa, and Mathraki, which are known as Diapontia islands. The population of the whole island is 67122 (census 2021), almost equally balanced, 48.5% males and 52.5% females. The principal city of the island (pop. 32095) is also named Corfu. Corfu's urban architecture influence derives from Venice, reflecting the fact that from 1386 to 1797 the island was ruled by the Venetians. The Old Town of Corfu city is a UNESCO World Heritage Site. The island has again become an important port of call and has a considerable trade in olive oil. Corfu is mostly planted with olive groves and vineyards and has been producing olive oil and wine since antiquity. Modern times have seen the introduction of specialist cultivation supported by the mild climate, like the kumquat and bergamot oranges, which are extensively used in making spoon sweets and liqueurs. Corfu also produces local animal products. The size of the city is 41905 km².



The local challenge, existing strategies and local development plans

The challenges that Corfu faces are mostly linked to the extremely **increased tourism flows** during the tourist season that goes well beyond the island's carrying capacity and that leads to the

production of a great amount of waste. Since 2018, the landfill is closed and that, in combination with the fact that especially up until 2018 the Municipality of Corfu had not developed sufficiently the recycling procedure, big amounts of waste needed to be shipped and exploited elsewhere, leaving a huge opportunity for recovery of materials and energy unexploited. Also, Corfu is a **newly developed Municipality** (after the partition of the island's unique Municipality into three new ones at 2019) that is trying to establish the "new way" of thinking to its residents about waste management and circular economy.

More specifically, **waste management has been a critical issue for the Municipality of Corfu through the last years**. The local society has faced many problems concerning the daily life and the good health of the residents. Bad decisions, poor information on how to avoid such problems, bureaucracy and more pushed the whole island in difficult situations. **The last three years, significant efforts are being made to improve**.

Among all the challenges Municipality is facing, **the creation of a mindset of circularity to the citizens** is one of the next basic targets of the local Authorities. The success will be greater with the participation of local groups of people, aiming the Municipality to reach the desired target.

Other **challenges** include:

- ✚ **Lack of proper collection of the recyclables**, in order to establish a good communication to the citizens that the recyclables do not end up with the mixed waste
- ✚ **Lack of a unified identity of the urban infrastructure** for the disposal of waste either mixed or recyclables / communication for the proper waste collection (i.e. bins of the same colour for different streams)
- ✚ **Lack of proper separation at the source**
- ✚ Lack of space and infrastructure for the disposal of mixed waste in Corfu
- ✚ Lack of proper disposal of bulky waste/ there is a 5-digit phone number that does not work effectively

- ✚ Lack of **awareness** of citizens for the proper resources management, especially for recyclables, backed by lack of a regulation and lack of monitoring
- ✚ Lack of proper management of the **green waste** coming from gardens, urban parks and periurban areas which has an impact on air quality

All the above, strengthen the fact that for Corfu, reaching the climate goals set by the National and European Authorities is difficult. In terms of local plans, there is the **Greek National Circular Economy Action Plan 2018-2019**, which counts with 35 actions, strongly connected with the SDGs and grouped in four main areas:

1. **Regulations and legislation**: a Law on recycling, the New Energy Communities Law and the general waste management legislation. In 2018, the New Energy Communities Law generated 60 energy communities producing energy from renewable sources.
2. **Financial tools and incentives**: subsidies for entrepreneurs and incentives for local administrations to provide industrial symbiosis.
3. **Knowledge, awareness, expertise, good practices**: organisation of events with the support of the European Commission on specific projects.
4. **Governance**: coordination of the 35 actions through large dialogue discussion, indicators and ministerial committees for supervision.

In addition, The Municipality of Central Corfu and Diapontia Islands has signed a MoC that includes all the candidate Greek cities that were willing to be part of the program “100 Climate-Neutral and Smart Cities by 2030” and will follow the principles of the program.

Ambitions and aspirations for local change

The main target of the newly established Municipality of Central Corfu and Diapontia Islands is not only a “basic level” of waste management but the **placement of the local society in the path of Circular Economy**.

One of the main goals is to **implement strategies of information and education** and to establish a new philosophy towards recycle.

It is important for our municipality to develop a **holistic Circular Economy strategy**, integrating the whole value chain of design/production, consumption and recycling/reuse.

Baseline situation of existing actions

Although there is no concrete plan to boost circularity in Corfu yet, there are several actions that have been up taken towards this direction. Some examples are listed below:

- ✚ Procurement of five (5) pieces of "green recycling kiosks" which are required for the needs of the Municipality in order to ensure the separate collection of different recycling streams and the general strengthening of recycling in the application areas.
- ✚ Procurement of 5 to 7 "Mobile Green Points" to effectively support "Sorting at Source" and ensure the discrete collection of different recycling streams.
- ✚ Establishment of a (small) Green Point at a central road of the city. The Green Point includes the appropriate shaping of the space and the procurement of appropriate separate waste collection equipment as well as other equipment that will allow the smooth and uninterrupted operation of the (small) Green Point.
- ✚ Establishment and procurement of a (Large) Green Point equipment which will be the most essential part of the entire recycling and reuse network of the Municipality of Central Corfu and Diapontia Islands.

- ✚ Procurement of proper equipment for the establishment of a separate biowaste collection network in the Municipality of Central Corfu and Diapontia Islands and respectively, procurement of garbage trucks to ensure the separate collection of biowaste stream.
- ✚ Procurement of garbage trucks to ensure the separate collection of bio-waste from companies belonging to the sector of HO.RE.CA. in the Municipality of Central Corfu and Diapontia Islands.
- ✚ Smart points, there have been implemented 5/10
- ✚ First stages of the procurement of proper equipment for the establishment of a separate used cooking oil network. A contractor has been selected and there will be installed infrastructure and obligation by the restaurant/ hotel owners
- ✚ Procurement of 110 composting bins of approximately 300 liters for distribution to all Kindergartens - Elementary - Middle Schools - High Schools.
- ✚ Plan to create for the first time, by the end of 2023, municipal separate collection networks for new waste streams such as cooking fats and oils, plastics/metals, paper, and organic waste.
- ✚ Infrastructures for waste sorting at source, for 8 new streams of separate waste collection (batteries, electrical devices, lamps, ink-toner containers, cigarette butts, unexpired medicines, marine litter, used clothes)
- ✚ Recycling.gov.gr : on line guide for separation at source
- ✚ Red bins have been procured, for plastics or metal objects as well as 1100 bins for paper and cardboard are being installed

For the green waste, Corfu is waiting for approval of a proposal submitted to the programme Antonis Tritsis. Also, Corfu participates in the "Blue Municipalities Network" (Greece) and being awarded at "GREEK GREEN AWARDS 2022", for the "Best Practice for the Marine Environment" concerning the actions that Municipality did for the implementation of underwater and coastal cleanups and for the installation and the operation of the 1st outdoor marine – coastal waste collection station.

Corfu submitted a funding proposal, awarded with the highest score amongst others, at the European financial mechanism "New Energy Solutions Optimized for Islands – NESOI", for the project of "Fair and Clean Energy Transition of the Diapontia Islands" and won the GOLD Award at the category "Climate Change" at the "Best City Awards 2023"

Finally, Corfu participates in the "Network of Historic Cities Against Plastic Waste" (HISCAP), which is an important part of the Horizon 2020 project entitled BIO-PLASTICS EUROPE.

Corfu engages in Participation in the European Program "100 Intelligent Cities Challenge – ICC" and is member of the Covenant of mayors for the climate and the energy. Municipality of Central Corfu and Diapontia Islands has allocated more than 3 million euros for actions related to CE, from EU and national streams.

Barriers identified so far

Some of the **barriers** that are identified so far are listed below:

- ✚ Lack of **regulation** for the recyclables
- ✚ Lack of **monitoring** of the implementation of the regulation
- ✚ Lack of efficient **communication campaign** for the separation at source and disposal of waste coming from households

The Municipality of Corfu will benefit from the URBACT LET'S GO CIRCULAR! network to further develop the **organizational and operational capacity** needed in order to co-create the IAP. The direct partner to the network is "Kapodistriaki Development SA" which is a new organization not having previous experience in integrated Action Planning using URBACT methodology. Also, the Municipality of Corfu has not implemented

an integrated Action Plan before. Indicative pilot actions are already discussed to some extent and these could revolve around:

- ✚ Pilot application of a "Pay As You Throw - PAYT" scheme (Approval of funding is pending)
- ✚ Investigation of disposal of books, after the end of the school year; potential donation to Greek schools that operate abroad
- ✚ Preliminary information and raising awareness campaign for proper household waste management through "Separation at Source", reuse and composting (In the re-auction phase)

Focus of the URBACT Integrated Action Plan

The potential focus of the IAP of Corfu is depicted in the following table.

Theme		Stream/ chain	R strategy
Governance (policies, strategies, regulations, monitoring, financial incentives, funding fiscal measures)	Food waste elimination – actions in collaboration with restaurants, hotels	Food	
	Policy for water consumption	Water	
	Fair and clean energy transition	Energy	
Education, Information, Capacity Building and Awareness for circular consumption patterns	Preliminary information and raising awareness campaign for proper household waste management through "Separation at Source", reuse and composting (In the re-auction phase)	Household stream	REUSE, RECYCLE
	Creation of a mindset of circularity to the citizens		
Development of methodologies and tools	Monitoring of water leakages, save water action	Water	
	Mapping of small businesses of the HORECA sector, provision of support to operate under certain principles - "green" – promotion of this network and incentivization	Tourism and Culture	
	Mapping of urban green: mapping, planning of pruning and of irrigation, monitoring	Green (and Water)	
	Establishment of a network of separate collection of biowaste stream in the Municipality of Central Corfu and Diapontia Islands (Project in contract)	Green	
	Separate collection and management of household stream in the Municipality of Central Corfu and Diapontia Islands (Project in contract)	Household stream	
	Digitalisation of the records of the history and culture of Corfu	Tourism and Culture	
	Application for better informing tourism flows about alternative routes	Tourism and Culture	
Infrastructure	"Green recycling kiosks" for selected municipal units of the Municipality of Central Corfu and Diapontia Islands (Project in contract)		
	Organisation and operation of second hand and repair café, plus co-working space for digital nomads	Tourism and Culture	REPAIR, REUSE
	Kiosks to operate as libraries for exchange of books	Books	
	Kiosks for WEEE	WEEE	
	Kiosks for equipment from restaurants and bars (chairs and tables)	Tourism and Culture	
	Recycling points, green and yellow bins outside schools		RECYCLE
	Organisation and operation of a point for exchange, sharing of baby equipment and clothes		

The **URBACT local group** is consolidated. **ULG coordinator is Konstantinos Soukakos**, General Manager of Kapodistriaki Development S.A. The ULG is already mobilized in the frame of the URBACT LET'S GO CIRCULAR! NETWORK network. The entities that will take part in the ULG are annexed.

The **political supporter** is the newly appointed Mayor of Corfu. The human resources of Kapodistriaki Development are sufficient though to design the IAP.

Learning and capacity needs and contributions

Corfu **can contribute** with knowledge and experience particularly in waste sorting at source and with municipal separate collection networks for several waste streams such as cooking fats and oils, plastics/metals, paper, marine waste and organic waste.

Corfu is interested in **learning** particularly about:

-  Pay as You Through
-  Reuse of oils
-  Green public procurements

10. Munich, Germany



Key generic data

Munich has a population of 1562128 inhabitants in 2021. Adults aged 18 to 44 years were the most represented age group in the Munich population, with 654301 (41.9%) individuals, followed by the age group of 45 to 64-year-olds with 398903 (25.5%) individuals. The percentage of children and adolescents under 18 years (15.4%) and adults aged 65 and older (17.1%) together constituted almost one-third (32.6%) of the remaining population. German citizenship was held by 1,111,737 residents (71.2% of the population). The proportion of German citizens without a migration background was 53.5%, while Germans with a migration background constituted 17.7% of the population.



The total urban area (January 1st, 2018) is 310.7 km², including buildings and open spaces (44%), Recreational areas (16%), Roads and transport areas (17%): Agricultural areas (15 %), Wooded areas (4%).

The most recent Sustainability Report for the City of Munich 2022 (barrier free) lists many of the City's successful sustainability practices and can be found [here](#). In terms of public procurement, there is no explicit

circular public procurement program or policy in place – a respective measure is in the early stages of development. However, some public procurement practices aim at increasing sustainability overall and also positively impact the circularity of the city in line with elements of the 10-R Framework.

The city of Munich is a member of CCRI (individual CCRI Projects: DEFINITE-CCRI, CircularInvest, Green Assist, etc.), CCD, 100 CNSC Mission, EIT Raw Materials, Eurocities Working group on Waste Management, Hubs4Circularity and others.

The local challenge, existing strategies and local development plans

The city is one of Europe's **wealthiest cities** and has the highest per-capita average income of all cities in Germany. Hence, **the material footprint with an estimate of 32t per capita is rather large**. A behavioural shift on the consumer side is therefore more challenging than in other major cities of Europe. The city is also a **vibrant business hub** with multiple large companies and some industrial production, however, most productive capacity of Munich's major businesses lies outside the city boundaries or even outside of Germany. Therefore, **improving the circularity of productive industries is difficult**, even for major companies headquartered in Munich. Lastly, there is an **immense pressure of public land and space**, with land and housing prices in Munich being extremely high and second only to Paris in all of Europe. The housing market is extremely tense and there is a **large need to increase (affordable) housing stock**, while construction also is responsible for the largest material footprint across all value major resource streams.

An analysis of the challenges in the area of circular economy, is listed below:

- ✚ **Construction and Buildings:** Munich aims to promote circular construction practices through a variety of measures in its construction and CDW sector. From Building stock reuse concepts to circular material construction pilots to material hubs, building component market places etc, Munich is hoping to exchange with peers on this particular resource stream.
- ✚ Munich is also pursuing the creation **of an electronics and electronic device strategy** to increase the re-use, reselling and repair of all sorts of household level electronic devices.

- ✚ **Batteries and battery recycling** as a major enabler for electric car manufacturing, the energy transition and the decreased dependence on CRMs is another area for intervention in Munich, probably expanded on during the project life cycle.

At national level and in the area of circular economy, there is the fundamental legislation in Germany is the Kreislaufwirtschaftsgesetz (Circular Economy Law) from 2012 (a revision of the original Circular Economy and Waste Management Law from 1996). It translates the 2008 EU-Waste Management Directive into German law, and sets the basis for the German dual responsibility system: producers and private companies are responsible for the management of their end-of-pipe products and resources, while cities are responsible for the management of household resources and waste. A Circular Economy Strategy for Germany is **currently under development** at the Ministry for Environment, Nature Protection, Nuclear Safety and Consumer Protection. The publication is foreseen for 2024.

On the state level in Bavaria, the development of a regional circular economy strategy has been announced by Bavarian Environmental Minister Thorsten Glauber. Currently, there the main framework is the Bavarian Resource Strategy with its 7-Items Plan. On specific issues within circular economy (e.g. construction, batteries, e-waste) there is a large number of activities in Germany.

At local level, there are four separate action plans of the City of Munich identified that are relevant to enhance circularity:

- 1) The Action Plan Climate Neutral Munich (Grundsatzbeschluss II)
- 2) The Zero Waste Concept (handled by the Zero Waste Coordination Unit)
- 3) BNE Vision 2030 (Action Concept on Education for Sustainable Development)
- 4) The URGE integrated Action Plan from the previous URBACT Network

Currently, a city-wide exercise is under way to review the relevance and state of implementation of all **255 identified measures from these plans** with relevance to circular economy in Munich. The results of this review will feed into the Circular Economy Strategy Process undertaken by the Circular Economy Coordination Office in Munich at the moment.

A further, more advanced and official action plan for Circular Economy will be developed under this strategy process. The Integrated Action Plan under LET'S GO CIRCULAR! will receive its content via the same strategy process.

Ambitions and aspirations for local change

The main ambition of the Municipality is to **reduce the material footprint of Munich's private households and economy, and decouple the local economy from material use.**

Other indicators pursued are the **reduction of material-based carbon emissions**, the **increase in more sustainable material use** (e.g. switch to organic materials), the **reduction of waste volume**, and other ways to improve Munich's sustainability directly or as a co-benefit of the circular economy.

The role of the Municipality in this transition is multi-faceted as it:

- ✚ Holds direct responsibility for handling household waste and end-of-life products from private households and public bins. It runs the local waste management company and gives out contracts to other resource management companies to handle these resource streams after the product life span ends.

- ✚ Influences large resource streams such as construction materials via a plethora of different city department activities from planning, auditing, procurement, permitting to direct works via city-owned enterprises.
- ✚ Supports and proposes regulatory measures that directly impact circular economy.
- ✚ Acts as a convener, enabler, guarantor and funder for activities suggested or implemented by other stakeholders, civil society, SMEs, citizens etc.
- ✚ Convenes, promotes, consults and collaborates with local business and industry to promote circular economy activities in areas directly under their responsibility.

Baseline situation of existing actions

Munich already has a wide range of strategies, plans and programs available. Now it is time for action, not (just) planning.

While more work in this regard is needed, there is also **a need for tangible success, action implementation and the creation of quick wins**. Activities like integrated Action Plan preparation or the convention of groups like the URBACT Local Group also run the risk to bind resources that could otherwise be spent on direct implementation.

Barriers identified so far

There are a vast range of challenges:

- 1) **Data and Analytical Knowledge on the state of circularity and how to measure it for a city**. As part of the strategy process, we carry out MFA (Material Flow Analysis) analyses with deep dives for the most important material flows. These are merely first steps to really understanding and monitoring resource streams adequately.
- 2) **Distributed responsibilities and political complexity**: The key actors of the municipality needed for circular economy activities are spread out in terms of responsibilities across different departments, often with different political affiliations in leadership. Also, there are **overlapping structures** such as the Zero Waste Office and the Circular Economy Coordination Unit in different departments. Including all relevant actors is difficult, as **there is no single leadership figure** that can act as umbrella for all stakeholder engagement across the city government.
- 3) **Including Business**: Including businesses is another challenge. Many businesses either have a proactive interest in circular economy, have a clear business case to get involved or are at least subject to increased regulation (e.g. ESRS) in the space. **Creating the right mechanisms for all of them to engage, providing them with services** and not overstepping competencies vis a vis other city department is a major challenge.
- 4) **Including Citizens and supporting civil society**. Raising awareness with demographics reluctant to engage on “green” topics remains an issue, while empowering already active and engaged civil society actors is also an issue at the other end of the spectrum. Munich needs to include and involve citizens and NGOs depending on their very diverse and specific needs, which demands a **wide range of engagement offers, tools, narratives and concrete support**.

Focus of the URBACT Integrated Action Plan

The focus of the integrated Action Plan will depend on the identification of three major value chains within the strategy process undertaken by the Circular Economy Coordination Unit. The strategy process will inform and draw conclusions for the integrated Action Plan. The IAP then becomes, in turn, an adaptation of the content of the strategy process.

The city of Munich has **organizational capacity to design the IAP**, which will be an adaptation of the Action Plan and Strategy developed by Munich's Strategy Process. Capacity will be made available to create a suitable summary and translation of the content of the strategy into the IAP format and required language (English).

The City Council is **the political supporter**; there is a special unit, the Circular Economy Coordination Unit (CEKS), supported by the responsible department head at the Department for Climate- and Environmental Protection. There is a larger strategy process undertaken by the CEKS with the support of a consulting consortium from Deloitte and Circle Economy. This process will cover a wider and deeper range of stakeholders, analytical exercises and the in-depth development of a circular economy strategy and action plan. The **ULG coordinator will be Vanessa Tschapke**, Circular Economy Coordinator, City of Munich, CEKS. The entities that will take part in the ULG are annexed.

Learning and capacity needs and contributions

The **strong points** of Munich that can be contributed to the network are listed below:

- ✚ A high interest in circular economy from all parts of the political spectrum, as long as the narratives are understood and supported by the activities chosen.
- ✚ A large range of stakeholders and potential allies, and a particular interest from private sector companies to engage in circular economy activities
- ✚ A high number of dedicated staff working on the topic across different departments and a wide range of related issues and programs to be linked up synergistically
- ✚ Comfortable budget in the city to address these issues, provided the purpose and planning is done well and the defined actions can demonstrate clear impact.

SECTION 3: SYNTHESIS

1. Introduction

This section aims to depict the themes of focus for the LET'S GO CIRCULAR! network, the specific lines of intervention around which partners will co-design specific actions in the frame of their IAPs and the methodology for transfer of knowledge that will be followed during the action planning, planning implementation and finale phase between January 2024 and December 2025.

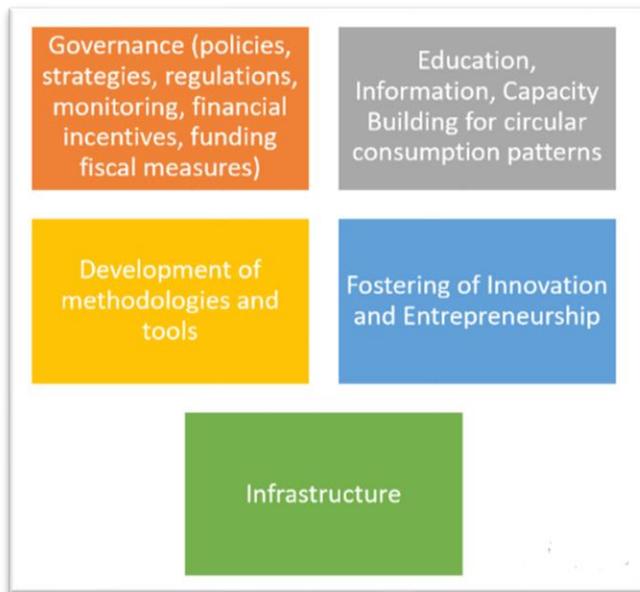
The cities' challenges that intensify their need to plan and implement circular economy principles, current ambitions, objectives depicted through their current strategic/policy papers or development plans, their learning needs as well as the experience/ knowledge that they can bring individually or even through their already established networks of stakeholders, have been deeply considered. The potential focus of the cities' IAPs has been discussed extensively during the lead expert's city visits, and the needs of the cities to boost circular economy, have emerged. This bottom-up analysis, started from the digital kick-off meeting in July of circular economy in the participating cities and are thus of interest for the most, and has evolved throughout the lead expert's city visits, leading to the sub-themes of interest for the whole network (referred to as "lines of intervention"). By grouping these "lines of intervention", the overarching themes of focus of the URBACT LET'S GO CIRCULAR! network have naturally emerged. During the whole process, the EU policy papers and roadmaps regarding the project topic have been taken into account, in order to reassure that at the end, URBACT LET'S GO CIRCULAR! network will not only help the participating cities at local level, but will also provide with useful insights the EU policy makers and the initiatives that aim to boost circular economy. Therefore, the policy context briefly analyzed in section I, has been taken into consideration. The exchange and learning methodology has been designed in correspondence with the themes of focus and lines of intervention, considering that partners need to exchange and build competences and skills on these emerging topics. The proposed exchange and learning methodology has been analytically presented in the transnational meeting held in Munich in September 2023. The methodology has been circulated there after and a consensus has been achieved by the partners. The exchange and learning methodology is the cornerstone for the network's Roadmap presented at the end of this section.

2. Analysis, synthesis – exchange and learning methodology

The results of the analysis and synthesis of the partners' needs as well as the exchange and learning methodology have been shared among the network during the transnational meeting in Munich, held in September and were discussed during the meeting. In the frame of the meeting the partners had the possibility to work individually on the results of the synthetic analysis in order to further elaborate on lines of intervention, which are important components of the exchange and learning methodology as they reflect the thematic focus of the network and thus highlight the needs for exchange and learning. A consensus on the components of the exchange and learning methodology (thematic focus) and on the number, kind and hosting place of the transnational exchange meetings, has been reached.

2.1 Themes of focus of the URBACT LET'S GO CIRCULAR! network

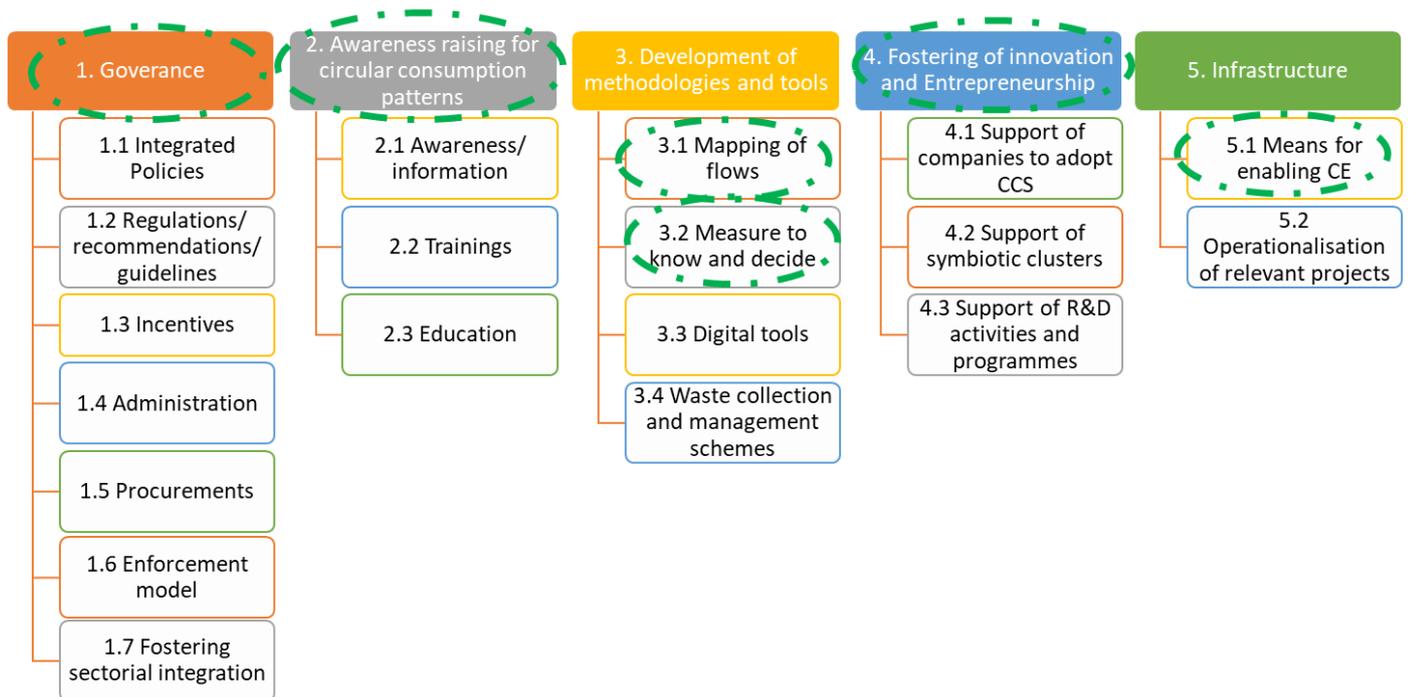
The categories that evolved as the overarching themes, on which URBACT LET'S GO CIRCULAR! network will focus throughout the next of the project, are depicted in Infographic 2.



Infographic 2: LET'S GO CIRCULAR! themes of focus

2.2 Lines of intervention of the URBACT LET'S GO CIRCULAR! Network

The lines of intervention that reflect each theme of focus are presented in Infographic 3. The themes and lines that are of particular interest commonly by all partners, are indicated in green dots.

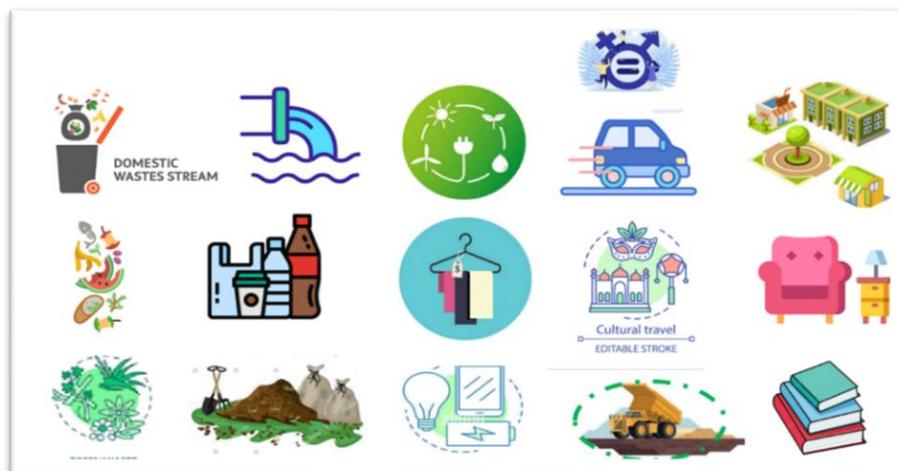


Infographic 3: URBACT LET'S GO CIRCULAR! network lines of intervention

2.3 Value chain – sectorial focus of the network

The value chains that emerged in the discussions during the city visits are illustrated in Infographic 4 and listed below.

- Household stream
- Electronic and electric equipment stream
- Books
- Furniture
- Municipal assets and public space
- Agri sector and green from public open spaces streams
- Packaging stream
- Tourism and Culture events
- Construction and demolitions streams
- Food stream
- Textile
- Green waste
- Biodiversity
- Energy
- Water
- Mobility

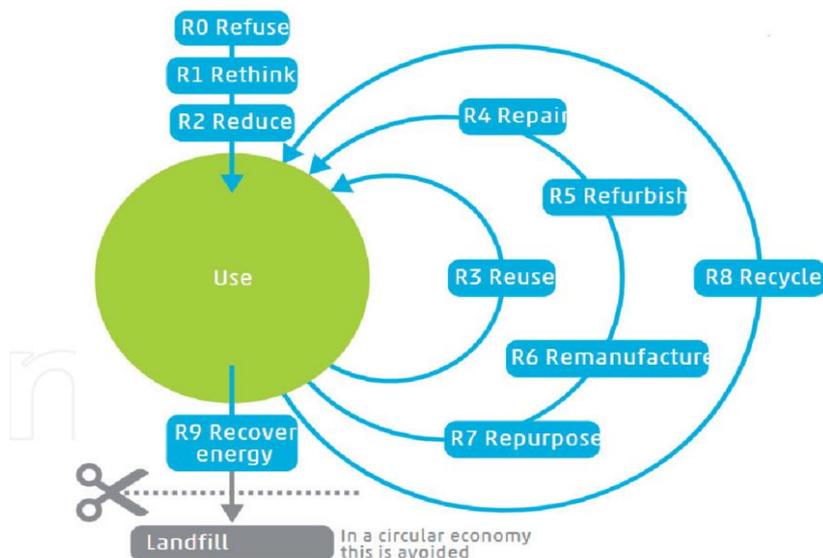


Infographic 4: Value chains of focus of the URBACT LET'S GO CIRCULAR! network

Among these, the common streams of focus for the partners are textile, food, household, green waste, water and energy.

2.4 R-driven approach of URBACT LET'S GO CIRCULAR! network

Circular economy / R-ladder



Infographic 5: Circular economy / R – ladder Source: Netherlands environmental assessment agency

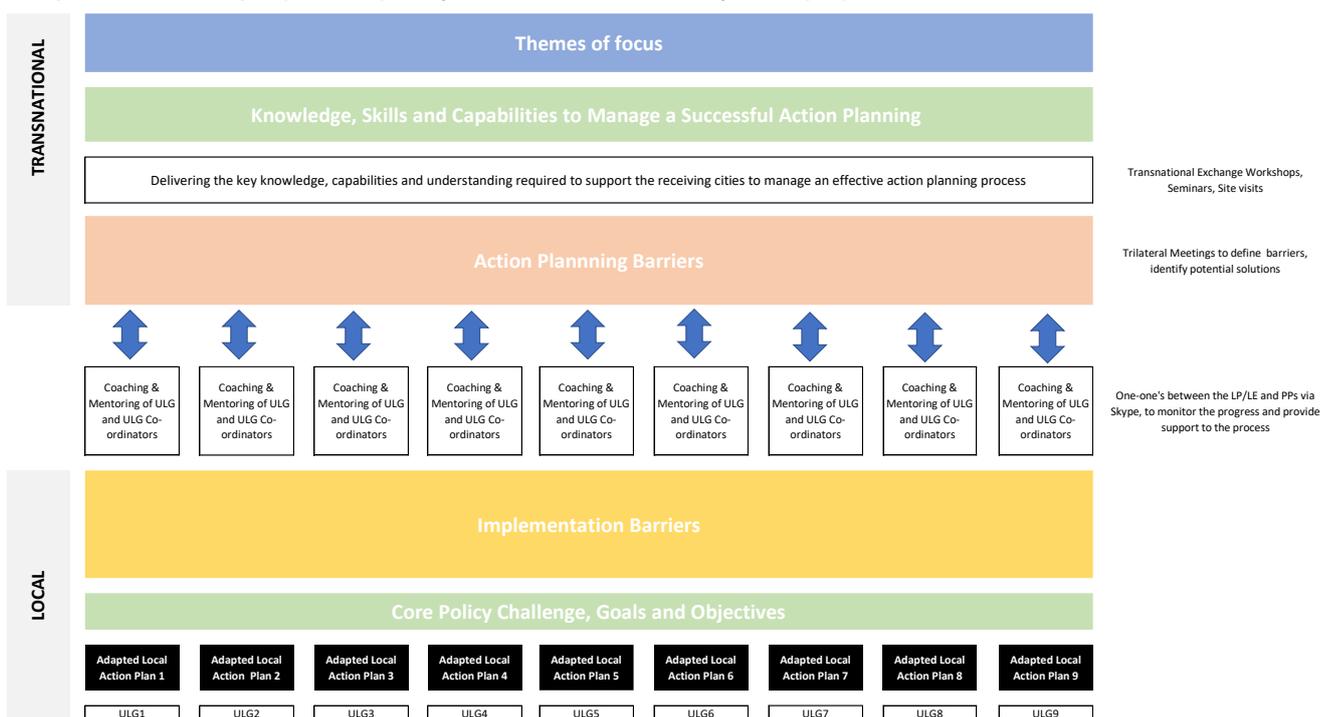
Another outcome of the synthesis of the city visits discussion, reflects the R-strategies that the cities raised as more important. The concept is schematically depicted in Infographic 5.

In terms of the 10-R approach the R-strategies that are of most interest for the partners are the following:

- Repair
- Reuse
- Recycling
- Rethink (also relevant to sharing economy)
- Redesign
- Renew

3. Network methodology

The concept behind the network methodology is schematically presented in Infographic 6. It is composed of the transnational and the local dimension. From a bottom-up point of view, core policy challenges, goals and objectives have been set at local level, implementation barriers are also known (as result of the city visits). During the URBACT LETS' GO CIRCULAR! network, these barriers will be subjected to discussion during the ULGs, in order to be "treated" using the knowledge available in the network. From a top-down point of view, the themes of focus and the knowledge, and the specific lines of interest will be discussed at transnational level in order to transmit knowledge to the ULGs, feed the new/ updated policies and the IAPs. In any case, in the core of the network methodology, lays the interaction with the ULGs, aiming to facilitate the co-production of IAPs, using transnational knowledge and solutions. Smaller, focused group meetings will be formulated to address particular needs. Moreover, 1-1 sessions will be held, between ULG coordinators and lead expert to monitor progress regularly and accommodate any emerging needs, not identified before.



Infographic 6: Concept of the URBACT LETS' GO CIRCULAR! network exchange and learning methodology

3.1 Transnational dimension of the network methodology

The aim of the transnational dimension is twofold: a) exchange/ build competences and knowledge on the themes of focus and lines of intervention and b) guide the IAPs' design.

The criteria that have been taken into consideration to propose the methodology are:

- (i) EU existing and forthcoming policies/ regulations/ needs (discussed in section I)
- (ii) the challenge and the focus of each city per line of intervention (depicted in section II)
- (iii) the available knowledge, dynamic in building synergies with other networks and practical experience to demonstrate (depicted in section II)
- (iv) learning and capacity building needs (depicted in section II)
- (iv) URBACT IV APN guidelines

The transnational learning and exchange methodology is structured around 9 transnational exchange activities (TEXs) dealing with the themes of focus and the respective lines of intervention, as well as with the progressive development of the IAPs, following the URBACT IV APN Guidelines. The outcomes of the transnational exchange activities will be communicated in project final event.

The location where each exchange is taking place has been chosen based on point (iii) above. Most of the TEXs (5/9) will have finished within the 1st year of the project implementation (with the first TEX already implemented in the activation phase, in Munich, in September 2023). This early planning serves several aims: a) provides partners with the knowledge needed at transnational level early in the project in order to have the time to draft the IAPs b) enables to act proactively in case corrective actions are needed c) saves the 2nd year of the project for peer reviews of the IAPs, refinements, improvements. In other words, we can say that this early planning eliminates the potential risks.

Each TEX will be structured around:

- i. Study visits to demonstration areas
- ii. Thematic sessions with 15' presentations by experts on the themes identified for each TEX
- iii. Communities of Practice with (CoP) sectorial/value chain focus with the aim to lead to Circular Systemic Solutions (URBACT LET'S GO CIRCULAR! network CSS portfolio)
- iv. Group activities for maximisation of knowledge exchange and plenaries to share results
- v. Presentations and "therapy sessions" on the action planning, planning implementation and communication topics, organised and managed by the lead expert
- vi. Coordination and communication sessions organised and managed by the lead partner with the support of the lead expert, including discussions on the Final Network Product

What is a Community of Practice?

- A community of practice is a group of people who share a common concern, a set of problems, or an interest in a topic and who come together to fulfil both individual and group goals.
- In the frame of URBACT LET'S GO CIRCULAR! network communities of practice will gather to share good practices, exchange and frame circular systemic solutions that when concretised, can be applicable by other cities, shared through the URBACT LET'S GO CIRCULAR! network CSS Portfolio. Interaction on an ongoing basis is an important part of this. Other themes of communities of practice can be introduced in agreement with the partnership
- Communities of practice in the frame of URBACT LET'S GO CIRCULAR! network will not rely only on face-to-face meetings but will schedule web-based collaborative environments to communicate, if needed

Other kinds of transnational interactions on the themes of interest identified, either in the frame of TEXs or digitally, in intervals between TEXs, are:

- i. Smaller focused group meetings (trilateral or bigger) of partners that aim to exchange on specific issues of common interest, allowing deeper dives – identified already and listed further down in this report
- ii. Master classes that aim to build the knowledge of the cities on a topic

What are smaller focused group meetings for?

It is clear that some of the URBACT LET'S GO CIRCULAR! network cities have more specific or individual areas of interest and there are some themes which are not (currently) of primary interest to all partners. Considering the cutting edge of the circular economy topic, the fastness of developments in this field at EU level and the cities' quickly changing needs, it is therefore recommended to introduce and adopt a flexible approach to some elements of transnational exchange and to allow scope for smaller group meetings as smaller clusters of partners, meeting around themes of interest as they emerge during the next phase of the project. An introduction to the smaller group meetings rationale has already been made during the meeting in Munich and partners welcomed the idea of being open to flexibility and being clustered into smaller teams to exchange, while the project is in progress. This will enable the network to work based on a transfer methodology that is always up-to-date, based on real time needs and will also help cities to find solutions on potential barriers that will emerge from the ULGs at the time of the implementation. Smaller group meetings might be organised in parallel in the frame of the TEXs, if this is feasible, otherwise they will be digitally

organised and held. The synthesis and the themes of the smaller focused group meetings are identified already and listed further down in this report.

What are master classes for?

Experts that will deliver the master classes might be ad hoc experts selected from the URBACT pool or well acknowledged experts either from public authorities or from European agencies/ initiatives (ie JRC, ICLEI, OECD, Circle Economy). The topics that will be delivered through a master class have been selected based on the partners’ needs and on the complexity of the topic (not being able to be covered through a 15’ thematic session). Master classes might last for 1-2 hours. Master classes can be either digital, in between TEXs, or physical, in the frame of the TEXs. This depends on travel and accommodation costs and CO₂ emissions saving. Master classes also allow for a bigger number of participants from each city to be able to follow. The themes of the smaller focused group meetings are identified already and listed further down in this report.

What is the difference between a master class and a smaller focused group meeting?

In the case of a master class there is either one partner that has strong knowledge on the thematic, or if not, there is a dedicated external expert that delivers the master class, usually digitally, to accommodate the participation of a larger group of participants from each partner. In the smaller focused group meetings, one or more partners have already some experience and progress on the thematic under discussion and meet to exchange internally. The focused group meetings can run during the transnational meetings, if circumstances allow this.

Focused onsite visits can also be organised to cities that have a special case to show and based on the special interests of the partners of the network.

What is common between TEXs, smaller focused group meetings, master classes and focused onsite visits?

At all cases, the outcomes and learnings will be available by the lead expert to all the partners of the URBACT LET’S GO CIRCULAR! network, through reports and memos/ short take aways.

The themes of the TEXs including organisational details and those of the smaller group meetings, master classes and focused onsite visits for the URBACT LET’S GO CIRCULAR! network partners are depicted further down in this study.

Transnational meetings (TEXs)

Table 4 below presents an overview of the TEXs’ themes of focus, hosting cities and timing. The first transnational meeting in Munich is not included. The partners agreed on the potential dates for each meeting, which are different from these presented in the Application Form. The transnational exchange learning meetings will take place as follows:

Table 4: Overview of the TEXs

Delivering the knowledge, skills and learning required	Transnational meetings	Proposed hosting city
Governance (policies, strategies, regulations, monitoring, financial incentives, funding fiscal measures, procurements) - Mapping of flows - Valorisation of different streams through R&D programmes - Waste collection and dmanagement systems for different streams including green - Educational programmes	TEX	Guimaraes - Lisbon
Education, Information, Capacity Building for circular consumption patterns - Use of municipal assets and public space - Pilot projects	TEX	Riga
Fostering of Innovation and Entrepreneurship - Use of digital tools and platforms to foster CE	TEX	Oulu
Measure to know - Infrastructure - potential study visit to CPH	TEX	Malmo
Peer review of action plans - MTR - thematiic exchange	TEX	Cluj
Coordination meeting and preparing for implementation	COORD 1	Tirana
Coordination meeting and communication of action plans	COORD 2	Corfu
Evaluation and celebration	Finclal Conference Dec 2025	Granada

- TEX 2: Workshop week in Guimaraes and Lisbon February 2024
- TEX 3: Riga, April 2024
- TEX 4: Oulu, 17-21 June 2024
- TEX 5: Malmo, November 2024
- TEX 6: Cluj- Napoca, February 2025
- TEX 7: Corfu, May 2025
- TEX 8: Tirana, September 2025
- TEX 9: Final festival in Granada, December 2025

The transnational strand of the programme has been specially designed to reflect the stages of the action planning methodology as well, as illustrated in Table 5.

Table 5: Stages of the action planning methodology at transnational level

The four phases of designing an action plan	Activities	Indicative delivery timetable
Phase 1: Activation	Establishment of a strong multi-agency ULG, problem analysis, co-design of the vision and objectives	June 2023 - December 2023
Phase 2: Action planning	Co-design of actions, specific, measurable, achievable, relevant, timebound	January 2024-December 2024
Milestone	Action Plans 1st version delivery & Mid-Term Review	(by) December 2024
Phase 3: Preparing implementation	Pilot activities implementation and evaluation/ Planning implementation - Update of the Action Plans and finalization	January 2025-September 2025
Phase 4: Communication/ dissemination	Communication and promotion of results	October 2025-December 2025

Taking all parameters into consideration, an indicative planning of the TEXs has been already discussed and agreed among the partners, during the activation stage meeting in Munich, in September 2023. The plan is described further down. The elements of the indicative agendas of the TEXs are corresponding to Infographic 3.

TEX 2: workshop week in Guimaraes and Lisbon, February 2024

Overview of the thematic content: Integrated policies, Procurements, Mapping of flows, Measure to know and decide, R&D programmes for valorisation of streams, Educational activities, Acceleration programmes

Sectorial focus: Waste and resource management, green waste and composting, food, plastic and packaging

Relevant IAP stage: Action planning

Indicative agenda in Guimaraes:

- ✚ Study visit
- ✚ Thematic sessions on:
 - Strategies: for CE, PAYT, recycling, action planning for sustainable development, Plastic free market initiative, Governance Ecosystem: Guimarães 2030, Mission structure, Administration, Guidelines/ Recommendations
 - Valorisation of end-of-life streams through R&D
 - Awareness, Training and Educational programmes
 - Waste collection and management schemes and enforcement
- ✚ Communities of practice indicatively on:
 - Circular systemic solutions
- ✚ Presentations and “therapy sessions” on the action planning needs:
 - Presentation of local progress since TEX 1 (all cities)

- b. Presentation of the intervention logic for the development of the actions: from vision, to specific objectives, to outputs and actions (lead expert)
- c. Presentation and discussion on tools provided by the lead expert (action and activity tables)
- d. Discussion on the content of the action plan
- e. Next steps

✚ Coordination and communication session

Indicative agenda in Lisbon:

✚ Study visit

✚ Thematic sessions on:

- a. Integrated policies – food action plan for the sustainability and circularity of Lisbon's food systems
- b. Procurements
- c. Methodology and results of hackathons and acceleration programmes to boost innovation, entrepreneurships and circular systemic solutions
- d. Circular economy indicators
- e. Mapping of flows

✚ Communities of practice:

- a. Circular systemic solutions (ie community composting, food)

TEX 3 in Riga, April 2024

Overview of the thematic content: Educational activities, Use of municipal assets and public space, small infrastructure, Methods and tools, Pilot projects

Sectorial focus: Constructions, glass, open areas and buildings

Relevant IAP stage: Action planning

Indicative agenda of TEX 3:

✚ Study visits: open and public space reuse, open markets.

✚ Thematic sessions on:

- a. Awareness, Training and Educational programmes
- b. Incentives
- c. Circular public procurements and applications including potentially collaboration with Pro Circ Interreg North Sea Region programme
- d. Methodology for establishment of Centres for Urban Resources, Reuse and Remanufacture in collaboration with EUKI project CURE+
- e. Neutrality measurement in the city centers
- f. Deposit system for multiple-use glasses and in the future - also dinnerware

✚ Communities of practice indicatively on:

- a. Circular systemic solutions (ie reuse of empty buildings and empty space)

✚ Parallel smaller focused group meetings:

- a. Household waste management (Corfu, Tirana)
- b. Climate action plans (CECAPs) (Cluj-Napoca, Guimaraes, Lisbon, Malmo, Munich, Riga)

✚ Presentations and "therapy sessions":

- a. Presentation of local progress since TEX 2 (all cities)
- b. Peer review of action tables (cities working in groups)
- c. Plenary discussion (all)
- d. Continuation of the intervention logic: from actions to resources (LE)
- e. Next steps

✚ Coordination and communication session

TEX 4 in Oulu, June 2024

Overview of the thematic content: Administration, Digital tools, Support of companies, clusters, alliances, as well as several initiatives in the area of innovation and entrepreneurship, R&D programmes, Awareness, Training and Educational programmes

Sectorial focus: Water, energy, ICT

Relevant IAP stage: Action planning

Indicative agenda of TEX 4:

- + Study visit
- + Thematic exchange on:
 - a. n "Housekeeping" guidelines for CE in the municipality's "assets" (i.e. ICT)
 - b. Awareness, Training and Educational programmes
 - c. Support of companies, clusters, alliances, as well as several initiatives in the area of innovation and entrepreneurship
 - d. R&D programmes and building alliances to boost innovation
 - e. Changing citizens' behaviour in potential collaboration with WRAP and with ad hoc expert
 - f. Digital tools to boost circular economy, digital passports
 - g. Circular product design to improve durability, repairability, reusability, upgradability, recycling and use of recycled content in new products
- + Communities of practice on:
 - a. Circular systemic solutions with water
- + Presentations and "therapy sessions":
 - a. Presentation of local progress since TEX 3 (all cities)
 - b. Peer review of action tables (cities working in groups)
 - c. Plenary discussion (all)
 - d. Monitoring of the action plan (lead expert)
 - e. Next steps
- + Coordination and communication session

TEX 5 in Malmo, November 2024

Overview of the thematic content: Topics related to Infrastructure and Governance

Sectorial focus: Textile, furniture, IT, energy, water

Relevant IAP stage: Action planning

Indicative agenda of TEX 5:

- + Study visit in Malmo
- + Thematic exchange on:
 - a. "Housekeeping" guidelines for CE in the municipality's "assets" (clothing, gloves, IT, furniture etc)
 - b. Incentives
 - c. Fostering sectorial integration
 - d. Sharing economy
 - e. Infrastructure and means to support circularity
 - f. Resource mapping/ baseline analysis
 - g. Circularity label in potential collaboration with the HOOP Network
- + Communities of practice on:
 - a. Circular systemic solutions (ie in textile sector, furniture, small household items, energy, from urban biowaste and wastewater to bio-based products)
- + Presentations and "therapy sessions":
 - a. Presentation of progress since TEX 4 (all cities);

- b. Peer review of draft action plans (cities working in groups);
- c. Mid Term Review (in plenary) that will lead to adjustment of the workplan and will possibly introduce new needs in terms of thematic content and action planning process;
- d. Next steps

✚ Coordination and communication session

TEX 6 in Cluj-Napoca, February 2025

Overview of the thematic content: Governance, Support of clusters. Cross cutting themes: gender equity, social integration, mobility, air quality, climate, New European Bauhaus, energy efficiency/ energy performance in buildings, land use – land change and forestry

Sectorial focus: agri-sector

Relevant IAP stage: Planning implementation.

Indicative agenda of TEX 6:

✚ Study visits (i.e. in the CCRI pilot).

✚ Thematic exchange on:

- a. Support of clusters (4.2)
- b. Support in development of policies and regulations for smaller administrative units and exploitation of urban - rural relation.
- c. Cross-cutting aspects: equity and equality, gender and vulnerable, New European Bauhaus initiatives
- d. Energy efficiency of buildings, smart lighting, smart mobility, low carbon ICT

✚ Communities of practice

- a. Circular systemic solutions (i.e. in the agri sector, use of second life batteries in potential collaboration with STARDUST and REFLOW projects)

✚ Presentations and “therapy sessions”:

- a. Presentation of progress since TEX 5 (all cities);
- b. Presentation of pilot actions' results (all cities);
- c. Deep dive into finding resources for the realisation of the action plans (lead expert);
- d. Discussions on lessons learnt so far (all); next steps

✚ Coordination and communication session

✚ Market place of ideas for Circular Systemic Solutions

✚ Political panel with the aim to discuss funding of Circular Systemic Solutions

By the time of the finalisation of TEX 6, all the themes and sub-themes that have had initially been identified, will have been addressed through TEX 1-TEX 6. The two upcoming TEXs (TEX 7 and TEX 8) will be focused mostly on the planning for implementation steps, including IAP monitoring framework, risk identification and mitigation and funding schemes. TEX 7 and 8 are intentionally organised in Corfu and Tirana towards the end of the life of the network, as even if these cities do not have exceptional experience and knowledge to demonstrate, they are strongly interested in making fast steps to meet the EU circularity goals. Therefore, organisation of meetings in Corfu and Tirana will enable to mobilise stakeholders.

TEX 7 in Corfu, May 2025

Overview of the thematic content: Coordination meeting & monitoring of action plans – funding. Additional thematic needs to be covered will be assessed at that time, taking into consideration also the results of the Mid-Term Review.

Sectorial focus: Marine waste and potentially additional thematic areas to be defined.

Relevant IAP stage: Planning implementation

Indicative agenda of TEX 7:

✚ Study visits

- ✚ Thematic sessions to be confirmed based on unmet needs at the time
- ✚ Master class on marine waste
- ✚ Communities of practice:
 - a. Circular systemic solutions
- ✚ Presentations and “therapy sessions”:
 - a. Monitoring of action plans, risk mitigation, funding scheme
 - b. Presentation of progress since TEX 6 (all cities);
 - c. Deep dive into monitoring of the action plans (lead expert);
 - d. Meeting final partners' needs (ALL);
 - e. Next steps
- ✚ Coordination and communication session

TEX 8 in Tirana, second half of September 2025

Overview of the thematic content: Coordination meeting & communication of action plans. Additional thematic needs to be covered will be assessed at that time.

Sectorial focus: To be defined, if needed

Overview of the planning implementation content: Peer review of final action plans (cities working in groups); plenary; Communication of action plans, pitching (lead expert); Final Network Product demonstration

Indicative agenda of TEX 8:

- ✚ Study visits
- ✚ Thematic sessions to be confirmed based on unmet needs at the time
- ✚ Funding options and synergies
- ✚ Presentations and “therapy sessions”:
 - a. Presentation of progress since TEX 6 (all cities)
 - b. Deep dive into monitoring of the action plans (lead expert)
 - c. Meeting final partners' needs (ALL)
 - d. Preparing for the communication of IAPs, pitching
 - e. Next steps
- ✚ Coordination and communication session including Final Network Product

TEX 9 – Grand festival in Granada, December 2025

Overview of the thematic content: Coordination meeting & communication of action plans. Additional thematic needs to be covered will be assessed at that time.

Sectorial focus: To be defined, if needed

Indicative agenda of TEX 9 – final festival:

- ✚ Study visits
- ✚ Inspirational speeches
- ✚ Thematic sessions open to the general public
- ✚ Political panel
- ✚ Market place of ideas
- ✚ Networking with EU partners and initiatives
- ✚ Coordination and communication meeting
- ✚ Future synergies for the implementation of the IAPs

Thematic outputs from TEXs are indicatively depicted in chapter 4 in this report.

It should be highlighted that all the types of organizations from different levels (municipality departments, academic, technical instates and authorities such as standardization authorities, chambers, entrepreneurs, regional authorities responsible for issues related to the thematic topics dealt within the network, university

departments) have already been involved during the activation phase, have shown great interest and will continue their active participation in the next steps. The selection of the representatives of each city in each one of the TEXs will be made carefully, taking into consideration different parameters (i.e. the thematic areas that will be discussed, the ability of the participant to influence and transfer knowledge at local level through the ULGs). The ULG Coordinator is strongly advised to participate in the TEXs, in order to be familiarized not only with the themes discussed that will continuously need to be transferred to local level but also with tools used during the TEXs, such as ice breaking activities, out of the box ways of working and capturing lessons learnt. The ULG Coordinator is the link between the transnational and the local activities, the voice of the ULGs that is very important to be heard in every TEX.

The TEXs and the final event will last minimum 2 days apart from TEX 2 (workshop week in Lisbon and Guimaraes) and each partner will be represented by 3 participants.

Focused group meetings topics and interested partners

The focused smaller group meetings' synthesis and topics are described in this section.

1. Climate action plans (CECAPs) in the frame of the 100 mission cities, in April 2024 during TEX 3 in Riga:
 - Cluj-Napoca
 - Guimaraes
 - Lisbon
 - Malmo
 - Munich
 - Riga
2. Household waste management in April 2024 during TEX 3 during TEX 3 in Riga and in parallel with the focused group in CECAPs:
 - Corfu
 - Tirana (need to learn)
3. Water circularity included during TEX 4 in June in Oulu - might be backed by a dedicated onsite visit to Granada earlier than the final festival that is scheduled for December 2025:
 - Corfu (need to learn)
 - Guimaraes (need to learn)
 - Granada (knowledge giver)
 - Lisbon (knowledge giver)
 - Oulu (research partner involved)
 - Riga (need to learn)
 - Tirana (need to learn)
4. Circular tourism, digitally, in September 2024:
 - Corfu
 - Granada
 - Lisbon
 - Malmo (to be confirmed later)
 - Munich
 - Tirana

It is possible that more than one focused group meetings will be organised per topic during the life of the network, based on the partners' needs. It is also possible that additional topics of focused group meetings added, based on the partners needs and on the Mid Term Reflection results.

Master classes topics

The proposed topics of master classes are listed below. All the partners of the network will be invited to follow these master classes.

1. Indicators for monitoring of circular economy, by external expert (OECD and or JRC and or Circle Economy and or ICLEI, in March 2024)
2. Changing people's behavior and mindset, potentially ad hoc expert in September 2024 online meeting
3. LCA/ LCC in circular economy, by external expert, can be in collaboration with Ellen Mac Arthur foundation or JRC online, in November 2024
4. Doughnut economy by external expert, for partners that initially expressed interest in this topic (Riga, Lisbon, Malmo and Cluj-Napoca), online, in February 2025

A master class on procurements might be organised in collaboration with other URBACT IV action planning networks (i.e. the EcoCore and GENPROCURE URBACT Networks).

It is possible that additional topics of master classes are added, either as a result of the Mid Term Reflection process or even earlier, based on the partners' needs. Other synergies will be sought with URBACT networks that address climate change (BIODIVERCITY, COPE, IN4GREEN, GREENPLACE), especially in terms of co-participation in master classes. In addition to that, co-participation in master classes or other thematic exchange digitally will be sought with the URBACT networks that are focused on gender, equality, diversity and inclusion (FEMACT Cities, WELDI, BREAKING ISOLATION).

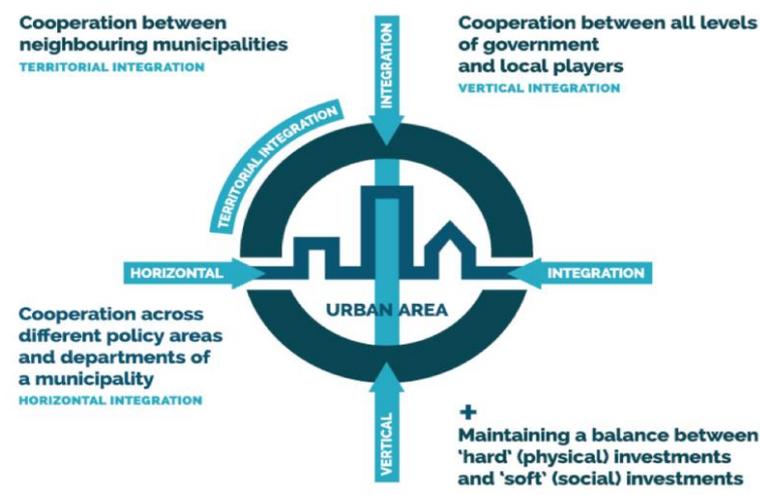
Potential focused 1-day onsite visits

1. Circular economy in construction sector – offer of a dedicated visit to Munich or Utrecht/ partners interested Guimaraes, Lisbon, Oulu, Riga
2. Resource centres for communities – offer of a dedicated onsite visit to Mechelen or Oslo, partners of URBACT III Resourceful Cities APN/ partners interested (Riga and Malmo)
3. Recycling centres/ business models and water reuse/citizens engagement – offer of a dedicated onsite visit to Copenhagen, partner of URBACT III URGE APN. It can be offered to all partners interested back-to-back with the visit in Malmo
4. Circular reuse of water in the textile sector and circular systemic solutions for textile – offer of a dedicated onsite visit to Prato, partner of URBACT III URGE APN/ partners interested Guimaraes, Malmo

Dates for the 1-day onsite visits will be decided during the coordination meetings as they need to take into consideration budgetary issues.

3.2 The local dimension: URBACT Local Groups (ULGs)

The 10 ULGs have been consolidated by the participating cities during the activation stage. The composition of the ULGs, is included in Annex 2. An assessment of the ULG compositions has been conducted against the different types of integration, which depicts that the ULGs are representative of the local, regional, national, territorial governance levels as well as of private sector and citizens. The composition of the ULGs is dynamic, therefore regular assessments the lead expert, in collaboration with the ULG coordinators, will be continuous.



Infographic 7: Integrated approach Source: URBACT

Objectives

Potentially the ULG meetings may have five objectives:

- ✚ Building capacities of its members
- ✚ Make the most out of the transnational experience
- ✚ Work with the stakeholders
- ✚ Engage with the stakeholders
- ✚ Co-produce Integrated Action Plans (IAPs)

All the LET'S GO CIRCULAR! partners have organised and implemented at least one ULG meeting by the time of the finalisation of this report.

Modus operandi

ULG meetings can take a number of formats depending on the purpose. Here are a few examples.

- ✚ Community planning events: Carefully structured collaborative events in which all stakeholders, including the local community, work closely with specialists from all relevant disciplines to make plans for the future
- ✚ Hands-on planning: A method of community involvement where small groups make plans for the future using table top plans or flexible cardboard models
- ✚ Interactive displays: Visual displays which allow people to participate by making additions or alterations to them

A non-exhaustive list on golden tips for the ULG meetings successful implementation follows below:

- Clear agenda, following the topics of the upcoming transnational meeting agenda
- Early save the date sent to the ULG members
- Careful selection of the participants and the venue. It does not always need to be in the Municipality Hall, it works well when the meeting is held at one stakeholder's place
- Big groups of more than 10 people are difficult to manage. It is preferable to keep the groups small and then, arrange another discussion in plenary to achieve a consensus
- Organise the ULG meetings to be interactive. The tools that are uploaded in the [URBACT Toolbox](#) help. Icebreakers and short energisers are needed
- Organise social activities and keep human relations active outside of the meeting room
- The ULG coordinator has resources to get well prepared: presentations and materials by the lead expert

- Be open and transparent, build trust. Adopt the network roadmap at local level; discuss openly about participation of ULG members in transnational meetings, what this implies and it is serves for. Share minutes after the ULG meeting, for everyone to be aware what has been discussed and agreed
- Give value to the ULG members, respect their schedule and treasure/ applause their participation
- Share responsibilities with the ULG members during the meeting, considering the strong and the weak points of everyone. There are always ambassadors and shy people who tend to hint, but need to unlock their potential in order to shine
- A ULG meeting may include inspirational talk by a local expert on a topic, transfer of transnational knowledge presentation by the ULG coordinator, workshops to adopt the transnational knowledge at local level through the design of pragmatic actions

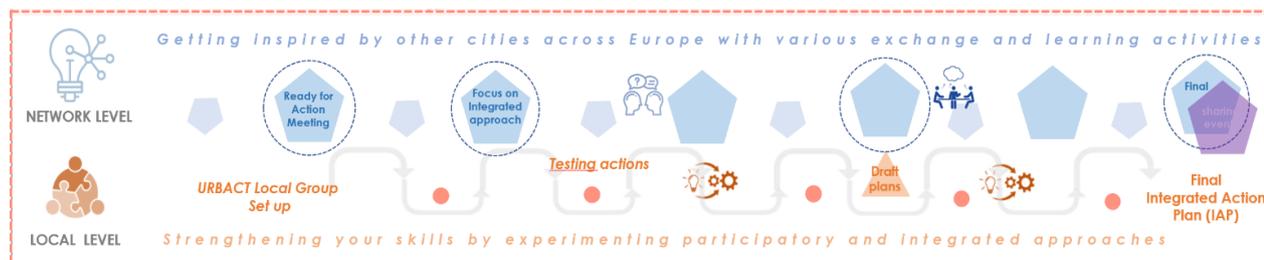
Retaining the interest and active participation of ULG members has always been a difficult task. The difficulties and the concerns of the ULG coordinators will be a matter of discussion during the transnational meetings and also during the 1-1 on line sessions between the lead expert and the ULG coordinator. A first round of 1-1 sessions has been conducted before the finalisation of this report, following the hosting and implementation of the first ULG meeting by each partner, not only to detect and discuss concerns but also to identify good practices that can be replicated and adopted. This successful approach will be followed throughout the life of the network. The 1-1 sessions are depicted in the roadmap.

Overview of the ULG meetings planning and implementation during Let's Go Circular!

Serving the purpose of the alignment between the transnational exchange and the local dimension, 11 ULG meetings are suggested to take place per partner.

The IAPs will be drafted at local level, adopting the lessons learnt from the transnational level. An effective communication channel will be established among the URBACT LET'S GO CIRCULAR! network - partner city - ULG Coordinator and ULGs.

The ULG meetings will serve to disseminate the knowledge acquired during TEXs among ULG members and to help plan ahead in detail. They will also, provide the opportunity to discuss the difficulties arising from the action planning process that should be clarified with the lead partner/ lead expert in the forthcoming TEX or during one of the one-to-one digital meetings.



Infographic 8: Transnational and local dimension Source: URBACT

The topical issues to be discussed in each ULG meeting will be relevant and aligned to the subject of the previous or upcoming TEX.

Distribution of ULG meetings in time

The distribution of the ULG meetings over time, is depicted in Table 6.

Table 6: Implementation of the action planning methodology at local level

The four phases of designing IAP	Activities	Proposed timetable	Number of ULGs
Phase 1: Activation	Establishment of a strong multi-agency ULG, problem analysis, co-design of the vision and objectives	June 2023 - December 2023	1
Phase 2: Action planning	Co-design of actions, specific, measurable, achievable, relevant, timebound	January 2024 - December 2024	6
Milestone	Action Plans 1st version delivery & Mid Term Reflection	(by) 01-12-2024	
Phase 3: Preparing implementation	Pilot activities implementation and evaluation/ Planning implementation - Update of the Action Plans and finalization	January 2025- September 2025	3
Phase 4: Communication/ dissemination	Communication and promotion of results	October 2025- December 2025	1

This is an overall estimation based on the transnational meetings design and has been strongly advised that each partner adopts this schedule to their own reality to create a realistic local roadmap. By doing that, each partner will adopt the overall schedule to their own reality considering the number of participants of each ULG and the needs that may derive after ULG meeting. For example, it might be the case that after the implementation of a ULG dedicated on circular constructions, it occurs that an additional, dedicated meeting is needed, with regional or national authorities to discuss about regulatory framework. For this reason, the local roadmap can be a useful, dynamic tool, in need of constant revision.

Kick starting the work at the local level

The first ULG meeting has been organised already by all partners in URBACT LET'S GO CIRCULAR! network serving the aim of identifying starting point, ending point, co-design of the vision, problem analysis and first ideas on the pilot actions. All partners reported their outcomes using a standard template provided by the lead expert and used resources/ materials indicated, from the: city visit, LET'S GO CIRCULAR! activation meeting in Munich, guidelines provided by the lead expert and from the URBACT Toolbox (problem tree, newspaper of tomorrow and stakeholders map).



3.3 Monitoring of the exchange and learning delivery and risk mitigation

The delivery of the exchange and learning methodology at transnational level will be monitored by the lead expert and lead partner. The feedback from the Mid Term Reflection will most likely introduce the need for modifications. Even before the Mid Term Reflection, the feedback of partners after each TEX will be taken and valorized as needed in order for the transnational and exchange methodology to serve always the needs of the partners.

The delivery and at local level will be monitored mainly through scheduled on-line 1-1 sessions between the lead expert and ULG coordinator. Five online sessions have been scheduled and will be implemented. The topics of discussion, will revolve around the ULG engagement, active participation and sustainment, pilot actions' implementation and remaining thematic needs. Additional meetings can be organised as needed in order to allow early detection of potential risks and take preventive or corrective measures.

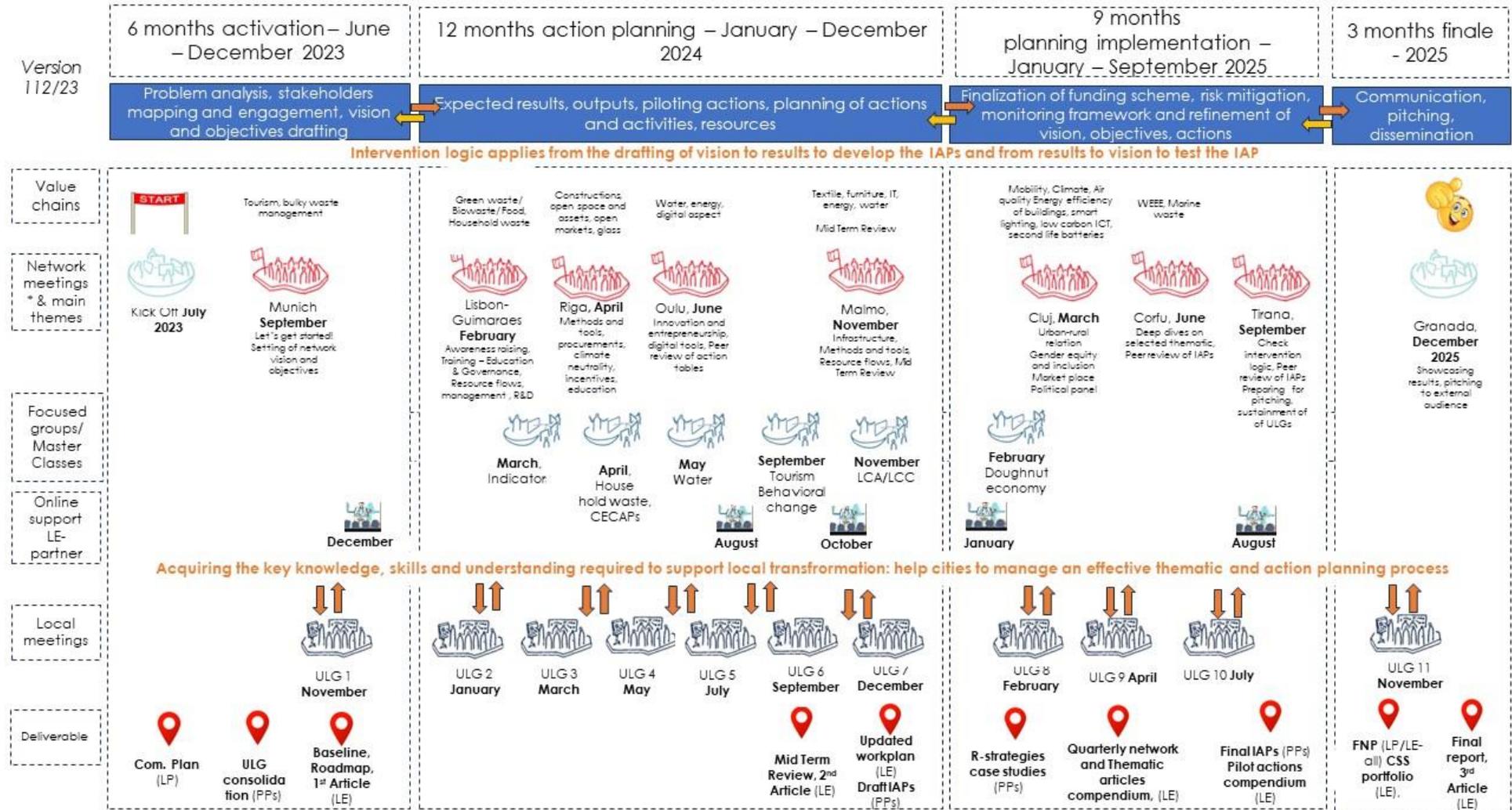
4. Network outputs

URBACT LET'S GO CIRCULAR! network will generate outputs that will be communicated at four levels: city, network, European and Programme. Most important outputs refer to the 10 IAPs that will be co-designed, co-produced in the frame of the consolidated 11 ULGs, following the network methodology and transfer of knowledge from transnational at the local level and vice versa. Outputs at network level refer to the outputs that will be dynamically produced from the TEXs:

- **At least five thematic articles and or Circular Systemic Solutions** by the LE. They will be used as an output that captures and organises the content from the TEXs. They will serve to convey main thematic network learning to external audience.
- **One policy recommendations paper**, about the EU transition to circular economy, in order to contribute to debates at EU, national or regional level, for instance Urban Agenda for the EU Partnership, aiming to influence decision and policy makers in the perspective of integrated and sustainable urban development. URBACT LET'S GO CIRCULAR! network will produce suggestions for the improvement of legal or regulatory frameworks, or manifestos, building on the main lessons learnt and on the common discussions among partners.
- **One booklet with R-strategies case studies/good practices**, by the PPs
- **One pilot actions compendium**, by the LE
- **Three core network articles**, by the LE
- **Quarterly reports**, by the LE
- **One final report**, by the LE
- **One Final Network Product**, by the network supported by the LE

Finally, at Programme level, URBACT LET'S GO CIRCULAR! network plans its managerial and operational activities totally in line with the URBACT's mission to enable cities to work together and develop integrated solutions to common urban challenges, by networking, learning from one another's experiences, drawing lessons and identifying good practices to improve urban policies. All the URBACT LET'S GO CIRCULAR! network outputs will be made public through the web and communicated/ disseminated through participation of all partners in external events. Finally, cooperation with Managing Authorities of other Operational Programmes to build synergies and raise future funds will be sought.

5. Network Roadmap



*Network meetings include at least study visits, technical presentations, focused smaller group meetings, communities of practice on CSS and indicators, action planning elements and URBACT guidance, communication /coordination sessions, social events. ULGs include: small group thematic meetings, plenaries, market places of ideas, playful sessions, workshops, visits. Focused groups and Master Classes depicted here are the minimum.

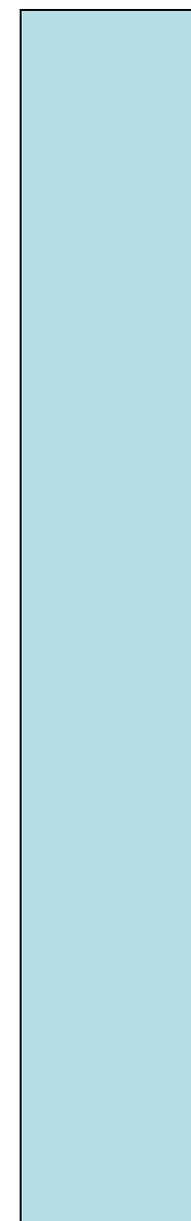
5.1 Lead expert work support for operationalization of the roadmap (stages 2-4: from planning actions to communication of IAPs)

Type of expertise	Quantity	Expected deliverables (outputs)	Deadline/ Frequency	Suggested time frame (nb of days)	Subtotals	Lead expert WORK PLAN days
1. Support with network development, dynamics, and results management framework					Task 1 sub total	10
1.1. Support Lead partner with partnership dynamics including network coordination meetings	7 coordination meetings	Participation at 7 network (coordination) steering group meetings, that will be held in the frame of the transnational meetings (TEXs) or separately as decided by the Lead partner. <u>Expected outputs:</u> contribution to agendas, notes, attendance report	TEX 2 – TEX 9	5 days		5
1.2. Support the Mid-term reflection (MTR) process	1 set	Familiarisation with URBACT MTR framework, preparation of network MTR session (online or in-person) <u>Standard output:</u> State of Actions report	MTR meeting: November 2024 State of Actions report in December 2024	3 days		3
1.4. Production of Integrated Action Planning report	1 report	<u>Standard output:</u> Integrated Action Planning report	December 2025	2 days		2
2. Support to transnational exchange and learning activities					Task 2 sub total	35
2.1. Support the design and facilitation of 7 core network meetings (in-person) (7 core network meetings altogether – each meeting shall be described as a separate sub-point/ activity i.e. 2.1.1. – 2.1.5.)	7 network meetings	<u>Standard outputs:</u> Agendas, PPTs, pre and post meeting briefing notes/ reports Tailored methodological and thematic inputs (tools, activities, communities of practice outputs)	5 in stage 2, 3 in stage 3 and 1 in Final stage	4 days per meeting on average		28
2.2. Support the design and delivery of the customised set of exchange and learning activities (in-person or online) (FLEXI) (each activity should be described as a separate sub-point/ activity i.e. 2.2.1 – 2.2.x.)	4 focused group meetings: 1. Climate action plans (CECAPs) in the frame of the 100 mission cities, in April 2024 during TEX 3 in Riga 2. Household waste management in April	<u>Standard outputs:</u> Meeting concept design, Agenda, thematic outputs	Starting in Quarter 3 - Planning Actions (throughout the project life-cycle)	7 days for preparation and delivery with support of ad hoc experts and external organisations		7

	<p>2024 during TEX 3 during TEX 3 in Riga and in parallel with the focused group in CECAPs</p> <p>3. Water circularity included during TEX 4 in June in Oulu - might be backed by a dedicated onsite visit to Granada earlier than the final festival that is scheduled for December 2025</p> <p>4. Circular tourism, digitally, in September 2024</p> <p>4 master classes:</p> <p>1. Indicators for monitoring of circular economy, by external expert (OECD and or JRC and or Circle Economy and or ICLEI, in March 2024)</p> <p>2. Changing people's behavior and mindset, potentially ad hoc expert in September 2024 online meeting</p> <p>3. LCA/ LCC in circular economy, by external expert, can be in collaboration with Ellen Mac Arthur foundation or JRC online, in November 2024</p> <p>4. Doughnut economy by external expert, for partners that initially expressed interest in this topic (Riga, Lisbon,</p>			
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	<p>Malmö and Cluj-Napoca), online, in February 2025</p> <p>4 potential 1-day study visits:</p> <ol style="list-style-type: none"> 1. Circular economy in construction sector – offer of a dedicated visit to Munich or Utrecht/ partners interested Guimarães, Lisbon, Oulu, Riga 2. Resource centres for communities – offer of a dedicated onsite visit to Mechelen or Oslo, partners of URBACT III Resourceful Cities APN/ partners interested (Riga and Malmö) 3. Recycling centres/ business models and water reuse/citizens engagement – offer of a dedicated onsite visit to Copenhagen, partner of URBACT III URGE APN. It can be offered to all partners interested back-to-back with the visit in Malmö 4. Circular reuse of water in the textile sector and circular systemic solutions for textile – offer of a dedicated onsite visit to Prato, partner of URBACT III URGE APN/ partners interested Guimarães, Malmö 			
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3. Support partners with the delivery of local activities					Task 3 sub total	32
3.1. One to one support for the set-up and sustainment of URBACT Local Groups (ULG) (Help with specific tools used in ULG activities including promotion of the use of URBACT toolbox)	5 one-one sessions between Lead partner – city, 7 TEXs	Outputs: TEXs' agendas, notes and customized presentations; 1-1 sessions between Lead partner and city	Throughout the project life-cycle	10 days (1 day per partner added on 2.1 and one-one sessions on line)		10
3.2. Support with Testing activities	5 one-one sessions on on line between Lead partner – city, 7 TEXs	Outputs: Support with specific testing activities based on the customised network framework; sessions in the frame of TEXs; 1-1 on line sessions between Lead partner and city; 1 pilot actions compendium	Within planning actions and preparing implementation stage (Quarters 3 - 9)	10 days		10
3.3. Support partners with production and reviews of Integrated Action Plans	10 IAPs reviewed	10 draft IAPs reviewed (i.e. with comments)	Throughout the project life-cycle	12 days		12
4. Support with the knowledge capture and communication of network results					Task 4 sub total	23
4.1. Support with the delivery of Communication plan (FLEXI)	At least five thematic articles and one policy recommendations paper	Outputs: at least five thematic articles and or Circular Systemic Solutions; one policy recommendations paper	Throughout the project life-cycle	6 days		6
4.2. Production of Quarterly Network Reports	6 per Network	6 Quarterly Network Reports published on URBACT Network webpage	Delivered in quarter 4 - 9 (Reflecting quarters 3 - 8)	10 days (approx. 2,5 days for first report, 1,5 days for further reports)		10
4.3. Production of core network articles	3 per network (1 already produced in activation stage)	2 articles published on URBACT network webpage	At the end of Stage 2, and in final stage	2 days (1 day per article)		2
4.4. Production of Network Results Product/s	1 set per Network	Network results product	Shared in Final Stage	5		5
					TOTAL DAYS work plan	100
					Maximum days available	100

ANNEX I: UPCOMING RELEVANT EVENTS

Name of event	Sector/area	Dates	Event type	Place	Organizing bodies	Link
Procura*	Procurements, Production, Waste management, Innovation and investments	13-14 March 2024	Conference	Lisbon	ICLEI, Lisbon	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/join-some-brightest-procurement-minds-procura-conference-2024-lisbon
#MeetingPack 2024	Circular action for climate neutrality, Food Packaging, Recycling, Reuse	10-11 April 2024	Conference Exhibition	Valencia	AIMPLAS, AINA	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/meetingpack-2024
Circular Economy: Reverse Thinking	Production, Consumption, Waste management, Secondary raw materials	6-7 Feb 2024	Conference	Düsseldorf	Handelsblatt Media Group	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/circular-economy-reverse-thinking
4th International Conference - Strategies toward Green Deal Implementation - Water, Raw Materials & Energy	Production, Consumption, Waste management, Secondary raw materials, Innovation and investments in: Agriculture, fertilisers and forestry, Bioeconomy and Biomimicry, Circular action for climate neutrality, Circular design, Energy and waste-to-energy, Food, water and nutrients, Industrial symbiosis, Industrial techniques, Innovation and investment, Soils, soil improvement and restoration, Waste management & Secondary Raw Materials, Water	14-15 December 2023	Conference	Cracow	Mineral and Energy Economy Research Institute, Polish Academy of Sciences	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/4th-international-conference-strategies-toward-green-deal-implementation-water-raw-materials-energy
Putting Science into Standards: Circular Technologies in construction	Circular action for climate neutrality, Circular design, Construction, Buildings and Infrastructure, Industrial Techniques	12-13 Dec 2023	Webinar, Workshop	Online	European Commission Joint Research Centre	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/putting-science-standards-circular-technologies-construction
Nonwovens for Society: EDANA Sustainability Forum	Awareness raising, Bioeconomy and Biomimicry, Circular action for climate neutrality, Circular design, Empowering Consumers, Recycling	28-30 Nov 2023	Conference	Brussels	EDANA	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/nonwovens-society-edana-sustainability-forum
Understanding Circular Healthcare and how to implement it	Health and healthcare, Plastics, Polymers and Rubber, Refuse, Re-think, Reduce, Reuse	28-Nov-23	Workshop	Brussels	Health Care without Harm Europe	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/understanding-circular-healthcare-and-how-implement-it
Circularity for Food Packaging - Conference in Freising, Germany	Circular design, Packaging, Plastics, Polymers and Rubber, Recycling, Research, Waste management & Secondary Raw Materials	23-Nov-23	Conference	Freising	Bavarian Research Alliance	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/circularity-food-packaging-conference-freising-germany
Resilient Europe: Empowering regions for climate adaptation Pathways2Resilience launch event	Innovation and Investments	23-11-2023 10:00 - 13:00 CET, in Brussels and online	Conference and online (Registration: https://www.pathways2resilience.eu/launch-event/)	Brussels	Pathways2Resilience / EIT Climate-KIC	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/resilient-europe-empowering-regions-climate-adaptation-pathways2resilience-launch-event
EuRIC Textiles: Connecting the Knots for a Circular Future	Secondary and Raw materials: Recycling, Retail, Textiles, apparel and leather, Waste management & Secondary Raw Materials	21-11-2023 14:00 to 19:00 CET	Conference	Brussels	European Recycling Industries Confederation EuRIC	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/eu-ric-textiles-connecting-knots-circular-future
Circular Republic Festival	Production, Consumption, Waste management, Secondary raw materials, Innovation and investments in: Sector Batteries and Vehicles, Clothing and Fashion industry, Construction, Buildings and Infrastructure, Culture, Sports and leisure activities, Digital solutions, Electronics and ICT, Housing and Urban development, Industrial symbiosis, Innovation and investment, Machinery and Equipment, Personal and household goods/Product as a Service, Repair, Refurbishment, Remanufacture, Repurpose, Waste management & Secondary Raw Materials	15-18 Nov 2023	Festival	Munich and online	Circular Republic Festival	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/circular-republic-festival
First CCRI General Conference "From vision to reality: Cities and regions drive forward Europe's circular transition"	Awareness raising, Circular action for climate neutrality, Economic instruments, Governance, Innovation and investment	08-Nov-23	Conference	Brussels	EC	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/first-ccri-general-conference-vision-reality-cities-and-regions-drive-forward-europes-circular
2023 Circular Week: Put economy in circular motion	Bioeconomy and Biomimicry, Circular design, Clothing and Fashion industry, Construction, Buildings and Infrastructure, Food, water and nutrients, Governance, Housing and Urban development, Mobility and transport, Packaging, Recycling, Refuse, Re-think, Reduce, Repair, Refurbishment, Remanufacture, Repurpose, Retail, Textiles, apparel and leather, Waste management & Secondary Raw Materials	23-29 Oct 2023	Conference, Webinar, Workshop	Warsaw	INNOWO	https://circulareconomy.europa.eu/platform/en/news-and-events/all-events/2023-circular-week-put-economy-circular-motion

ANNEX II INITIAL COMPOSITION OF ULGs

Riga

- Ministry of Environmental Protection and Regional Development of the Republic of Latvia
- Ministry of Climate and Energy of the Republic of Latvia
- Office of the Executive Director of the city of Riga
- Housing and Environment Committee of the Riga City Council
- City Development Committee of the Riga City Council
- Development Department of the Riga City Council
- Housing and Environment Department of the Riga City Council
- Property Department of the Riga City Council
- Education, Culture and Sports Department of the Riga City Council
- Department of Transport of the Riga City Council
- Centre of Residents of the Neighbourhoods of the City of Riga (a municipal structural unit)
- Procurement Department of the Riga City Council
- Waste management companies serving the city of Riga and other stakeholders of the Waste Reduction and Management Working Group
- Business support organisations, e.g., Latvian Chamber of Commerce and Industry
- Non-profit organization, for example, neighbourhood associations, environmental associations, etc.
- Educational institutions
- Riga Planning Region
- Representatives from other projects and campaigns related to the circular economy, climate action and behavioural change.
- cross- sectorial Climate Neutrality Working Group (<-it was already mentioned)
- working group about health policies that is talking about wider sector: development, property, environment dt, how to develop health habits.
- Zero Waste Latvia (<https://zerowasteurope.eu/member/zero-waste-latvija/>)
- Andris Kēniņš, Rudīte Vesere Ministry of Environmental Protection and Regional Development of the Republic of Latvia andris.kenins@varam.gov.lv, rudite.vesere@varam.gov.lv

Guimares

- Environmental and Climate Department and all relevant Municipal Departments.
- Landscape Lab of Guimarães (RD Institution for circular economy + Coordinator of The Municipal educational Program for Sustainable Development)
- All relevant municipal and regional subsidiary companies, such as the Waste Management Company (RESINORTE), the municipal waste Collection Company (Vitrus Ambiente).
- Centre for Waste Valorisation, Public Utility Entity and Technological Interface Center
- Innovation in Polymer Engineering Centre (PIEP), Technological RD Institution, university of Minho)
- TO BE-GREEN (circular textiles and polymerics)
- Private sector towards Municipal Economics and Energy division
- Members from local and National ENGO, schools, ReFood association.
- Green Brigades (volunteer group of citizens already covering 79% of the territory with civil society initiatives, they have a year-base action plan to implement field-actions towards environmental sustainability)
- Local administration units known by parishes.

Lisbon

1. Gonçalo Rosa, Municipality- Climate change Dpt.
2. Maria Efigénio, Territory General Directorate
3. Patricia Malta Dias, ADENE
4. Eduardo Silva, Lisboa E-Nova
5. Rui Mende, Lisboa E-Nova
6. João Lopes, EPAL

7. Margarida Almeida, CARRIS
8. André Moura, Turismo de Lisboa
9. Manuela Filipe, Municipality- Financial Dpt.
10. Cristina Velozo, Dona Ajuda
11. Filipa R. Garcia, Dona Ajuda
12. Helena Martins Municipality- Data Platform Dpt
13. Sara M. Pinto, Zero Waste Lab
14. Diana Henriques, Lisboa E-Nova
15. Paulo Cardoso, FabLab Lisboa
16. Paulo Santos, ADENE
17. Leonor Santos, Built Colab
18. Tomás Ramos, New University of Lisbon
19. Paula Afonso, Lisbon Metropolitan Area
20. Marta Brazão, Circular Economy Portugal
21. Inês Andrade, Renovar a Mouraria
22. Maria J. Domingo, Rede DLBC
23. Augusta Andrade, Municipality- Financial Dpt.
24. Paula Alves, Municipality- Financial Dpt.
25. Margarida Revés, Municipality- Public Works Dpt.
26. Joana Tomás, Muro Atelier
27. Luís Brás, GEBALIS
28. Marta Barata, Fablab
29. Luísa Magalhães, Smartwaste Portugal
30. Rafael Calado, Biolab/ Repair café Lisboa
31. Vincent Rault, Muro Atelier
32. Miguel Brito, Municipality- Economy & Innovation Dpt.
33. Carlos Teixeira, CCDR LVT
34. Eugénia Santa-Bárbara, Municipality- Economy & Innovation Dpt.
35. Isabel, Advirta, Municipality- Economy & Innovation Dpt
36. Lourenço Gouveia, Unicorn Factory
37. Victor Vieira, Lisboa E-Nova

Granada

- Technical Board: as a guiding group for our CE strategies.
- Inner Board: including all City Council Departments involved.
- Professionals and Companies Board: to tackle our local productive sector.
- Social Board: with participation of neighbors associations, social collectives and platforms.
- Energy Board: linked to sustainable production (photovoltaic mainly yet).
- University of Granada (Academia)
- Chamber of Commerce (Commerce assessment)
- Patronato de la Alhambra y el Generalife (Tourism assessment)
- Official Association of Architects and Official Association of Technical Architects (Professional assistance)
- Neighbourhood Associations (Districts Albaicín, Beiro, Centro, Realejo), (Citizenship participation)
- Activist associations (Salvemos la Vega), (Citizenship participation)
- EMASAGRA (Water Supply Company in the city), (Public Services Supplier)
- ALSA (Public Transport Supplier), (Private Public Services Supplier)
- Sorigué (Public Works Company), (Private Public Services Supplier)
- Inagra (Public Services Supplier)
- industrial, tourism, constructions and other key sectors
- Representatives of the companies (CCG, CGE)

Malmö

- Municipal Departments, such as the Environment Department, City Executive Office (procurement and business), Internal Services Department (municipal buildings), City Planning Office, Property Management Department and Streets and Parks Department and also Labour Market and Social Services Department.

- The utility actors within the municipality
- Local Roadmap for Malmö 2030-network (LFM30 - a network of stakeholders from the construction and building industry)
- Research Institutes of Sweden (Rise)
- Local Climate Contract signatories
- The regional and national policy-makers are invited through e.g., the CE-coordinator at the regional administration Region Skåne and a regional society for sustainable development HUT Skåne and the national innovation programme Viable Cities (Sweden:s coordinator of EU:s Mission Climate Neutral and Smart Cities 2030) and the national Centre for Industrial and Urban Symbiosis.
- Sustainable Business Hub, Cirkulär Utvecklingshubb för livsmedel – IUC Syd, MINC (Malmö Incubator)
- Civil society and organisations – e.g. “Drevet” (a civil society organisation working with sharing solutions for citizens), “Cradlenet” (NGOs driving the development of CE regionally). “Malmö Citysamverkan” (an organisation of shops and companies with the aim to develop the city centre).

Oulu

1. Petteri Tuuttila, Urban and Environmental Services
2. Tapio Siikaluoma, Urban and Environmental Services
3. Mika Jutila, Urban and Environmental Services
4. Satu Pietola, Urban and Environmental Services
5. Santeri Lokkila, Urban and Environmental Services
6. Sisko Repola, Urban and Environmental Services
7. Sami Rundgren, Urban and Environmental Services
8. Tommi Riippa, Building Supervision of Oulu
9. Reetta Leinonen, Oulun Tilapalvelut Public Utility
10. Markus Savikuja, Oulun Vesi Public Utility
11. Helmi Riihimäki, Kiertokaari Ltd
12. Päivi Kunnari, Oulu Regional Environmental Office
13. Riikka Vainik, Oulu Regional Environmental Office
14. Sari Matinheikki, Central Administration of Oulu
15. Jussi Tomberg, Educational and Cultural Services
16. Pekka Tervonen, University of Oulu
17. Rauno Toppila, Oulu University of Applied Sciences

Cluj-Napoca

- Department of strategy and local development projects management, Service of urban ecology, Office of Urban Strategies.
- The company responsible for waste management, Supercom S.A.
- Educational and Research entities such as: “Babeş-Bolyai University (Faculties of Geography – the Research Centre of Sustainable Development, Environment, Sociology), “Ernest Lupan” Institute for Circular Economy and Environmental Research.
- The civil society is represented by: Sustainable Cluj NGO (ro: Clujul. Sustenabil)Urbannect, Cluj Youth Federation (ro: FederatiaTinerilor din Cluj-Napoca).

Tirana

1. Julinda Dhame, Municipality- Environment and Sustainable Development Directorate
2. Ester Likaj, Municipality - Environmental Policy Innovation and Smart Solutions
3. Romina Dervishi, Municipality - Risk Management and assets for emergencies, natural disasters, and environmental adaptation sector
4. Gezim Dapi, Municipality- Environmental Management Sector, Circular Economy, and Energy Resources
5. Kledisa Pufja, Municipality- Environmental Policy Innovation and Smart Solutions
6. Eris Qesja, Municipality- Environmental Policy Innovation and Smart Solutions
7. Endrita Muca, Ministry of Tourism and Environment -3R Sector and Environmental Education
8. Uarda Begaj, Hana Corner Cafe

9. Gulia Dajci, Hana Corner Cafe
10. Genc Myftiu, SEDA
11. Fjoralba Begeja, INCA
12. Daniela Mane, INCA
13. Engjëllushe Haxhi, Environmental Council of Tirana
14. Fjona Tashi, Environmental Council of Tirana
15. Sonila Jurku, Rossman & Lala
16. Belinda Gremi, Rossman & Lala
17. Hazis Porja, "Mati", Environmental Patriotic, Cultural Association
18. Majlinda Demko, GIZ, Department of Circulating Economy
19. Alesia Shala, GIZ, Department of Circulating Economy
20. Kristi Dashi, URI - Urban Research Institute
21. Arbër Xihani, Green Recycling
22. Ergest Nako, Verso Altima
23. Anjeza Sinani, Build Green Group
24. Liljana Paloka, Build Green Group
25. Sazan Guri, G&G Group

Corfu

- All relevant to the project LET'S GO CIRCULAR! Municipal Departments, such as the Waste Management Department, the Department of Tourism, the Finance Department and the Technical Department that are relevant to the network theme and would like to participate
- The relevant Municipal "companies", such as the Company for Culture, Sports and Environment, the Solid Waste Management Body etc.
- Researchers and students from the Ionian University from the project Departments relevant to the theme
- The Greek National Tourism Organization (Corfu Office), the Technical Chamber of Corfu, the Commercial Chamber of Corfu and their members
- Representatives and students from Municipality's schools from all the levels of education
- Local groups of residents that have already created teams and are making actions towards circularity
- Local groups of residents who will express their desire to get involved to the project LET'S GO CIRCULAR!

Munich

1. Vanessa Tschapke City of Munich, Project Manager in the CEKS (RKU) and new ULG Coordinator
2. Heindl Christian City of Munich, Head of Environmental Protection in the Department for Climate and Environmental Protection (RKU)
3. Weininger Evelyn City of Munich, Head of Emmission Control, Circular Economy, Indoor Air Quality and Ecoprofit Department (RKU)
4. Hellinger Corinna City of Munich, Head of Circular Economy Coordination Unit (CEKS) (RKU)
5. Simon Julia City of Munich, Project Manager in the CEKS (RKU)
6. Koncici Salihe City of Munich, Project Manager in the CEKS (RKU)
7. Waldorf Stephan Coordinator for the Zero Waste Unit of the Municipal Department
8. Langer Günther External circular economy expert
9. Stommel Daniel Deloitte Consulting GmbH
10. Willmaser Marvin Deloitte Consulting GmbH
11. Völkers Antonia Deloitte Consulting GmbH

ANNEX III: RELEVANT PROJECTS

Riga

- INTERREG BSR Creative Circular Cities (to be started in November 2023) – REA is a partner.
- EUKI project CURE+ Centres for Urban Resources, Reuse and Remanufacture – REA is a lead partner.
- Horizon project DESIRE – Riga City Development Department is a partner.
- INTERREG BSR project NonHazCity3 – Riga City Housing and Environment Department is a lead partner.

Guimaraes

- **Name:** [CARE Project](#)/ **Objective:** single-use plastic reduction
- **Name:** [Plastic-Free Market](#)/ **Objective:** single-use plastic reduction.
- **Name:** [Urgeztes Circular](#)/ **Objective:** repair of electrical and electronic equipment, furniture, etc
- **Name:** [Second-Hand Market](#)/ **Objective:** reuse.
- **Name:** [Consigo project](#)/ **Objective:** repair and reuse of adaptive medical equipment.
- **Name:** [Textile Waste Collection in Schools](#)/ **Objective:** textile waste recycling.
- **Name:** [Mask Recycling](#)/ **Objective:** collection and recycling of disposable medical masks.
- **Name:** [EcoPontas&PapaChicletes](#)/ **Objective:** cigarette butts and chewing gum collection and valorization.
- **Name:** [Home Composting](#)/ **Objective:** decentralized treatment of food and kitchen waste.
- **Name:** [Green Waste Valorization](#)/ **Target:** green waste treatment.

Lisbon

- Horizon 2020 FORCE project (in the Circular Economy area)
- CEMOWAS2 <http://cemowas2.com/en/> Objective: circular economy applied to the competences of the local authorities as for the organic services of waste management and of the process by-products of purification (muds and waste water)
- RURBANLINK <https://cidadescirculares.dgterritorio.gov.pt/pages/rede-rurbanlink> Objective: Develop an action Plan for the food systems sustainability. Promotion of Circular connections between Urban and Rural Areas (RURBAN Link)
- Hub Criativo do Beato Living Lab: <https://livinglab.hubcriativobeato.com/en/> Objective: The HCB Living Lab aims to ensure the promotion of sustainable solutions through the creation of evidence, as well as the dissemination of its effectiveness and performance, ensuring the necessary conditions for the development of new businesses and for the sustainability of the business ecosystem that is growing in the eastern part of Lisbon.

Granada

- POCITYF (Horizon)
- Intelligent Cities Challenge (European Commission)
- PathoCERT (Horizon)
- Hyperion (Horizon)
- Tropa Verde (Green Troops): <https://spain.tropaverde.org/>
- RE.WIND (Italy)

Malmö

- E-Harbours (Interreg North Sea)
- ProCirc (Interreg North Sea)
- EPIC 2020 (IEE)
- Urban Food from Residual Heat (Climate-KIC/EIT),

- Circular PP (Interreg BSR)
- RASK, which equips actors for faster climate transition.
- Case Sofielund which exemplified how the global Sustainable Development Goals, Agenda 2030, can be applied locally with innovative thinking.
- Clever Cities where the city promotes smart green solutions in urban planning. Both greener (increased biological diversity) and socially inclusive cities are important steppingstones towards a Circular Economy.
- CoNet which aimed at exploring approaches to strengthen social cohesion in neighbourhoods.

Oulu

- Investigation of material and mass flow and Material and mass recycling management plan. Project partly funded by the Ministry of the Environment.
- Water TestBed: ERDF project 05/2023 –12/2024. University of Oulu and Oulun Vesi (Local water utility). <https://oulu.com/oia/hankkeet/water-testbed-water-testbed-infra/>
- Digitization of Water Utilities: Waste Waternetworks data management and innovative applications. ERDF project 03/2020 –06/2022, 4 Water Utilities, 13 Companies, University of Oulu
- Digitization of water supply networks –analysis of the current state in Finnish Water Utilities. The Ministry of Agriculture and Forestry funded project 08/2020 –12/2021, University of Oulu

Cluj-Napoca

- REFLOW: Horizon 2020 project with a circular component, in which URBACT LET'S GO CIRCULAR! NETWORKULG members have been involved. Its aim was to observe the impact and the potential of circular economy-like actions for Cluj-Napoca energy efficiency practices.
- STARDUST – Holistic and integrated approaches for smart cities: Horizon 2020 project still in implementation. The main topics of the project are: Energy efficiency of buildings, smart lighting, smart mobility, low carbon ICT, use of second life batteries, testing innovative solutions in these fields. In this Project Cluj Metropolitan Area is a follower city having the opportunity to closely observe, analyze and understand the tested solutions and after consulting the local stakeholders adapting in a Replication Plan some of the solutions.
- ProGInreg - productive green infrastructures for post-industrial regeneration, holistic and integrated urban model for smart cities. In this project Cluj Metropolitan Area is developing a strategy which prioritizes local efforts and reduces social discrepancies, empowering residents through sustainable interventions and regenerating local landscapes. The project aims to introduce community-based urban farms, green corridors, green roofs and urban gardens in local environmental compensation processes.

Tirana

- Circular City Labs 2023-2025. This project, in Cooperation with Giz Albania aims to promote and encourage the REUSE process. In Tirana, some of the businesses that practice this as a process have been identified, but from the citizens' side, it is still a concept that is not very well known. The goal of the project is to reduce the pollution that comes from recycling and the implementation of the reuse process by businesses that offer products to consumers.
- "Sunny Schools" project. This project is in collaboration with OSFA - Open Society Foundation for Albania. We are currently continuing with the preparation of an authorization to allow the contracting company to install photovoltaic panels in 4 schools of Tirana.
- Installation of Composting Plant in Skrapar, -south of Albania.
- Hana, Zepa Natural: These are businesses that focus on reuse and sustainable development of their activity.

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BASELINE STUDY

MUNICH – GUIMARAES – LISBON – GRANADA – RIGA – CLUJ NAPOCA – MALMO – OULU-
CORFU – TIRANA

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