

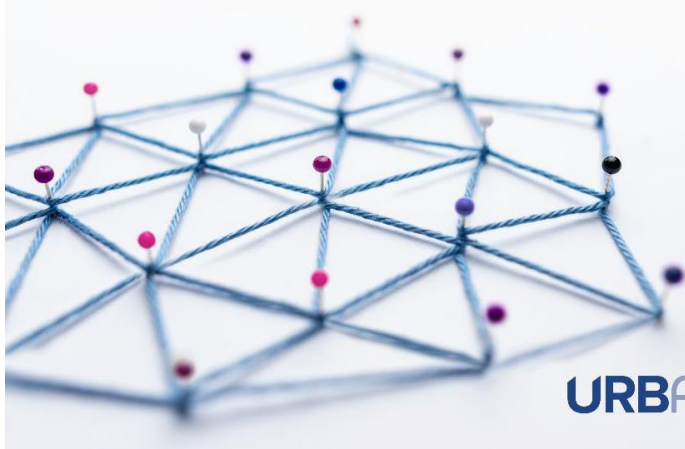
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# LET'S GO CIRCULAR!

Paving the way for a circular transition of cities



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## BASELINE STUDY

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

## DECEMBER 2023

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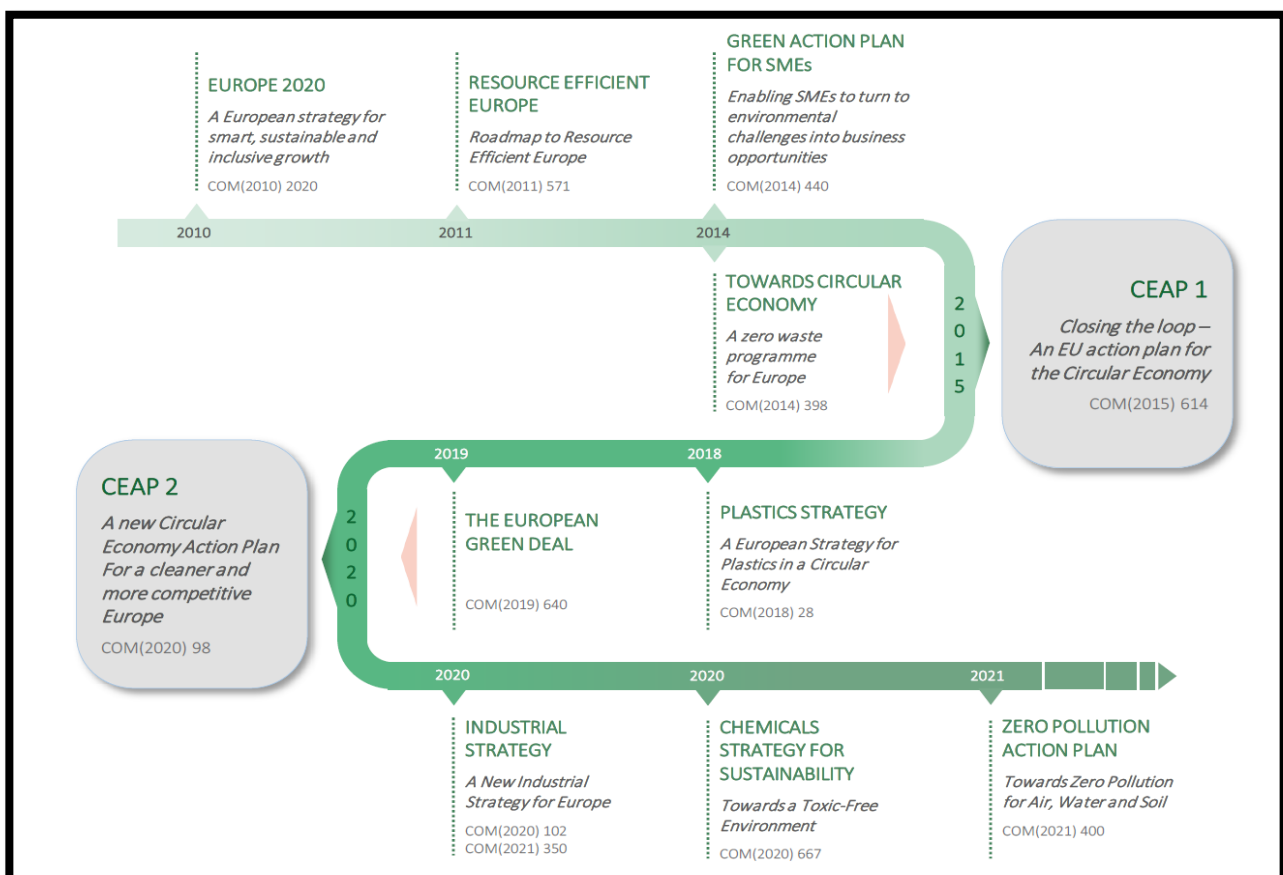
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## SECTION I: STATE OF THE ART

### 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
<b>Production &amp; consumption</b>	1. EU self-sufficiency for raw materials 2. Green public procurement 3. Waste generation <ul style="list-style-type: none"> <li>a. Generation of municipal waste per capita</li> <li>b. Generation of waste excluding major mineral waste per GDP unit</li> <li>c. Generation of waste excluding major mineral waste per domestic material consumption unit</li> </ul> 4. Food waste
<b>Waste management</b>	5. Recycling rates <ul style="list-style-type: none"> <li>a. Recycling rate of municipal waste</li> <li>b. Recycling rate of all waste excluding major mineral waste</li> </ul> 6. Recycling/recovery for specific waste streams <ul style="list-style-type: none"> <li>a. Recycling rate of overall packaging waste</li> <li>b. Recycling rate of plastic packaging waste</li> <li>c. Recycling rate of wooden packaging</li> <li>d. Recycling rate of electrical and electronic waste (e-waste)</li> <li>e. Recycling of biowaste per capita</li> <li>f. Recovery rate of construction and demolition waste</li> </ul>
<b>Secondary raw materials</b>	7. Contribution of recycled materials to raw materials demand <ul style="list-style-type: none"> <li>a. End-of-life recycling input rates</li> <li>b. Circular material use rate</li> </ul> 8. Trade in recyclable raw materials
<b>Competitiveness/ innovation</b>	9. Private investments, jobs and GVA related to circular economy sectors <ul style="list-style-type: none"> <li>a. Gross investment in tangible goods</li> <li>b. Number of persons employed</li> <li>c. Value-added at factor cost</li> </ul> 10. Number of patents related to recycling and secondary raw materials
<b>Global sustainability and resilience</b>	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
<b>Urban resource management</b>	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)
<b>Circular Business Enablers and Drivers</b>	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
<b>Circular Consumption</b>	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.
<b>Governance</b>	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

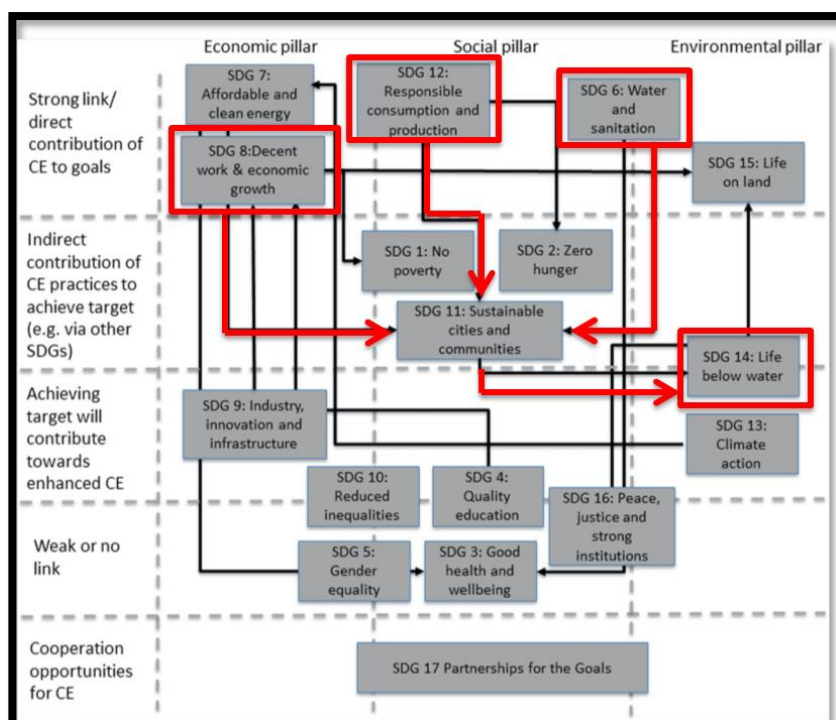


Figure 1: Interaction between SDGs and CE practices, Schroeder et al. (2018)

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 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.

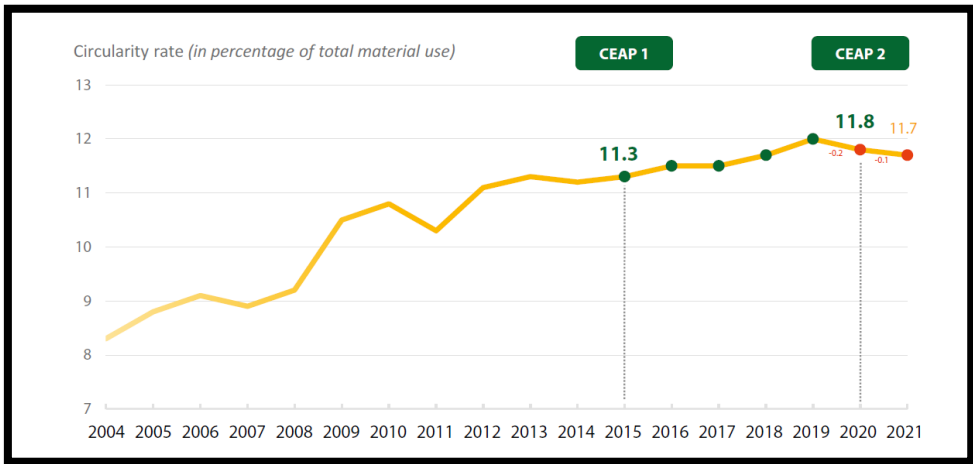


Figure 2: *EU-27 progress towards a circular economy*

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 percentage points.

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.

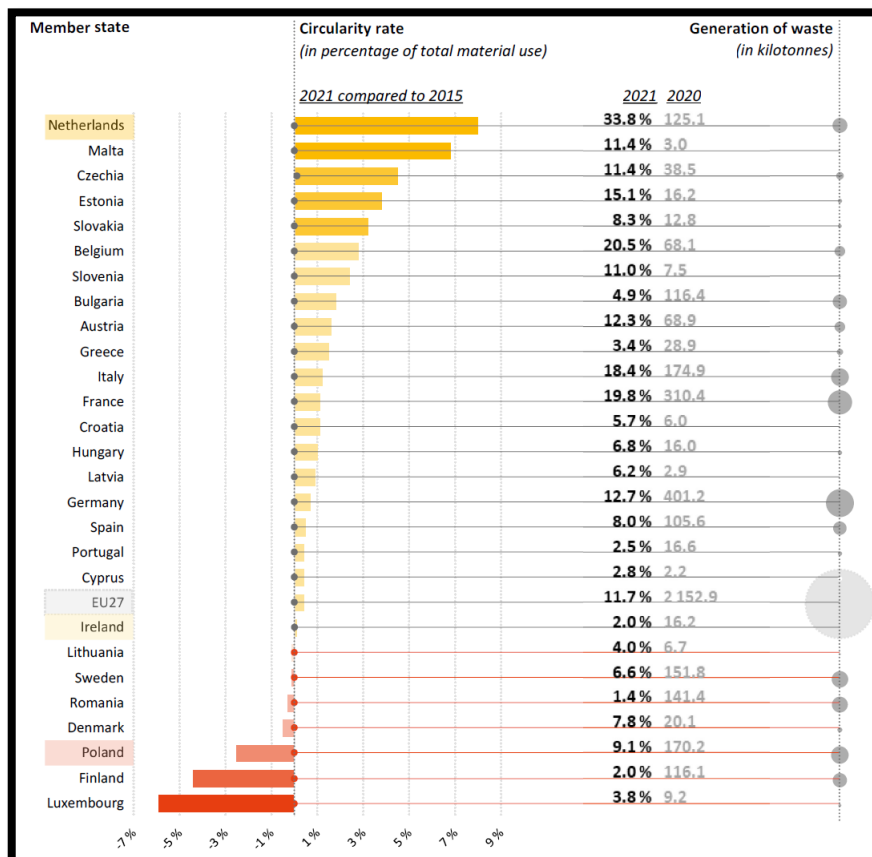


Figure 3: Eurostat circular material use rate and Generation of waste

### 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 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.

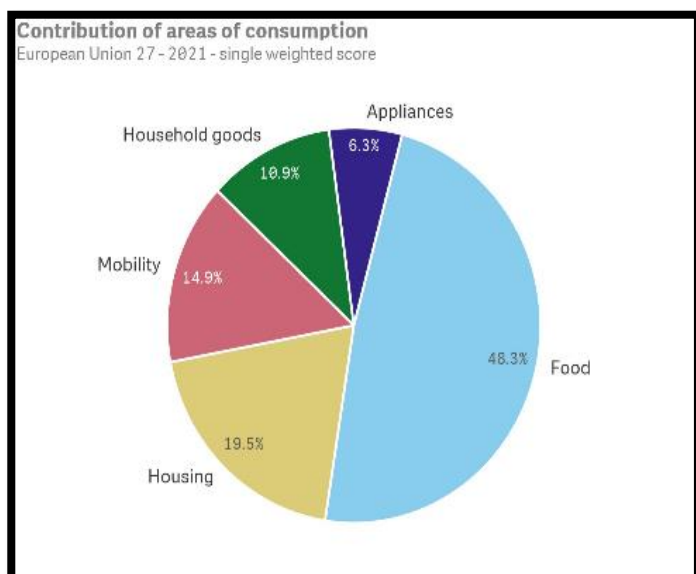


Figure 4: Contribution of areas of consumption, 2021 [14] and own

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

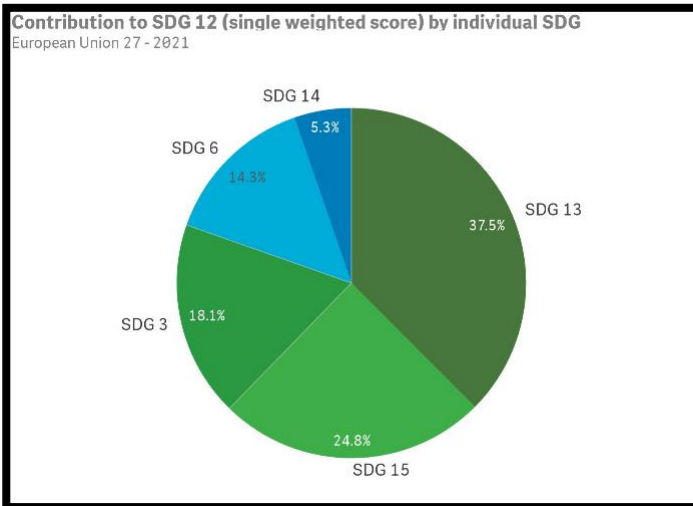


Figure 5: Contribution of areas of consumption EU-27 (2021)

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).

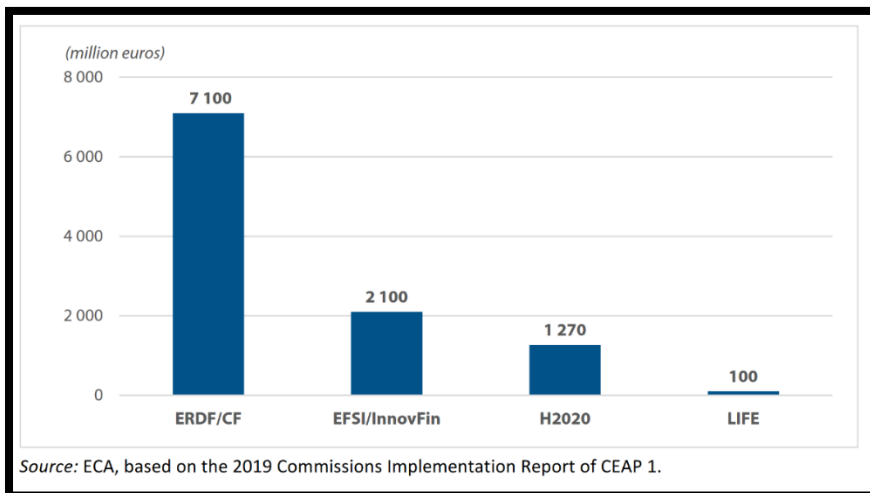


Figure 6: Planned EU funding for circular economy by 2020

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 (€1 215 million) as the entire Horizon 2020 programme (€1 332 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 €1 345 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 CO<sub>2</sub> 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?

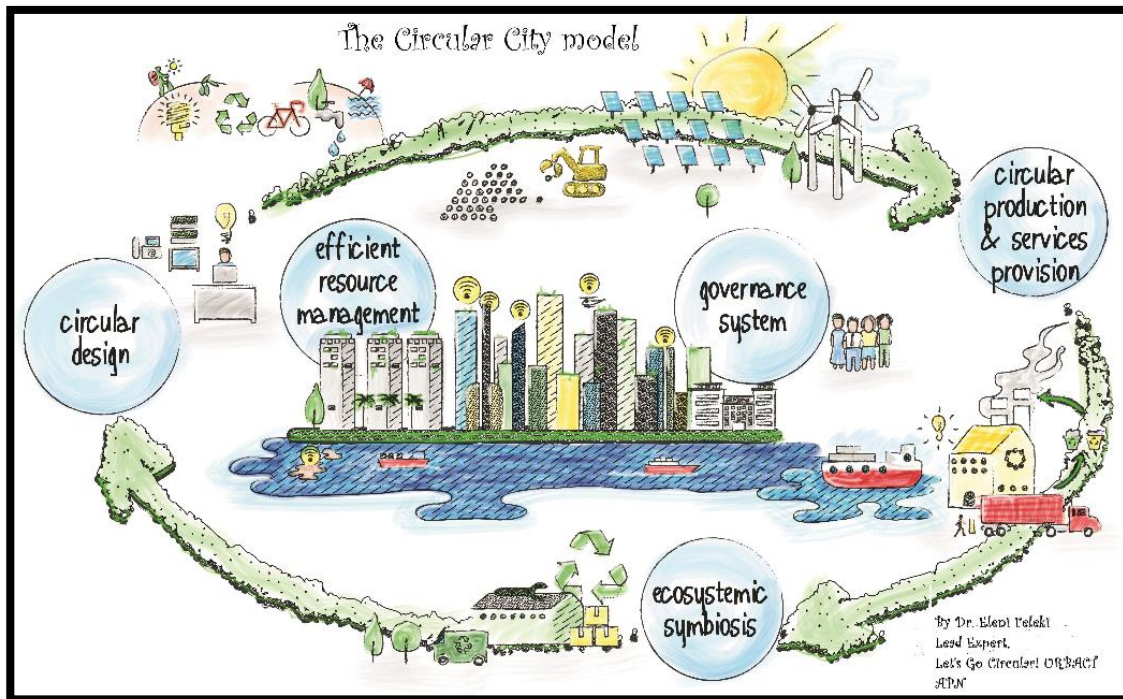
Cities are at the centre of key decisions determining economic growth, social well-being and environmental benefits. Despite taking up just 2% of global landmass, our urban centres consume more than 75% of natural resources, are responsible for over 50% of solid waste, represent almost two-thirds of 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 50 000 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
<b>Roamaps and strategies</b>	
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]
<b>Awareness raising</b>	
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	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

potential of a circular economy	(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]
<b>Capacity building</b>	
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 skills for new material applications	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 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]
<b>Public procurements</b>	
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 Herning 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]
<b>Fiscal measures</b>	
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]
<b>Legislation and regulations</b>	
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	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

bylaws to manage unintended consequences	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]
<b>Financial support</b>	
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](#).

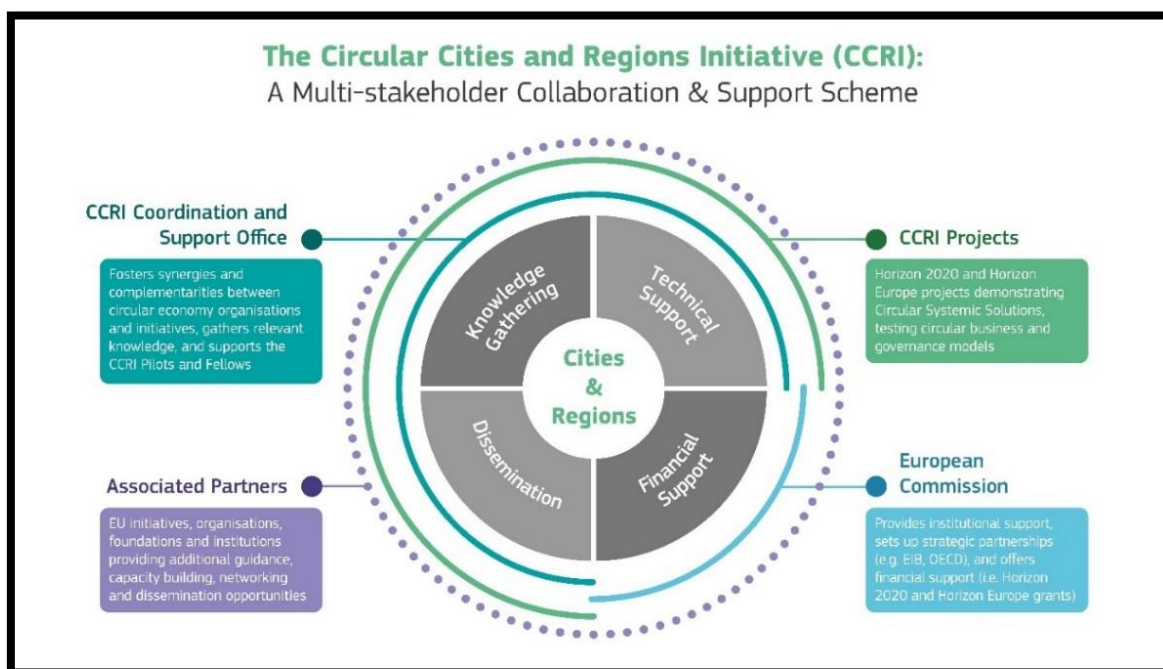


Figure 7: The CCRI initiative

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.

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

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

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

## Other important knowledge providers

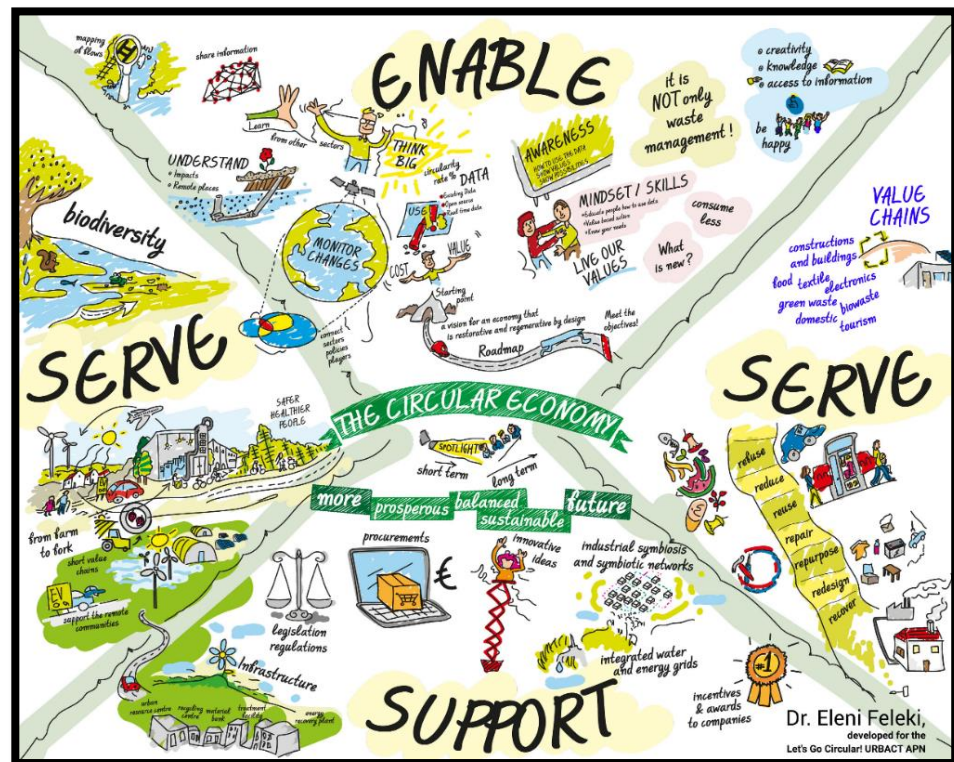
<a href="#">EU Circular Economy Stakeholder Platform</a>	Includes relevant practices, innovative processes and 'learning from experience' examples.
<a href="#">Circular economy good practices</a>	Circular economy case studies by country and sector.
<a href="#">Circular Cities Declaration</a>	Circular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

## Platforms and Tools

<a href="#">Metabolism of cities Data Hub</a>	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
<a href="#">Stocks and Flows Database Schema (STAFdbs)</a>	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.
<a href="#">Online material flow analysis tool</a>	The Online Material Flow Analysis Tool (OMAT) is a free, open source tool that can be used to undertake a Material Flow Analysis (MFA).
<a href="#">Global Urban Metabolism Data</a>	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.

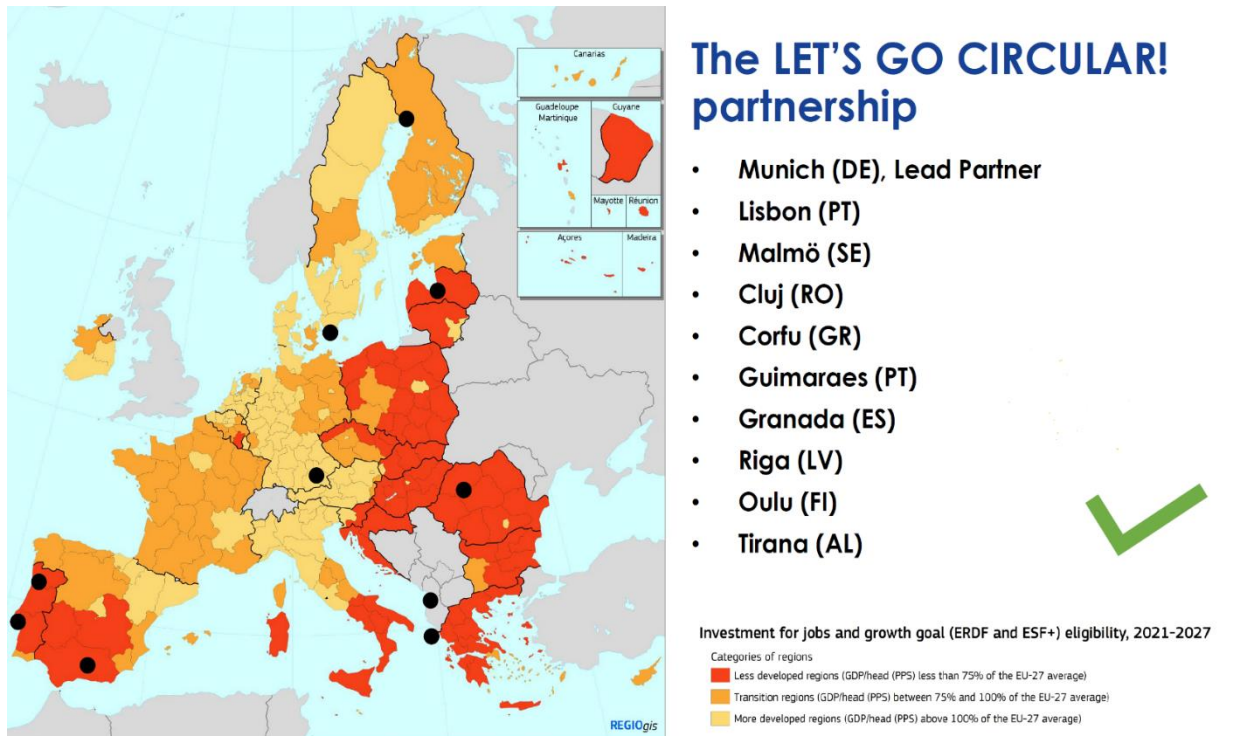




## SECTION 2: PARTNER PROFILES

### 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



Riga is the capital and largest city of Latvia. Riga's territory covers 307.17 km<sup>2</sup>. Home to 614987 inhabitants, the city accounts for a third of Latvia's total population (45 % male and 55 % female). One of the key economic and financial centres, though its population has decreased from just over 900,000 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 25'895 EUR (2020). 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

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
- ✚ Low use of RES and energy efficiency measures.

### Ambitions and aspirations for local change – focus of the URBACT Integrated Action Plan

*"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.*

The focus of the Integrated Action Plan of Riga, is strongly linked to serving the city's ambition. 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.

#### Strong points

- ➔ Guidelines on circular construction (URBACT III/ URGE: Circular Building Cities)
- ➔ First experience in the development of circular design
- ➔ Circular dismantling of building (partially dismantling)
- ➔ Ongoing Horizon (NEB) project DESIRE – about citizen engagement in circular spatial planning
- ➔ Calculating CO<sub>2</sub> emissions and waste in the frame of an event that took place for one week in Riga
- ➔ Healthy eating, commuting
- ➔ Management of general waste from households

#### Learning 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

### 3. Granada, Spain



Granada is a historic city located in southern Andalusia. The city is known for its UNESCO World Heritage sites. 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 21.784 €/year. The total area covers 88,06 km<sup>2</sup> with the urban area covering 19.3 km<sup>2</sup>. There's no foresee expansion, since the new urban masterplan is keeping same limits in its preliminary phase yet. Its the main focus of work, educational and administrative activities.

#### The local challenge

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

#### Ambitions and aspirations for local change – focus of the URBACT Integrated Action Plan

The focus of the Integrated Action Plan of Granada, is strongly linked to serving the city's ambition. 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)

#### Strong points and learning needs

##### Strong points

- ➔ Action plan on circular construction (URBACT III/ URGE: Circular Building Cities)
- ➔ 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
- ➔ Administration change: CE department

##### Learning needs

- ➔ New technological solutions to minimize the necessary resources
- ➔ 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

Guimarães is a medium-sized city in Portugal. 156830 inhabitants populate the city with population density of 651 inhabitants/km<sup>2</sup>. 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. The functional urban area is 240955 km<sup>2</sup>

### The local challenge

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. 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.

### Ambitions and aspirations for local change – focus of the URBACT Integrated Action Plan

The focus of the Integrated Action Plan of Guimaraes, is strongly linked to serving the city’s ambition. 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).

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

### Strong points and learning needs

#### Strong points

- ➔ “Guimarães 2030 Governance Ecosystem” (GGE)
- ➔ RRRCICLO - Strategy for Circular Economy
- ➔ Door to door collection of sorted waste
- ➔ Development of strategy for PAYT implementation
- ➔ Environmental diagnosis
- ➔ Monitoring of municipal performance
- ➔ R&D for waste valorization
- ➔ Environmental Education Programme implemented in 80 schools
- ➔ Volunteer group of citizens already covering 79% of the territory with civil society initiatives
- ➔ Promotion of sharing economy
- ➔ Reporting of emissions, scope 1 and 2
- ➔ Informative manual for citizens, provision of compost bins to citizens
- ➔ "Paper for Food" campaign
- ➔ Municipal events regulation: CARE - reusable cups to replace disposable plastic cups in events

#### Learning needs

- ➔ Reduction of food waste
- ➔ Reduction of municipal solid waste
- ➔ Citizens’ behavior



## 5. Lisbon, Portugal

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/km<sup>2</sup>. The Lisbon region has a higher GDP PPP per capita than any other region in Portugal. 73 billion is the GDP presented by the Lisbon region. 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. The city has also an important tourism sector.

### The local challenge

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.

### Ambitions and aspirations for local change

The focus of the Integrated Action Plan of Lisbon, is strongly linked to serving the city's ambition. The ambition of Lisbon in terms of circularity are:

- ✚ Formalization of a working group internally
- ✚ 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

### Strong points and learning needs

#### Strong points

- 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
- Innovation and entrepreneurship carried out by the area of Economy and Innovation of the Municipality and Startup Lisbon.
- Recycling of water

#### Learning needs

- Construction and management of public space in a more circular way
- Improving the population's sensitivity levels to the transition processes towards more circular economic systems.

## 6. Malmö, Sweden



Population in Malmö is estimated to reach 360000 residents during 2023. Young population, 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. The functional urban area is just under 80 km<sup>2</sup>. The economy of Malmö was traditionally based on shipbuilding and construction-related industries, such as concrete factories. The number of start-up companies is high in Malmö. Among the industries that continue to increase their share of companies are transport, financial and business services, entertainment, leisure and construction.

### The local challenge

The growing population of (it is expected that the number will increase by about 50000 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. Also, there is a relatively high unemployment rate.

### Ambitions and aspirations for local change – focus of the URBACT Integrated Action Plan

The focus of the Integrated Action Plan of Malmö, is strongly linked to serving the city's ambition related to circular economy, as this is illustrated briefly below:

- ✚ 100% renewable and recycled energy city, increase of resource energy efficiency and decrease of the energy produced by incineration
- ✚ Identify the key leverage points for the continued circular transition and engaging multiple actors
- ✚ Change the norm, which is still to shop and consume
- ✚ Extend public procurements in construction and infrastructure development
- ✚ Increase utilisation of recycled textile

### Learning and capacity needs and contributions

#### Strong points

- Functioning waste collection system: all household waste is collected and 98% is reused, recycled, recovered
- Testing and implementing sharing possibilities for citizens
- Baseline analysis for Circular Economy
- Governance: contract of players with Malmö city
- Textile facility state of the art
- Mobile recycling, disposal, exchange points – PopUp-ReTuren.
- Swop Shop business model and innovative social enterprises
- Malmö Upcycling Service
- District with the theme of sharing and for affordable and climate smart living

#### Learning needs

- More than 140,000 tons of new textiles are put on the Swedish market per year, but only just under five percent are recycled as material
- Mapping and measuring of resource flows, estimated CO<sub>2</sub> emissions from resource use and level of circularity within a city
- Using the collected data to show different scenarios
- Creation of a methodology for measurement and monitoring of CE
- 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

Population in Oulu is 211 848 (31.12.2022), with a middle age of 39.4-years, gender balanced. The GDP per capita was 39669€ in 2020. Unemployment rate is 12,1%. Functional Urban area 2975 km<sup>2</sup> (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.

### The local challenge

In Oulu, the challenges are the following:

- ✚ Growth in urbanization and need for new residences (2% annual growth in city plan area)
- ✚ Unemployment rate
- ✚ Growing repair debt
- ✚ Logistical challenges caused by long distances; in terms of environmental impact, soil masses are transferred long distances, in order to be reused or stored.

### Ambitions and aspirations for local change – focus of the URBACT Integrated Action Plan

The focus of the Integrated Action Plan of Oulu, is strongly linked to serving the city's ambition related to circular economy. The City of Oulu wants to be carbon neutral by 2035. Oulu's vision for 2030 is to be the most learning circular economy city and to develop and implement sustainable lifestyles in cooperation with companies, residents and other stakeholders. The municipality's 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.

### Strong points and learning needs

#### Strong points

- Existence of a RoadMap towards circular economy
- Strong ICT sector, very fast in wireless technology, piloting 6G
- Utilization of large-volume industrial side streams and masses of soil generated from infrastructure construction
- "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
- Oulu innovation alliance strategy 2021-2027 and ecosystem agreement
- MetaCity Oulu, CE Cluster, AC cluster (automotive), InSteams Hub
- Sites: Välimaa circular economy area, built and financed by the city of Oulu, for businesses of for waste management and recycling activities, as well as Tahkokangas –circular economy in building a residential area and Radiopark, Oulu station centre

In terms of **learning needs**, Oulu needs support on how to move from strategy to action and how to measure realization of actions.



## 8. Cluj-Napoca, Romania



Cluj-Napoca 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 boundaries of the municipality contain an area of 179.52 km<sup>2</sup>. 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 local challenge

Biggest challenges in Cluj are:

- ✚ Transportation, air pollution, cost of living
- ✚ Pressure on infrastructure and on the housing sector
- ✚ 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)
- ✚ Decreased administrative capacities of the surrounding communes and the behavioral tendencies of the inhabitants of the area
- ✚ Lack of data on the average level of knowledge and/or competence of citizens and the local ecosystem
- ✚ Ability to change the mindset of people in Romania, especially concerning the “reduce” strategy

Related to infrastructure, there is room for improvement.

### Ambitions and aspirations for local change – focus of the URBACT Integrated Action Plan

The focus of the Integrated Action Plan of Cluj-Napoca, is strongly linked to serving the city's ambition related to circular economy. 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 40,000 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. Last but not least, Cluj envisions better waste management, in a more circular way and 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).

### Learning and capacity needs and contributions

#### Strong points:

- Strong academic sector: department dedicated to CE
- Strong cluster community
- Working with vulnerable people
- Existence of a popular network of second-hand stores
- Existence of traditional circular practices in rural areas (almost no food/vegetable waste)
- Strong willingness of citizens to apply circular practices
- Electrical appliances free (pickup from home) collection system
- Food bank – food action plan

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



The population of Tirana in 2023 is 863694 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. Population density reaches 777 inhabitants/km<sup>2</sup>. The General Local Plan TR030 defines 32625391 m<sup>2</sup> of urban surface in which the boundaries of the urban area of Tirana Municipality lie, which has an administrative territory of 1120912341 m<sup>2</sup>. Major economic sectors are tourism and services.

### The local challenge

The general challenges faced by the city are listed below:

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

### Ambitions and aspirations for local change – focus of the URBACT Integrated Action Plan

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).

### 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.

## 10. Corfu, Greece



The island is part of the Corfu regional unit, and is administered by three municipalities with the islands of, 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 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. Corfu also produces local animal products. The area of the city is 41905 km<sup>2</sup>.

### The local challenge

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.

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
- ✚ Lack of proper separation at the source
- ✚ Lack of space and infrastructure for the disposal of mixed waste in Corfu
- ✚ 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

### Ambitions and aspirations for local change – focus of the URBACT Integrated Action Plan

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.

### 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

## 11. Munich, Germany






Munich is the capital and most populous city of the Free State of Bavaria. With a population of 1578132 inhabitants (census: 2022) it is the third-largest city in Germany and thus the largest which does not constitute its own state, as well as the 11th-largest city in the European Union. The proportion of German citizens without a migration background was 53.5%, while Germans with a migration background constituted 17.7% of the population. Munich is a global centre of science, technology, finance, innovation, business, and tourism. Munich's economy is based on high tech, automobiles, and the service sector, as well as IT, biotechnology, engineering, and electronics. It has one of the strongest economies of any German city and the lowest unemployment rate of all cities in Germany with more than one million inhabitants. The city is one of Europe's wealthiest cities and has the highest per-capita average income of all cities in Germany. The total urban area (January 1st, 2018) is 310.7 km<sup>2</sup>.

### The local challenge

The city has a 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. Also, as most productive capacity of Munich's major businesses lies outside the city boundaries or even outside of Germany, 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. 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.

The following areas constitute the city's main challenges:

-  Construction and buildings
-  Electronics and electronic devices
-  Batteries

### Ambitions and aspirations for local change – focus of the URBACT Integrated Action Plan

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.

### Learning and capacity needs and contributions

Strong points:

- 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
- 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

In terms of learning needs, Munich wants to acquire knowledge in order to put forward circularity in the building sector, in electronics and electric devices and batteries.

## 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.

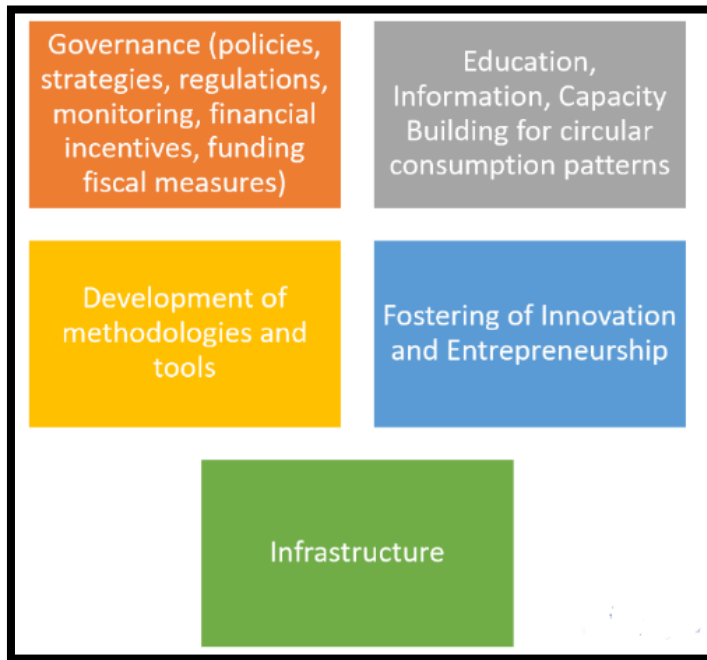
### 2. Analysis, synthesis – exchange and learning methodology

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. The themes of focus are listed below:

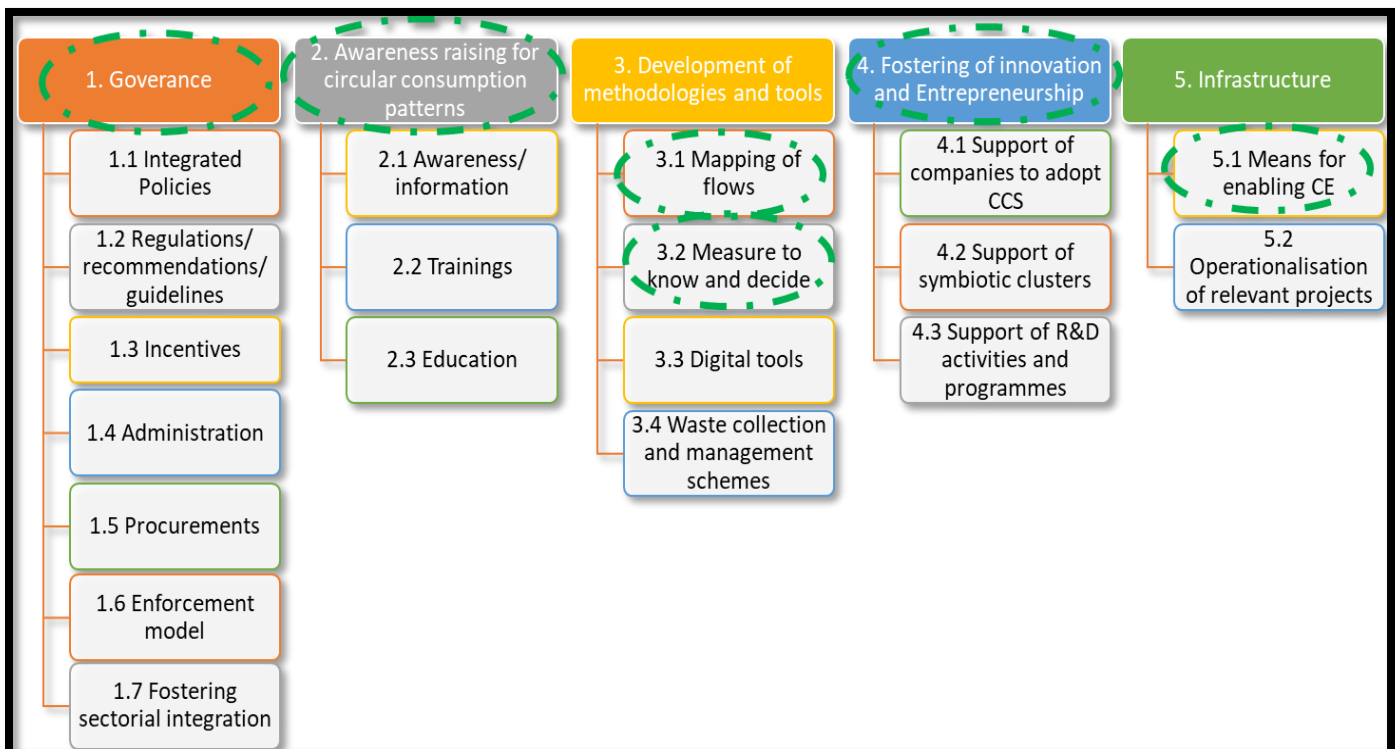
1. Governance
2. Awareness raising for circular consumption
3. Development of methodologies and tools
4. Fostering innovation and entrepreneurship
5. Infrastructure



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



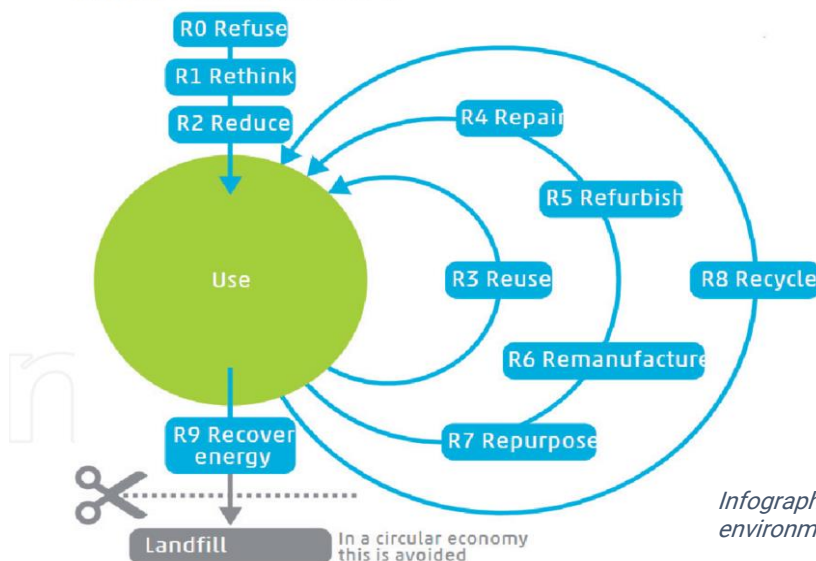
Infographic 4: Value chains of focus of the URBACT LET'S GO CIRCULAR! network

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

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.

Circular economy / R-ladder



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

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

- 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.

#### 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 1<sup>st</sup> 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 2<sup>nd</sup> 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 CO<sub>2</sub> 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.

*Table 4: Overview of the TEXs*

<b>Delivering the knowledge, skills and learning required</b>	<b>Transnational meetings</b>	<b>Proposed hosting city</b>
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 incuding 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	Finca Conference Dec 2025	Granada

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:

- 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
<b>Phase 1: Activation</b>	Establishment of a strong multi-agency ULG, problem analysis, co-design of the vision and objectives	June 2023 - December 2023
<b>Phase 2: Action planning</b>	Co-design of actions, specific, measurable, achievable, relevant, timebound	January 2024-December 2024
<b>Milestone</b>	Action Plans 1st version delivery & Mid-Term Review	(by) December 2024
<b>Phase 3: Preparing implementation</b>	Pilot activities implementation and evaluation/ Planning implementation - Update of the Action Plans and finalization	January 2025-September 2025
<b>Phase 4: Communication/ dissemination</b>	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:
  - a. Strategies: for CE, PAYT, recycling, action planning for sustainable development, Plastic free market initiative, Governance Ecosystem: Guimarães 2030, Mission structure, Administration, Guidelines/ Recommendations
  - b. Valorisation of end-of-life streams through R&D
  - c. Awareness, Training and Educational programmes
  - d. Waste collection and management schemes and enforcement
- + Communities of practice indicatively on:
  - a. Circular systemic solutions
- + Presentations and “therapy sessions” on the action planning needs:
  - a. 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, entrepreneurs 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).

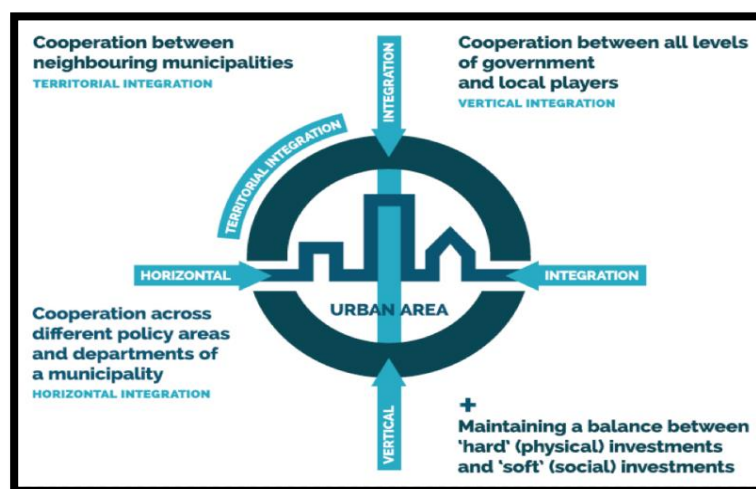
### Potential focused 1-day onsite visits

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 – 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 considering budget.

### 3.2 The local dimension: URBACT Local Groups (ULGs)

The 10 ULGs have been consolidated 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 and will be regularly assessed.



Infographic 6: 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

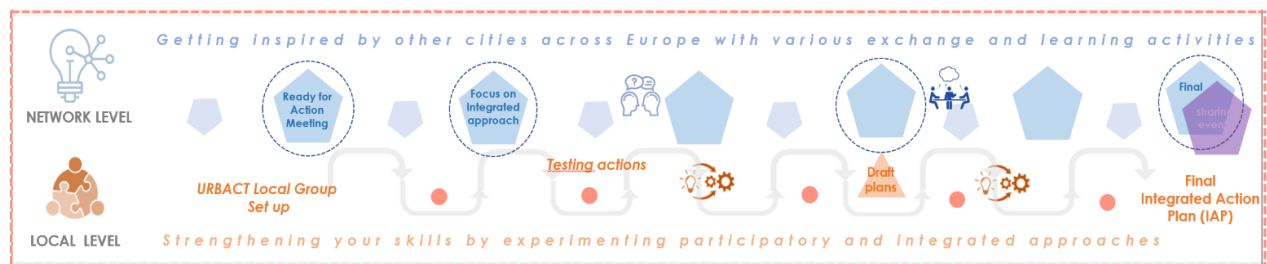
Retaining the interest and active participation of ULG members has always been a difficult task. The difficulties and the concerns of the ULG coordinators will be a matter of discussion during the transnational meetings and also during the 1-1 on line sessions between the lead expert and the ULG coordinator. 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 7: 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

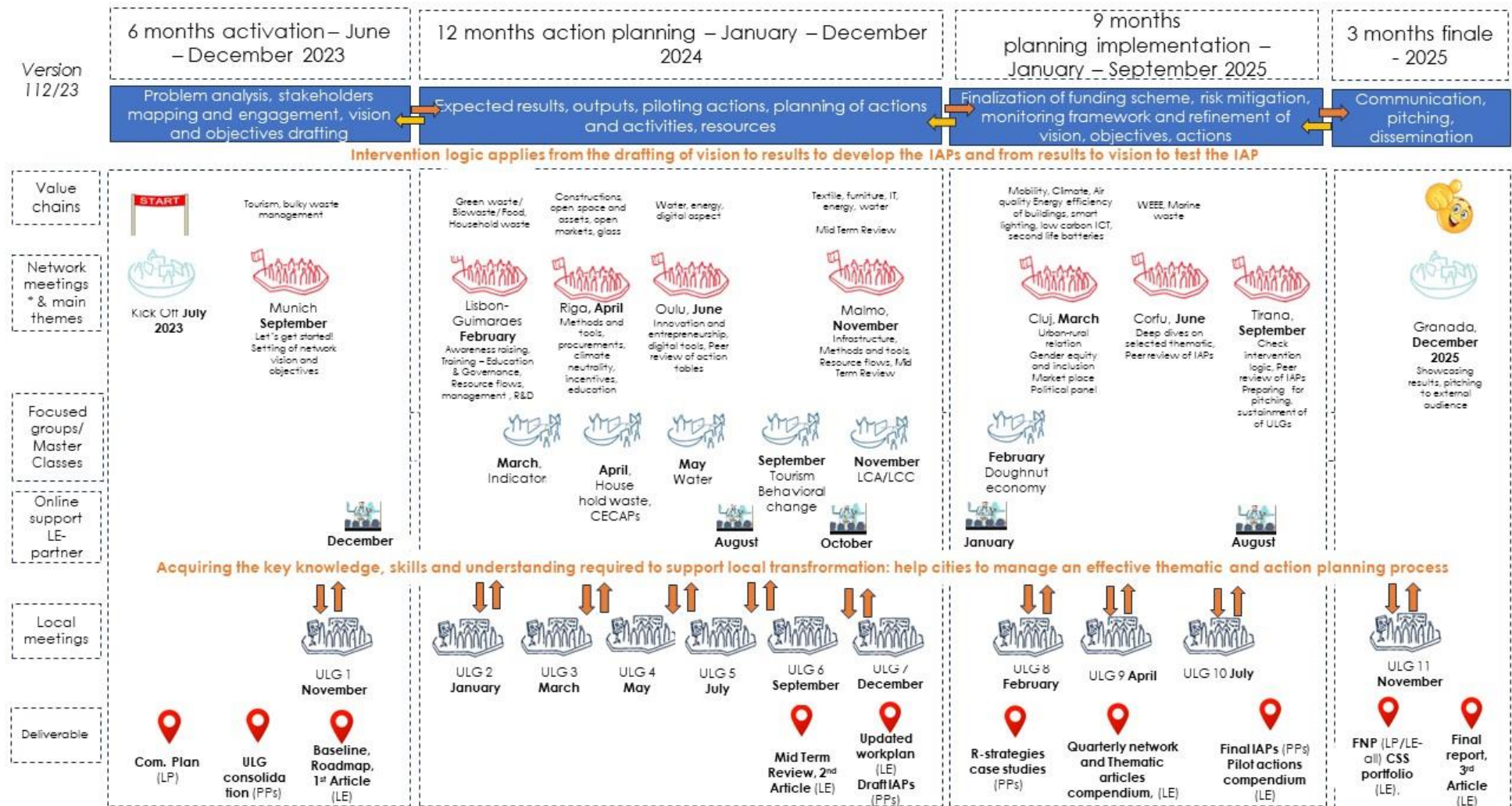
URBACT LET'S GO CIRCULAR! network will generate outputs that will be communicated at four levels: city, network, European and Programme. Most important outputs refer to the 10 IAPs that will be co-designed, co-produced in the frame of the consolidated 11 ULGs, following the network methodology and transfer 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. UIGs include: small group thematic meetings, plenaries, market places of ideas, playful sessions, workshops, visits. Focused groups and Master Classes depicted here are the minimum.

## ANNEX I 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](mailto:andris.kenins@varam.gov.lv), [rudite.vesere@varam.gov.lv](mailto: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 (Virus 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 II: 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.

### Guimarares

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

### Lisbon

- Horizon 2020 FORCE project (in the Circular Economy area)
- CEMOWAS2. 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. 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.
- ProGReg - 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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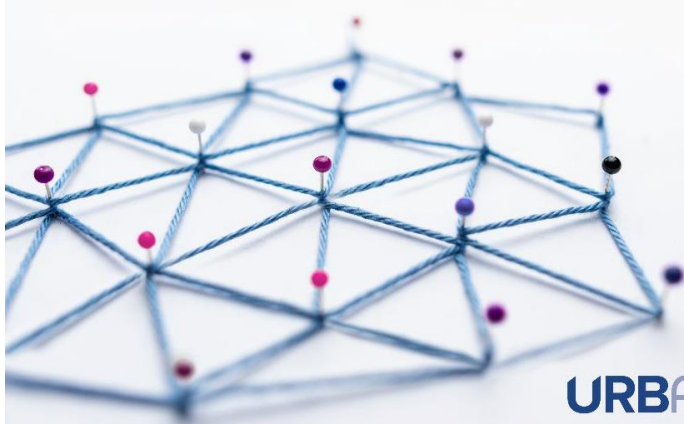
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# LET'S GO CIRCULAR!

Paving the way for a circular transition of cities



## BASELINE STUDY

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

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