



# Recommendations for EU and national policy makers to accelerate the circular transition in cities

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Abstract	This policy brief proposes 12 recommendations targeting EU and national policy makers and addressing barriers faced in the implementation of CityLoops Demonstration Actions, with the aim to accelerate the circular transition of cities. It includes general recommendations, addressing cross-cutting and structural issues observed during the project, sector-specific recommendations to enable circularity in both the construction and demolition waste and bio-waste streams, as well as procurement-related recommendations to empower local governments and public procurers.
Keywords	Policy recommendations, circular economy, construction and demolition waste, bio-waste, circular procurement
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# Executive summary

Cities and towns throughout Europe are increasingly recognising that the transition from a linear to a circular economy is crucial for staying within planetary boundaries. In practice, this means that they need to move away from the “take-make-waste” approach towards an economy based around closed material loops, where resource consumption is - to the extent possible - decoupled from economic growth. Aiming to address these challenges, CityLoops brought together seven small-to medium-sized cities – Apeldoorn (The Netherlands), Bodø (Norway), Mikkeli (Finland), Porto (Portugal), Seville (Spain), and Høje-Taastrup and Roskilde (Denmark) to pilot a series of demonstration actions to “close the loop” in two material streams, respectively construction & demolition waste and bio-waste, identified in the EU’s Circular Economy Action Plan as two of the most important streams in Europe.

Over the past four years, these seven cities have implemented a total of ten demonstration actions, testing over 30 new instruments and processes. The wide variety of these solutions reflects the different needs and contexts of the cities participating in the project. While Bodø was demolishing its old military airport to build a new part of the city in the cleared area, Porto was focusing on making its social economy and tourism sector more circular. And while Apeldoorn was experimenting with soil improver bokashi, Seville was implementing waste collection awareness campaigns for school children. As such, CityLoops has highlighted the great potential of circular approaches, showing that they can be applied effectively in many different industries and with many different objectives. This has been captured in a number of reports, tools and guidance documents, disseminated to a large audience of local governments.

During CityLoops, several challenges and barriers have been identified on the road to the circular transition of cities. Some of them have been tackled locally, while others require national or EU level support to enable structural changes. To address these barriers, CityLoops partners have developed a series of recommendations, which aim at ultimately empowering cities and towns across Europe and accelerating their circular transition. Grouped into four categories, these 12 recommendations target EU and national policymakers. Firstly, general recommendations respond to systemic barriers that have been identified by partners throughout the project. Then, construction and bio-waste recommendations target bottlenecks that have been identified in these two sectors and that hamper the closing of material loops. Lastly, the last category of recommendations aims to embed circularity within procurement processes. This series of recommendations complement CityLoops’ contribution to the ROOTS initiative’s position paper<sup>1</sup>.

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<sup>1</sup> [https://cityloops.eu/fileadmin/user\\_upload/Media/Position\\_Paper\\_-\\_ROOTS.pdf](https://cityloops.eu/fileadmin/user_upload/Media/Position_Paper_-_ROOTS.pdf)

# Policy recommendations

## General Recommendations

### 1. Associate local governments to circular policy development in the EU and within Member States

Major centres for production and consumption, and places where most of GHG emission and waste is generated, it is widely acknowledged that cities and towns are central to the circular transition. As exemplified by CityLoops, they are also pioneering new approaches, measures and solutions, paving the way for future national and EU legislation and regulation.

- (to the EU) Any proposed new mandatory or legislative measures at the EU level should take into account best practices and exemplary projects that are already being implemented at the local and regional level and consider facilitating their scale up. **In this sense, the Commission should ensure scoping of all Horizon projects and their best practices, and get in touch with their local project implementers ahead of drafting any new legislation.**
- (to the EU) Any new legislation should be developed in close collaboration with all levels of government that are required to implement the measures. As not all cities and towns have this capacity to keep track of the legislative processes and consultations, **the Commission should increase its interaction with city networks to take into account their input.**
- (to national governments) While Member States are drafting and implementing their national circular economy action plans, they **should ensure a sustainable multilevel governance dialogue with local and regional governments, particularly for key sectors like construction and bio-waste.**
- (to national governments) In the transposition of EU legislation to national level, Member States should avoid a simple copy-pasting and ensure that national legislation goes beyond by **providing requirements and recommendations to local governments regarding monitoring and reporting.**

### 2. Finance the development of circular infrastructure

Developing circular infrastructure is crucial for closing material loops in both the construction sector and in the bio-waste stream. CityLoops partners recommend the provision of additional support to local governments for developing circular infrastructure, both technical and financial.

This support should cover the whole life of infrastructure and should not focus only on innovation, but rather aim at the widespread roll-out of circular infrastructure in European cities and towns.

- (To the EU and to national governments) Funding streams available at both EU and national levels are often project-based and rarely encompasses costs related to either operations or end-of-life, which are nevertheless substantial, thus creating a bottleneck. **We recommend including key aspects like operations, maintenance and end-of-life in calls for projects and other funding schemes, for instance requiring applicants to adopt whole-life costing approaches.**
- (To the EU) On a similar note, through Horizon Europe funding is often provided for developing pilots or demonstrating new technologies, seldom for rolling out fully proven or mature technologies in every European city and town. Making sure that no local authority is left behind, for instance that everywhere standard treatment facilities for valorising bio-waste are in place, is what will make the difference in the transition to a circular economy. **In order to support the roll out of solutions piloted in H2020 and Horizon Europe, we recommend better coordination between Horizon Europe and with European Structural and Investment Funds. We also call for more earmarking of Cohesion Policy funds towards the circular economy and consequently a better monitoring by the Commission of funds spent at the national level. We finally recommend exploring increasing funding towards upstream solutions at the local level, and not limiting it to waste treatment facilities.** This is aligned with previous recommendations made by the European Court of Auditors<sup>23</sup>.

### Example

#### *Identifying strategic locations for circular infrastructure in metropolitan Paris*

In a study on the construction sector, *Atelier Parisien d'URbanisme (APUR)*, the Paris Urbanism Agency, identified several strategic waste streams and key locations in the metropolitan area where these materials could be stored, treated and repurposed, therefore greatly reducing the impact or new developments. Due to high investment costs and to high pressure on urban land, local governments were however ultimately unable to develop such infrastructure<sup>4</sup>.

### 3. Promote sustainable consumption patterns in cities

<sup>2</sup> [https://www.eca.europa.eu/ECAPublications/SR-2023-17/SR-2023-17\\_EN.pdf](https://www.eca.europa.eu/ECAPublications/SR-2023-17/SR-2023-17_EN.pdf)

<sup>3</sup> [https://www.eca.europa.eu/Lists/ECADocuments/SR22\\_23/SR\\_H2020\\_and\\_ESI\\_Funds\\_EN.pdf](https://www.eca.europa.eu/Lists/ECADocuments/SR22_23/SR_H2020_and_ESI_Funds_EN.pdf)

<sup>4</sup> [https://www.apur.org/sites/default/files/les\\_chantiers\\_du\\_ne\\_mgp\\_un\\_exemple\\_pour\\_economie\\_circulaire.pdf?toKen=dHPYp6MT](https://www.apur.org/sites/default/files/les_chantiers_du_ne_mgp_un_exemple_pour_economie_circulaire.pdf?toKen=dHPYp6MT)



Changing behaviours towards more sustainable consumption patterns is integral to the circular transition. Long-lasting change is nevertheless hard to achieve as local governments lack resources and go against predominantly linear consumption patterns.

- (To the EU and to national governments) Engaging with the public, raising awareness and encouraging circular behaviours - beyond recycling - has been central to CityLoops. This endeavour has however proved to be extremely difficult, as changing consumption patterns is a long-term process and as linear thinking predominates. **Cities' efforts to raise-awareness and change behaviours should be encouraged and supported, as they are the level of government closest to citizens. Clear and effective messaging, guidance should be made available, and good practices disseminated within member states and across the EU.**
- (To the EU) Moreover, efforts to promote the circular economy and change behaviours are dwarfed by efforts from the private sector to promote linear products and services, i.e. through marketing strategies and commercial advertising. **To the EU, we recommend that advertising and marketing activities should be included within life cycles of the products they are promoting, and as such should be covered by the Commission's Sustainable Product Policy Framework, in order to promote products in line with a climate-neutral, resource-efficient and circular economy.**

#### **4. Improve data collection and management to measure circularity at the local level**

Local governments need data to assess where they stand in the circular transition, monitor progress and evaluate impacts of their actions. However, collecting data in CityLoops has proven to be a real challenge for cities, as the availability and the quality of data at the local level is insufficient, while local governments are often ill-equipped to collect and manage data.

- (to the EU) A dedicated monitoring framework is needed for local governments to be able to assess progress made towards the circular transition and to measure impacts. Additionally, as current indicators tend to be mostly related to waste, upstream indicators are necessary to measure material flows and stocks in cities. **We therefore recommend the development of a dedicated monitoring framework encompassing the entire life cycle of products at European level, piloted and developed with local governments as well as other relevant stakeholders.**
- (to the EU and to national governments) Moreover, **we recommend Eurostat and national statistical agencies to improve the collection and the accessibility of data at the local level, at statistical units that matter for local governments, particularly on data related to material flows and stocks.** We also suggest building capacity in local governments on data collection and management, with dedicated guidance, harmonised tools and training programmes.

- (to the EU) At city level, data informs the development of strategies and supports long-term decision making. In particular, methodologies like the Material Flow Analysis make it possible to identify the most impactful material streams and assess the overall circularity of cities. **We recommend harmonising methodologies at European level and providing open source tools, guidance and training to local governments, for them to be able to measure material footprints of cities.**

## Construction recommendations

### 5. Enable circularity in cities through planning legislation

Embedding circularity within national planning policies and building regulations would allow cities to become more circular. This includes for instance promoting brownfield developments, curtailing unjustified demolitions, and promoting design for flexibility.

- (to the EU and to national governments) Urbanisation is a major driver of land use and soil sealing in Europe; this is why reaching no net land take has been set as a long-term objective of the EU Soil Strategy<sup>5</sup>. However, cities and towns across Europe are hit by a housing crisis, with greenfield developments remaining a way to provide affordable housing. **We therefore recommend the provision of guidance to local governments to make brownfield development easier, on topics such as pollution or land assembly.**
- (to the EU and to national governments) Moreover, considerable damage to the environment can be prevented if building structures are re-used, rather than demolished. We suggest setting **stricter requirements on total demolition** at EU and national levels to make re-use of building structures the new standard, including more robust assessment processes for the evaluation and green-lighting of planned building demolitions on a case-by-case basis.
- (to national governments) **Design for flexibility and disassembly** makes adaptation of buildings to future uses easier, reducing the likelihood of future demolition and therefore reducing resource consumption. **We recommend integrating flexibility within all new or retrofitted publicly owned buildings design, as well as for all private developments above a certain threshold.**

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<sup>5</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0699>

Examples	
<p><b><i>Demolition must be justified to be granted permission (London, UK)</i></b></p> <p>Within the Circular Economy Statement Guidance, attached to the London Plan, extensive justifications are required for developers proposing substantial demolitions<sup>6</sup>.</p>	<p><b><i>Net zero land take legislation (France)</i></b></p> <p>In 2023, France adopted a new law called “Zéro Artificialisation Nette”, which aims to reduce urban sprawl and achieve no net land take by 2050, by avoiding greenfield development, reducing soil sealing and introducing compensation measures<sup>7</sup>.</p>
<p><b><i>Design for disassembly (Amsterdam, NL)</i></b></p> <p>The Amsterdam temporary courthouse has been designed as a kit of parts that can as easily be assembled as disassembled and reassembled, to facilitate changing uses, users and locations.</p> <p>After the first period of use, it can be disassembled and reassembled in its entirety at a different location, and if desired also in a different configuration.<sup>8</sup></p>	<p><b><i>Circular requirements for municipally-owned land (Tampere, FI)</i></b></p> <p>Finnish local governments usually own a lot of land. They have focused their efforts on the land allocation process. Tampere has successfully developed circular criteria in their process, so that private developers can engage to develop circular buildings/infrastructures<sup>9</sup>.</p>

## 6. Boost the supply of secondary materials

Enhancing circular construction entails simultaneously pushing supply and demand. On the supply side, additional changes are needed to promote reuse and recycling, including making pre-demolition audits and source separation mandatory, encouraging on site re-use and creating end-of-waste criteria for certain types of materials.

- (to national governments) **Pre-demolition audits** create opportunities for reuse of waste and surplus materials. The tendering of pre-demolition audits or screening mandatory for all large buildings that are commissioned for selective demolition or deconstruction services could for instance become mandatory. The audits should aim at identifying all the materials and building components with reuse or recycling potential.

<sup>6</sup> <https://www.london.gov.uk/programmes-strategies/planning/implementing-london-plan/london-plan-guidance/circular-economy-statement-guidance>

<sup>7</sup> <https://www.ofb.gouv.fr/la-demarche-zan-zero-artificialisation-nette>

<sup>8</sup> <https://www.cepezed.nl/en/project/temporary-court-amsterdam/30529/>

<sup>9</sup> <https://kuntalehti.fi/uutiset/tekniikka/tampereen-kissanmaalle-rakennetaan-suomen-ensimmainen-kiertotaloustalo/>

- (to national governments) **Sorting** should be promoted, and developers should specify which materials (type, percentages, quantities) from demolitions are to be reused and recycled. Waste management plans should be made mandatory for all types of constructions. For public construction clients, this could be done by including specific requirements in tenders, while for private developers this should be included in planning applications.
- (to national governments) Draw up administrative regulations in the form of administrative orders, e.g. the upcoming administrative order for Selective Demolition, which should be followed up with specific requirements for sorting materials, so that the **total amount of mixed waste is reduced to a minimum**.
- (to the EU and to national governments) Waste can cease to be waste and instead achieve end-of-waste status, if it has been prepared for reuse/recycling, if it is used with a specific aim or there is a market for it, or if it meets the technical requirements for the specific purpose and complies with applicable legislation and standards regarding the product and the use of the substance or object does not have general negative effects on the environment or human health. **End-of-waste criteria** should be defined at EU or at national level for the most commonly used building materials such as concrete, masonry, steel and wood.
- (to national governments) New constructions should now take into consideration the future (re)use of building materials. As such, digital material passports enable a better traceability of the materials, by identifying materials history, content, quality (embodied carbon, structural capacity, toxicity), use, maintenance and thus reuse potential. The Revision of the Construction Products Regulation includes the set up of a Digital Product Passport. **As it has now reached the stage of the trilogue discussion, we recommend the Parliament, the Council and the Commission to ensure it will effectively enable the re-use - and when not possible the repurposing or the recycling - of all types of construction materials.**

## Example

### *Mandatory requirements in legislation (France)*

With its recently adopted Anti-waste and Circular Economy Law adopted in 2020, France has paved the way to circularity with measures such as mandatory pre-demolition diagnosis and a new Extended Producer Responsibility (EPR) for construction products<sup>10</sup>.

<sup>10</sup> <https://www.ecologie.gouv.fr/loi-anti-gaspillage-economie-circulaire>

## 7. Stimulate demand for secondary materials

Besides a limited supply, additional bottlenecks currently hamper demand for secondary materials. To address these bottlenecks, we recommend the development of specific standards and certifications for secondary materials (either reused, reclaimed materials or for materials with recycled content). We also suggest the adoption of an enabling fiscal framework that would establish a level playing field with virgin materials.

- (to the EU and to national governments) As of today, using reused, reclaimed or recycled materials usually comes with additional risks for construction companies, architects, and clients alike. We recommend the **development of standards and certifications** to ensure they meet quality, health and safety standards. When existing, standards and certifications should be made more ambitious. Moreover, guidance should be provided and disseminated to increase trust in these products or materials. This should be done in consultation with key stakeholders such as regulatory bodies, quality control agencies or insurers. This could include for instance CE marking for certain reused products, or measures to ease the introduction of those products for reuse purposes.
- (to the EU and to national governments) Secondary raw materials have been reported to be more expensive than virgin raw materials, hampering construction clients' will to build more circularly. **We therefore recommend national governments to correct this market failure - as negative externalities connected to extraction are not reflected in prices - and adopt fiscal measures to support establishing a level playing field for circular materials, including higher taxes for virgin materials or tax reductions for secondary raw materials.** At the EU level, the implementation of Carbon Border Adjustment Mechanism, as well as the EU fiscal reform should support the transition to a circular economy.
- (to the EU and to national governments) As standards and incentives are usually not enough, **explicit requirements for replacing natural raw materials with waste products** should be incorporated into the EU and/or National Building Regulations, drawing respectively on the Danish Building Act §1 and Resources Act § 1. Concrete, the most widely used construction material, but also in a sense the most destructive, offers a good example, as recycled aggregates can be safely integrated into concrete structures in Denmark for a number of Applications (see examples below).

## Examples

### ***CE-label for reclaimed bricks (Denmark)***

The well-known European CE-label (Conformité Européenne- European Conformance) is a guarantee for a product's fulfilment of all applicable safety directives. All building materials that are regulated through a standard, must have the CE-Label to be marketed in the EU. Until now, it has not been possible to CE-label a reused/recycled building material, including e.g. bricks, due to the lack of a standard or methods description. Such a description has now been developed for recycled bricks and approved in all EU countries. The main driver for the development of the technical description was the Danish company "Gamle Mursten" ("Old Bricks"). The company chose to set the same requirements to the recycled bricks as to new ones, based on DS/EN 771-1:2011+A1:2015. The recycled bricks can, however, only be used in masonry, where the requirement to the rock strength does not exceed 20 MPa<sup>11</sup>.

### ***Up to 100% of recycled aggregate in concrete (Denmark)***

Denmark has a standard in place for recycling concrete in 2020 (DS/EN 206), which states that 100% of stone and sand in concrete can be replaced with crushed concrete, provided the material and the concrete meet requirements for special testing and documentation. Most other EU countries still operate with 20%. Nevertheless, recycling crushed concrete as aggregate in new concrete does not happen because there are no requirements and financial incentives – and it is perceived as a risk to have to do things differently.

### ***Bringing Insurers on board (Belgium)***

Insurance issues are at the core of current reuse practices. There are still many open questions: how can we get insurers to cover the use of reused materials? How can risks be assessed and responsibilities be shared? What are the new roles for each stakeholder (including contracting authorities, architect, technical controller, etc.)? When and how is insurance information to be communicated between project members? Many initiatives are running to tackle these barriers:

- SECO Belgium, an independent technical expert for the construction industry, in collaboration with different stakeholders (builders, developers, contractors and insurers), has launched a research project to address the insurability of circular projects in the building sector. The project will develop recommendations for insurers and policymakers to overcome the obstacles related to the insurability of circular constructions, by working on the availability of reliable and relevant technical information for reusing materials.
- Safety circularity certification: this certification, developed by partners specialised in reused materials, aims to increase trust of owners, project managers and prescribers (architects, research departments...) in the capability of recovery actors to propose safe and reliable reused materials. It presents companies specialised in materials refurbishment as a way to control their internal processes and a certificate to recognise their ability to declare reliable information on the materials concerned, delivered by an external party. As a result, the certification provides project owners, architects and contractors a quality guarantee towards the company they are working with.

<sup>11</sup> <https://www.katche.eu/da/ce-label-reusedrecycled-building-materials-5/>

# Bio-waste recommendations

## 8. Support bio-waste prevention at the local level

Due to their proximity with restaurants, food services and citizens, local governments have an essential role to play to prevent food waste. As the EU is currently revising its Waste Framework Directive to reduce food waste, this constitutes an opportunity to accelerate action at the local level. We recommend integrating the following points in the revision.

- (to national governments) Local governments' contribution will be essential to achieve the 30% food waste reduction target in each Member State, as they are in a unique position to prevent food waste generated in households, restaurants and food services. **We therefore recommend that local governments should be involved in the development of national food waste reduction strategies, which should in turn provide them with dedicated resources to effectively contribute to achieving national targets.**
- (to the EU and to national governments) Local governments need tools and indicators to measure and monitor food waste and be able to demonstrate benefits associated with prevention. For instance, assessing avoided emissions (scope 3) would allow cities to integrate food waste prevention measures in climate action plans.
- (to the EU and to national governments) **Local governments need guidance on how to effectively prevent food waste, especially through procurement**, which is a powerful lever to prevent food waste produced in catering and school canteens. Local governments need enabling policies or strategies at both EU and national levels that support the inclusion of requirements in tender to improve the prevention of food waste where relevant. They also need examples of requirements and criteria that they can include in tenders when procuring food and when dealing with suppliers.
- (to national governments) As most food waste is generated at households' level, considerable effort must be made to raise awareness and change behaviours at home. Local governments are in a unique position to reach citizens; **that is why we recommend Member States to include the provision and the dissemination of toolkits and guidance on how to change behaviours towards zero food waste in future national waste reduction strategies.**
- (to the EU and to national governments) A substantial share of food waste is generated by food services – or HoReCa sector, and local governments can enable source reduction due to their proximity with this category of actors. **We recommend the provision of guidance on how to engage with food services, as well as specific actions to support food services in their transition, from both the EU and member states.**



- (to the EU and to national governments) Food waste reduction is part of the broader transition of the food industry, with food waste generated at later stages of the value chain often being the result of linear design and production. On top of the 10% target in processing and manufacturing, **we recommend developing meaningful strategies and measures at EU and national levels to promote more local, more sustainable, and more resilient food systems, particularly through the Commission's proposal for a legislative framework for sustainable food systems, under development. This includes supporting organic agriculture, shorter supply chains and small producers, to reduce food losses as well as to close biocycles locally.**
- (to the EU and to national governments) Last, to the EU and national governments we recommend exploring and promoting ways to reduce other categories of bio-waste, for instance encouraging more sustainable green space management practices to prevent green waste and foster biodiversity.

### Example

#### *Preventing food waste in the HoReCa sector in Porto (Portugal)*

Porto is a popular tourist destination and lies at the centre of a dynamic metropolitan area, attracting commuters every day. All this activity generates a lot of waste, especially food waste from the HoReCa sector. That is why within CityLoops, Porto has endeavoured to prevent food waste by engaging with and providing training to food services.

As such, the Dose Certa initiative strives to reduce food waste and promote the adoption of nutritious and more sustainable menus. This initiative emphasises the use of seasonal and local ingredients while considering the variety, quantity, and nutritional value of food. Moreover, by carefully assessing and characterising the food waste generated by restaurants and canteens, it becomes possible to identify areas of waste and adjust serving sizes accordingly, leading to a significant reduction in food waste of approximately 30%. The more efficient utilisation of ingredients ultimately leads to a reduction of meal costs. Additionally, the produced information helped raise awareness among chefs, cooks, and staff members, who developed a greater sense of consciousness around meal planning.

An additional measure is Embrulha (Wrap it), an initiative that comprises the use of biodegradable packaging for taking home leftovers. This type of packaging was distributed to restaurants interested in participating in this initiative. A digital dashboard tracks restaurants involved, packages distributed, and food waste and CO<sub>2</sub>eq emissions avoided. In Porto Municipality, 56 restaurants received the stamp recognition, reducing 3.1 tonnes of food waste in 2021 and 6.8 tonnes in 2022. Reproducing such measures in other cities, at national or even at European level would greatly contribute to reducing food waste generated in food services<sup>12</sup>.

## 9. Promote decentralised bio-waste valorisation in cities

Decentralised valorisation of bio-waste (i.e. at home or within communities) presents many environmental benefits and appears as a good complement of separate collection and centralised schemes. Decentralised valorisation should be promoted at EU and national levels

<sup>12</sup> <https://www.lipor.pt/en/awareness/no-waste/food-waste/>



to achieve separate collection targets, while guidance should be provided to relevant stakeholders.

- (to the EU and to national governments) Valorising bio-waste is necessary to recover nutrients, organic matter, and energy, thus closing biological cycles. However, different valorisation options exist, and at different scales. While centralised options and separate collection require considerable investment from local governments, decentralised solutions are simpler and allow for a real engagement with citizens and waste producers, while presenting many environmental benefits (absence of impacts associated with transportation, increased biological activity of soil) as demonstrated by Porto. **Therefore, we recommend the promotion at both EU and national level of decentralised treatment solutions towards local governments.**
- (to the EU and to national governments) Residents and communities are at the core of decentralised valorisation, therefore specific action is needed to raise their awareness and have them effectively contribute to bio-waste valorisation. Rules on what can be composted at home or should be collected differ greatly between cities or countries. More, composting can in some instances be associated with health and safety issues if not done properly. **Therefore, we suggest the provision of clear guidance for citizens on home or community valorisation, with harmonised instructions across regions and countries and for different solutions (traditional composting, vermicomposting, bokashi...).**

### Example

#### *Home and community composting in Porto (Portugal)*

Under the CityLoops project, the city of Porto has taken proactive measures by establishing community composting spaces dedicated to the separate processing of household bio-waste. These initiatives have been complemented by comprehensive awareness campaigns and informative composting training sessions conducted within the neighbourhoods where the community composting spaces were implemented. Additionally, a "compost master" role was introduced, designating the person responsible for weekly monitoring, logistical coordination, and administrative management of the composters. Community composting complements home composting and altogether decentralised solutions make it possible to avoid economic costs and environmental burdens associated with organic waste collection while generating "buy-in" from citizens and communities<sup>13</sup>.

## 10. Develop standards and certifications for bio-waste based materials and energy

Bio-waste based materials and bioenergy represent a great economic opportunity for local governments. However, uncertainties remain on both the applicable regulatory framework and on demand for bio-waste based materials and bioenergy. A more transparent European

<sup>13</sup> <https://www.porto.pt/pt/noticia/ilhas-de-compostagem-comunitaria-transformam-os-biorresiduos-em-composto-organico>

framework should be adopted to support long-term investment decisions and enable the closing of biocycles at the local level.

- (to the EU and to national governments) As separate collection of bio-waste becomes mandatory, local governments are investing into treatment facilities, and the supply of bio-based materials will consequently increase. However, certain bio-based materials derived from biowaste are perceived to be unsafe to use, making it necessary to develop standards and certifications, as well as the necessary verification systems to increase trust in these products. That is why **we recommend the development of dedicated standards and certifications to ensure that bio-based products derived from biowaste meet quality, and health and safety standards.** These standards and certifications can in turn be used in procurement processes. Cities can use their purchasing power by prioritising the procurement of bio-based products derived from bio-waste recycling, esp. if these products, such as compost or biogas are derived from bio-waste from the cities themselves. Cities can use standards or certifications in tenders to ensure that the bio-based products derived from bio-waste meet quality, and health and safety standards. These new standards and certifications should ultimately be disseminated widely towards local governments.
- (to the EU) Across Europe, local governments are setting up anaerobic digestion plants to convert bio-waste into biogas, which has many applications and can for instance be used as biofuel. As it is a substantial investment, they need clarity on future uses for biogas in the long term. This is illustrated by possible new EU directives on combustion engines (Fit for 55 directive), as any changes to these related to combustion engines and the use of biofuels in these cars will have a great effect in the production and use of the biofuels made. Moreover, in line with the waste hierarchy and EU policy, biofuels made locally from biowaste should be promoted through regulations, since they help cities and towns to become more self-sufficient and to move away from fossil fuels.

## Example

### *Local biogas for collection trucks and public transports in Mikkeli (Finland)*

The city of Mikkeli started with the production of biogas in the year 2021. The biorefinery treats sewage sludge, bio-waste and agricultural and industrial by-product streams generated in Mikkeli and the surrounding areas. The end-product of biorefining is biomethane processed into transport fuel and fertilisers. At full capacity, the plant can produce around 1.5Mm3 biomethane, which is equivalent to the annual consumption of 2000 passenger cars. Within CityLoops, biogas has been turned into a biofuel, to be used by waste collection trucks and local buses, thus reducing reliance on fossil fuels, and increasing local resilience. For Mikkeli, knowing that there will still be a market for locally produced biogas on the long term is crucial.



# Procurement recommendations

## 11. Raise the minimum standards for procuring organisations

Procurement can play an important role in enabling the circular economy. Minimum standards for procuring organisations should be raised, by for instance making Green Public Procurement (GPP) criteria mandatory, while circular, social, and environmental minimum criteria should be required throughout the value chains within the city spend areas.

- (to the EU) **We recommend making GPP and circular principles mandatory** and train teams to be prepared for the implementation, including social criteria where relevant.
- (to the EU) The circular transition is happening now at full speed. Criteria run the risk of becoming outdated quickly. **European Green Public Procurement criteria for sectors like construction, food and other organic products, ICT, furniture or textiles need more regular updating to run along the many transitional circular innovations.** Regular dialogues with the market are extremely important to ensure a smooth transition.
- (to the EU) Minimum requirements and sample award criteria addressing circularity should be included in EU spending programmes such as the European Structural and Investment Funds and Recovery and Resilience Facility, and in relevant legislation under the Green Deal/Fit for 55. For example, requiring training clauses to promote the development of skills linked to the circular economy as part of the delivery of public contracts.
- (to the EU and to national governments) **We suggest EU institutions and national governments to lead by example** by making their procurement more circular, in order to showcase to other public buyers and especially local governments' procurement strategies and practices necessary to facilitate the transition to a circular economy.

## 12. Promote the uptake of circular procurement

Circular procurement should be promoted among local governments, including approaches like Life Cycle Costing, the inclusion of circular criteria in tenders, or joint statement of demands. The professionalisation of public procurers should be supported, while the development of circular economy knowledge among procurement practitioners should be encouraged.

- (to the EU) **We recommend promoting Life Cycle Costing** across the European Union through use of whole life cost evaluation within tenders / projects using the development of common EU methods and, free-to-access Life Cycle Costing measuring tools. These tools need to include carbon cost calculation of products and services; including impacts related to other planetary boundaries should also be

encouraged. Finally, guidance and training for public procurers on how to use Life Cycle Costing tools in tenders should be developed.

- (to the EU) **We suggest facilitating the inclusion of circular criteria into tenders** by developing databases of circular criteria that public procurers can then easily include in tender documentation, tender document templates for circular projects across several product categories to simplify the preparation of tender documents for circular projects, as well as database of circular criteria and clauses at EU-level that support the objectives of the CEAP. This can help procurers across Europe support circular economy objectives.
- (to the EU) **We recommend procuring authorities forces with other Contracting Authorities through Joint Statement of Demands (JSDs).** Groups of local governments can issue joint statements of demands to send a signal to the market of their intention to buy more circular products, materials or services.
- (to the EU) **We suggest supporting the professionalisation of public procurers and encouraging the development of circular economy knowledge among procurement practitioners.** This includes training and certifications at the national level to ensure that public procurement practitioners have the required skills and knowledge, as well as short courses, or training to develop circular economy and circular procurement knowledge among public procurers. Ultimately, guidance and training to procurers on how to include circular criteria in tenders should be provided.

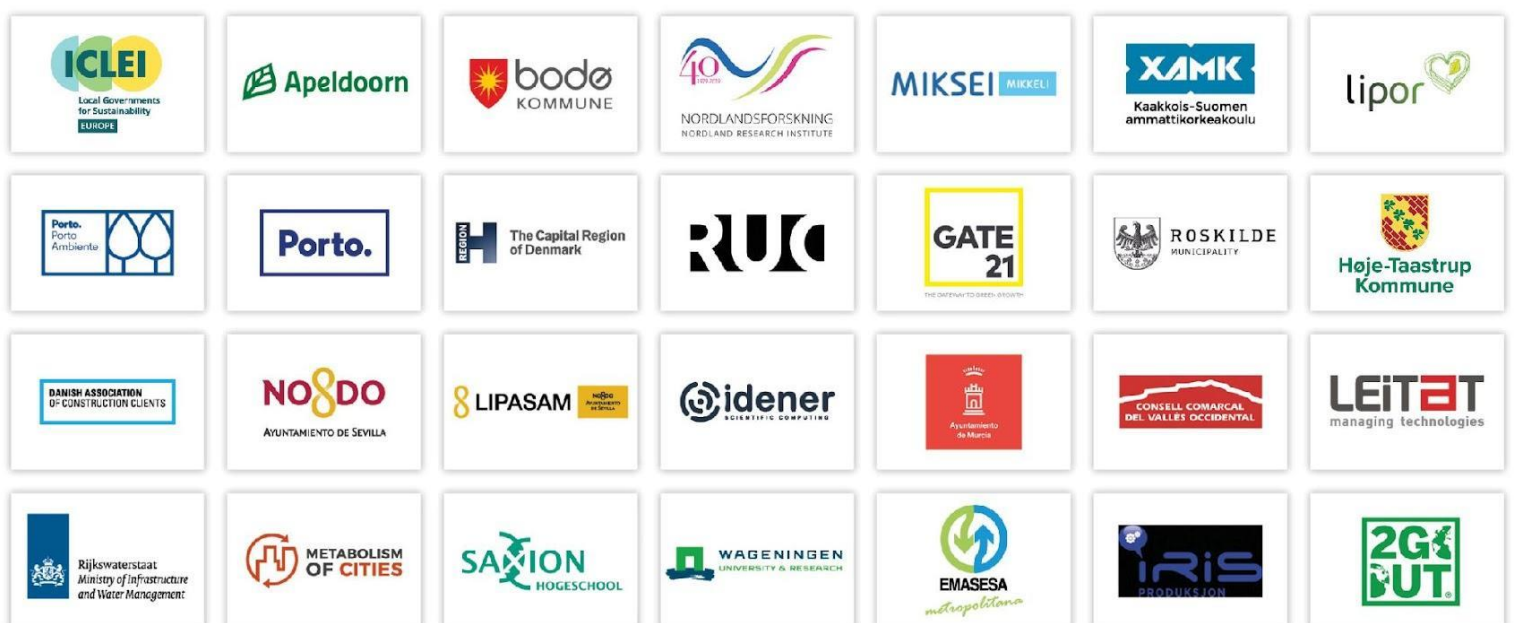


CityLoops is an EU-funded project focusing on construction and demolition waste (CDW), including soil, and bio-waste, where seven European cities are piloting solutions to be more circular.

Høje-Taastrup and Roskilde (Denmark), Mikkeli (Finland), Apeldoorn (the Netherlands), Bodø (Norway), Porto (Portugal) and Seville (Spain) are the seven cities implementing a series of demonstration actions on CDW and soil, and bio-waste, and developing and testing over 30 new tools and processes.

Alongside these, a sector-wide circularity assessment and an urban circularity assessment are to be carried out in each of the cities. The former, to optimise the demonstration activities, whereas the latter to enable cities to effectively integrate circularity into planning and decision making. Another two key aspects of CityLoops are stakeholder engagement and circular procurement.

CityLoops started in October 2019 and will run until September 2023.



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