

# Leading the way towards waste prevention



A Policy Brief from the Policy Learning Platform on  
Environment and Resource Efficiency

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## Summary

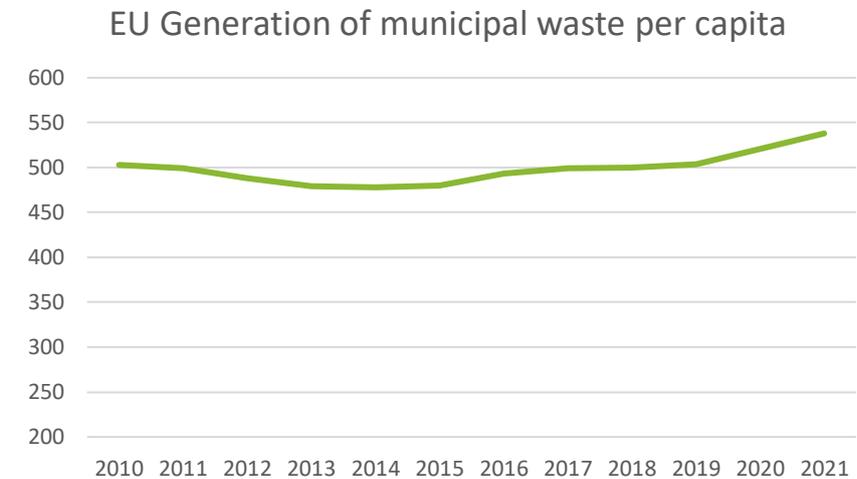
Waste generation in Europe is on the rise. On average, every European citizen produces nearly half a tonne of municipal waste and the annual waste generation in the EU amounts to [2.5 billion tonnes](#). To reverse this trend, the EU supports a defined waste hierarchy featuring waste prevention as the number one priority and clearly the most efficient way to save resources and lower the environmental impact of waste. Moreover, waste prevention reduces local waste management costs, and encourages social inclusion and economic development through creating jobs, volunteer schemes and training opportunities.

**Local and regional authorities have an opportunity to lead the way in waste prevention** and use their considerable purchasing power in various sectors (construction, transport) to change linear consumption and production patterns. There are several ways to support waste prevention, including establishing prevention policies and targets, adopting green public procurement practices and tools, encouraging active citizen participation, developing awareness raising campaigns and providing information through various outlets.

The present policy brief provides an overview of EU initiatives to inspire local and regional authorities and showcase ways to support waste prevention. These include actions on food waste prevention, or examples of green public procurement and training. Furthermore, it presents a selection of Interreg Europe good practices from the projects [GPP4Growth](#), [ECOWASTE 4FOOD](#), [CECI](#), [CircE](#), [LCA4REGIONS](#), [REDUCES](#) and [ENHANCE](#), with a high degree of replicability in other municipal contexts.

## Waste generation

Despite existing legislation, municipal waste generation, including many waste streams, has been stagnating over the last two decades, even slightly rising in the last years. Waste prevention programmes have so far been ineffective to significantly reverse this trend. Therefore, the European Commission is currently working on a **proposal for the revision of the Waste Framework Directive**, which is expected to be published in the [second quarter of 2023](#).



Source of data [Eurostat](#), in kilograms per capita

The proposal specifically focuses on circular management of textile waste, food waste reduction targets, and promotion of best practices in waste prevention monitoring. One of its goals would be to shape and implement effective waste prevention plans, which would include specific prevention targets and measures. Most importantly, the revision of the WFD presents an opportunity to [include legally binding waste prevention targets](#).

## European policy and its role in waste prevention

Waste prevention is closely linked to reduced use of resources and pollution prevention and is therefore an inherent part of many European policies and strategies. The [Waste Framework Directive \(EU\) 2018/851](#) of the European Parliament and of the Council of 30 May 2018 amending [Directive 2008/98/EC](#) on waste, defines waste prevention as “**the most efficient way to improve resource efficiency and to reduce the environmental impact of waste.**” Apart from limiting unnecessary consumption, waste prevention includes the reduction of adverse environmental impacts of waste, or reducing the quantity of materials in products ([DG Envi](#)).

The [European Green Deal](#) aspires to achieve net-zero emissions by 2050, making European Union the first climate-neutral, resource-efficient and competitive economy and decouple economic growth from resource use. This commitment is an opportunity to increase the waste prevention efforts, as it is interlinked with emission reduction. The document encourages public authorities, including the EU institutions, to “**lead by example and ensure that their procurement is green**”.

The [Circular Economy Action Plan \(CEAP\)](#), a key part of the [European Green Deal](#), envisions that circular economy will provide citizens with high-quality, functional and safe products which are durable and repairable, designed to be used for a long time. The first principle of a circular economy is to eliminate waste and pollution. Redesigning products and processes is essential for the efforts to decouple from waste. One objective of the Circular Economy Action Plan is to “**transform consumption patterns so that no waste is produced** in the first place”. According to CEAP, a key to making progress on waste prevention is a ‘sustainable products’ policy, which should support the circular design of all products based on a common methodology and principles, prioritising material reduction and reuse before recycling them.

In addition, the Commission plans to propose waste reduction targets, enhance requirements of the Extended Producer Responsibility schemes and halve the amount of residual municipal waste by 2030. While the circular economy action plan will guide the transition of all sectors, **action will focus in particular on resource-intensive sectors such as textiles, construction, electronics and plastics.**

## Waste Framework Directive

The [Waste Framework Directive \(2008/98/EC\)](#) set a legal obligation for European Union Member States to adopt waste prevention programmes by December 2013 and to evaluate and revise them at least once every six years. The European Environment Agency (EEA) has been carrying out an annual review of the progress made towards the ‘completion and implementation of the programmes’ ever since. The revision of the [Waste Framework Directive in 2018](#) has put even

more emphasis on waste prevention and proposed Member States should explore policy interventions such as setting national waste prevention targets for specific waste streams and use of common indicators. The latest country profiles can be found for the year [2021](#) and include various types of measures, including reuse, bans of plastic products or initiatives related to food waste prevention.



Source: [European Commission](#)

## Guest contribution: From national prevention targets to local action

Author: Jack McQuibben, Zero Waste Europe

### What types of actions or targets should be introduced to boost waste prevention?

- Greater material regulation – what can and cannot be placed on the market – thus providing clear incentives for producers to use only materials which can be reused or closed-loop recycled at best.
- Mandate for quantitative waste prevention targets, both for individual product groups, as well as an overall EU-level target – e.g. a 20% binding reduction of waste generation to be achieved by 2030, compared to 2019.
- Adopt a residual waste target for all EU Member States to incentivise waste reduction – e.g. a target of maximum 120 kilograms per capita per year to be achieved by 2030;
- Reinvent failing Extended Producer Responsibility (EPR) schemes, in order to provide the tools for member states to implement enforceable targets for prevention, reuse, and high-quality recycling (in this order of priority, as stipulated in the waste hierarchy).

### In your view, what are the main challenges and barriers preventing wider adoption of choices resulting in prevention of waste generation?

Several barriers are slowing down the progress towards a circular economy in Europe. Locally, cities often lack capacity and knowledge to design and implement reuse models. [Yet they should know that expertise is out there](#), and feel confident to utilise such sources. Second, the standards and models often used in reuse systems currently are not harmonised, due to a lack of European and national regulation on this topic. [We have some guidance](#) on what essential criteria should be installed, however. This means that currently, different cities are using different materials, different take-back models from businesses and different system management options. This will prove a barrier for greater scale-up in the coming years, as citizens and businesses will require harmonisation to operate with confidence and regularity within a reuse system. Furthermore, the continued lack of material regulation and the current inability of EPR schemes to incentivise producers to change, remains a huge barrier.

### What steps can local and regional authorities take to prioritise waste prevention?

There are numerous policies and measures available to municipalities to tackle waste generation. [In our policy briefing](#) on this exact topic, we identified four key measures for municipalities to enact first:

- Adopt environmental and social public procurement criteria that prioritise reuse
- Establish re-use and prevention targets for key material streams ([as has been done in Austria](#))
- Create quality collection points to capture as many reusable items as possible
- Create a re-use culture locally (educate and raise awareness across the whole community)

Ultimately, I would suggest authorities first analyse their waste system and generation levels to understand what the biggest problems are, to prioritise, and where the waste is generated. [Our guidance document for cities & regions](#) on how to implement the EU's Single-Use Plastics Directive at local level provides lots of useful tips and ideas on where to begin. For example, total or partial bans of single-use plastics in public events, spaces and buildings is a great policy to enact, setting the tone for waste prevention within the wider community.

### Please describe a few inspirational examples of tools aimed at waste prevention for local and regional authorities.

- Our sister organisation, the Mission Zero Academy (MiZA), has created [a Carbon calculator](#) for measuring the greenhouse gas emission impact from current and future waste policies. The uniquely focuses on waste prevention, reuse, preparation for reuse– meaning users can calculate the emissions generated by the implementation of the city's zero waste transition.
- MiZA also has a [Waste Prevention Toolkit](#) for cities. It allows municipal authorities to determine the environmental impact and financial cost of a range of waste prevention measures. The tool analyses ten preloaded initiatives, such as: home composting, promotion of reusable nappies, food waste campaigns, kerbside bulky waste collections for reuse, and general communications.

## European financial support for waste prevention

The 2021-2027 Multiannual Financial Framework ([MFF](#)) supports European regions in becoming greener and more circular. Hence, EU's structural and investments funds ([ESIFs](#)) and direct funding instruments like the [LIFE](#) and [Horizon Europe](#) programmes are accessible to projects aimed at waste prevention.

During the [2014–2020](#) programming period, the [LIFE programme](#) supported the implementation of circular economy projects with over [945 MEUR](#). The [new regulation](#) governing the programme between 2021 and 2027 allocated a budget of EUR 1,35 billion to the 'Circular Economy and Quality of Life' subprogramme, which is expected to help the dissemination of best practices and solutions like those of the [OEKO](#) project, whose aim was to prove in practice the feasibility of prevention methods through careful planning and by motivating and training the different partners involved in a construction project. Another example is the [Waste Prevention](#) project, which intended to identify and develop new informational means to promote material efficiency, waste prevention and sustainable development. The primary goals were to improve the levels of awareness among target groups (manufacturer) and to help them to reduce the amount of waste generated. One goal was to show that intense advising does translate into action and clearly reduces the consumption of materials and the production of waste.

Making Europe the first digitally enabled, circular, climate-neutral and sustainable economy by transforming production systems and restoring Europe's ecosystems and biodiversity are two of the four 'key strategic orientations' of [Horizon Europe](#). As such, they were included in the [first strategic plan](#) that will guide the new EU research and innovation programme between 2021 and 2024. Horizon Europe [Cluster 6](#) – concerning food, bioeconomy, natural resources, agriculture and environment – is expected to contribute to the two aforementioned key strategic orientations and will be the major source of financial support for R&I projects in the area of reuse and repair as a way to transition to circular economy. Horizon Europe has a budget of €95.5 billion and runs until 2027. It will support projects such as [FOODRUS](#), which addresses the challenge of reducing and preventing food waste and losses in the agri-food chain, or the [LOWINFOOD](#) project that should contribute to design of low-waste food value chains through the demonstration of innovative solutions to reduce food loss and waste.

**European Territorial Cooperation** also provides a powerful support for regional and local authorities wishing to learn how other peer organisations across Europe design their waste prevention and management policies. In the following chapters of this brief, several good practices identified in the framework of Interreg Europe will be highlighted. But other Interreg programmes have enabled interesting projects with inspiring results. As an example, [STREFOWA](#) ran in the framework of the [Interreg Central Europe](#) programme to help regions in five partner countries to integrate food waste reuse in local environmental strategies. The project organised initiatives like food waste hackathons, programs with food banks, educational programmes for schools, an online interactive tool, and produced factsheets, guidelines and handbooks.

## Policy solutions for waste prevention

EU Member States, regions and municipalities are setting measures to decrease the generation of waste by addressing overproduction and overconsumption. These include restrictions in the use of single-use plastic products, bans on destruction of new or unused goods, or specific waste prevention targets. The European Union is increasingly likely to introduce binding targets on the volume of raw materials on the market, aiming to reduce EU's ecological footprint. Local authorities have an important role in waste prevention, as they provide waste management services and shape local legislation and strategy. They are also waste producers who can lead by example.

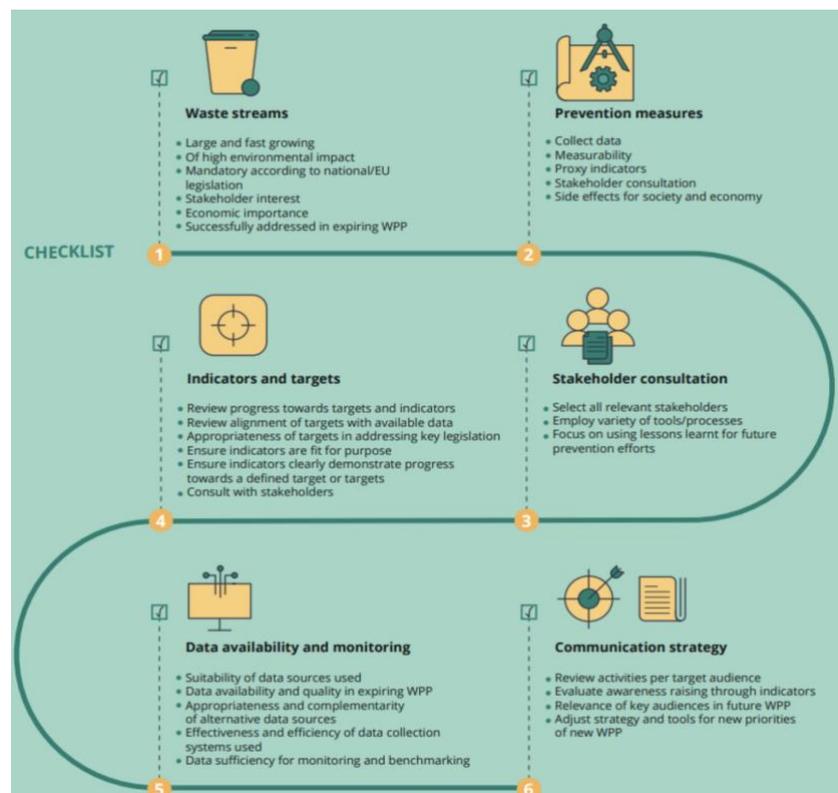
### National and regional waste prevention policies

While there are no EU level targets for waste prevention at the moment, many countries and regions are already starting to implement their own legislative measures and quantitative targets to lower waste generation. In **Catalonia** (Spain), the authorities set ambitious waste reduction targets in their [General Waste and Resource Management Prevention Programme 2019-2025](#). These include 15% waste reduction (by weight) by 2020, or a limit on the amount of residual waste generated per capita – 150 kg per year by 2025. **Balearic Islands** (Spain) published a [law](#) in 2019 that set binding targets to reduce waste generation by 10% by 2021 and by 20% by 2030, compared to 2010. They have [reached the 2021 goal](#), but still have a lot of work ahead to reach their 2030 target. **Flanders** (Belgium) developed targets to reduce the total quantity of residual waste from households, companies and organisations, which are tailored to the specific profiles of the municipalities. Thanks to these targets, the amount of household waste generated in 2021 was [471 kg per inhabitant, the lowest figure since 1994](#). The amount of residual waste decreased as well, to 140 kg per capita.

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The municipality of **Ljubljana** (Slovenia) published a [Zero-Waste Strategy](#) and with the goals to reduce annual waste generation to 280 kg per person and to reduce annual residual waste to 60 kg per person by 2025, the city aims to significantly reduce its waste generation. On a national level, **France** has adopted a [Waste Reduction and Circular Economy Bill](#), with the goal to reduce municipal waste generation per capita by 15% and commercial waste generation by 5% by 2030. France was also the first EU country to introduce a ban on destroying unsold new products, including textiles, electronic items, hygiene products, shoes, books and household appliances. Unsold items must be prepared or donated for reuse, or recycled. The country correspondingly introduced several measures to prevent plastic waste and food waste, for example by banning destruction of unsold food and [making donation obligatory](#).

Member states are required to publish national waste prevention programmes, which need to be regularly updated. To aid them evaluate their plans, the European Environmental Agency published a [guidance](#) that



should enable the assessment of efficiency, effectiveness and relevance of concrete waste prevention plans. The main elements of such evaluation are shown on the picture above.

## Food waste prevention

Food waste prevention has received a lot of attention in the past years and can be considered a frontrunner in waste prevention. In the EU, [57 million tonnes of food waste](#) are generated annually, with 71% coming from households, services and retail. Reduction and prevention of food waste and loss is among the targets of the Green Deal's [Farm to Fork](#) strategy, which aims to contribute to achieving a circular economy by reducing the environmental impact of the food processing and retail sectors, taking action on transport, packaging and food waste.

The strategy proposes a target to halve food waste per capita at the retail and consumer level by 2030 and reduce food losses along the food supply chain. [By the end of 2023](#), the Commission plans to set legally binding targets to reduce food waste across the EU, revise EU laws on 'best before' dates, further integrate food loss and waste prevention in other policies, and implement initiatives to help consumers reduce food waste at home. This has reflected in regional and national policies; Catalonia (Spain) set ambitious targets for food waste reduction, France and Czech Republic made it obligatory for retail stores larger than 400 m<sup>2</sup> to donate surplus food to charity.



### Good practice 1: French law against food waste (France)

The main measure of the law makes it illegal for food stores above 400 m<sup>2</sup> to throw away and destroy edible unsold food, subjecting uncomplying retailers to a fine. Other measures of the law include:

- Awareness and training of all stakeholders, for example through local waste prevention schemes.
- Contractual regulations cannot prevent food donations from retailers to charities and such donations are encouraged by formal contracts and arrangements.

Approval of the national law should facilitate the work of charities, NGOs, food banks, food organisations and other subjects fighting food waste. The law has been internationally recognised as a best example of sustainable policy, and since its approval, many countries and regions in Europe followed.

Further information about the practice is available [here](#).

The revised [Waste Framework Directive](#) calls on EU countries to take action to reduce food waste at each stage of the food supply chain, monitor food waste levels and report back regarding progress made. The Commission has already implemented a common [EU methodology to measure food waste](#), established the [EU Platform on Food Losses and Food Waste](#) and taken measures to facilitate food donations and use of food no longer fit for human consumption in animal feed.

### **Policy change in Wielkopolska Region (Poland)**

Involvement of the Regional Council of the Wielkopolska Region in the [ECOWASTE 4 FOOD](#) project resulted in a policy change and the inclusion of food waste prevention in the region's strategy to 2030. One concrete action is a project "We eat, do not throw away" focused on education and awareness raising about waste prevention among young people (15-19 years old), parents and teachers. People will, for example, learn about making use of leftovers, proper storage of various food items, or about best before and expiry dates, and other actions they can take as individuals to prevent food waste.



### **Good practice 2: Disco Soup Encourages Citizen Participation and Food Waste Prevention (France)**

Each year 1.3 billion tons of perfectly edible, safe, and nutritious food ends up in the bin. This can include fruits and vegetables that are rejected because of small aesthetic irregularities; bumps, or spots, or because they do not meet the required form, size, and colour standards. Disco Soup is an event which encourages active citizen participation. At this event, people gather in public places to prepare meals such as soups and salads from unsellable and rejected fruit and vegetable produce, while enjoying music. The surplus products used at the event would otherwise have been wasted.

Disco Soup can be organised by any group of volunteers who want to raise awareness about food waste. Organizers of Disco Soups engage with local stakeholders, such as wholesale retailers or distribution centres, to gather surplus food and to borrow required equipment for cooking and preparation of the meals. Participants enjoy fun, good music and tasty meals, while learning about easy ways to minimise food waste. Involved markets and retailers reduce the amount of food waste, while saving money on waste disposal costs. From 2012 to 2021, up to 1000 Disco Soups have been organized worldwide, 2/3 of them being led by third sector initiatives or autonomous groups with organization cost close to zero. More than 200 tonnes of food have been saved from disposal. Over 50 000 participants have joined and twice as many have been reached by awareness material. The numbers are increasing every year.

Further information about the practice is available [here](#).



### **Good practice 3: Education on food waste prevention in schools (Lombardia, Italy)**

The mission of Banco Alimentare della Lombardia is to recover surplus from the food supply chain and educate about food waste prevention. Their awareness raising program named "Banco Scuola" is targeting students of different ages and aims to increase their awareness about the need to reduce food waste. They apply the method of sharing a direct experience, which makes the topic concrete and easy to understand. The messages and activities are modified in accordance with the students' age who learn about:

- Banco Alimentare activities,
- The people who receive help from food banks and why,
- What it means to have respect for food.

The campaign started at Primary schools, as young children are free from prejudices, do not yet have established habits, and are most open and willing to welcome new information. They can also positively influence their parents and increase the awareness in their families. Over the course of six years, the initiative reached over seventy thousand students from 542 schools.

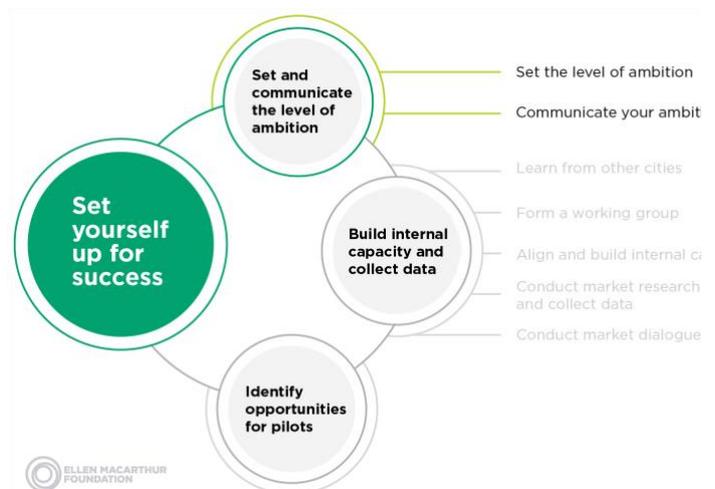
Further information on the practice is available [here](#).

## Green Public Procurement

Purchasing power of public authorities represents around 14% of EU's gross domestic product and can serve as a powerful driver in waste prevention and circular purchasing. The Circular Economy Action Plan mentions minimum mandatory green public procurement targets. It is recognised by the European Commission as “a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured.” Green public procurement helps public authorities to lead by example, have considerable impact in sectors such as construction, transport, education or health, and stimulate development of green technologies and products. Through green public procurement, local and regional authorities can tackle waste prevention with specific measures related to elimination of food waste or plastic waste, but also through procurement of more durable products, and tendering of more circular projects, which fundamentally lead to waste prevention in various sectors.

Sustainable public procurement is renowned by UNEP as one of the targets under Sustainable Development Goal (SDG), precisely under number 12 in sustainable production and consumption. The specific target in question is target 12.7 that aims to “Promote public procurement practices that are sustainable, in accordance with national policies and priorities.” Circular public procurement goes even further, providing framework for a more holistic consideration of waste creation, including prevention of waste all together.

Green public procurement is voluntary for EU Member States, however, the European Commission developed the GPP Criteria, to facilitate the inclusion of green requirements into public procurement tenders. Cities can make use of various circular public procurement frameworks, for example one by Ellen McArthur Foundation, or by Circular Europe Network. Local and regional authorities can choose from a range of GPP tools, including life cycle costing-based calculators, ISO standards, Environmental Management Systems or eco-labels.



### Good practice 4: Ireland's Green Government Initiative (Éire, Ireland)

In January 2019, the Irish Government decided that government departments and public bodies would lead in reducing generation of single use plastics and waste. According to the government, the public service must demonstrate its commitment to sustainable development and use its influence to persuade others of the changes required to reduce our impact on the environment. The implemented actions included that: the Government Departments stopped supplying, directly or indirectly, single use plastic beverage containers, cutlery and straws, implement green public procurement, make savings in water, materials and energy use prevent food waste and maximise recycling in public institutions, report waste prevention measures to the Ministry. Waste prevention is mentioned as a top priority in Ireland's National Waste Policy, and the country started to adopt specific targets such as reducing food waste by 50% by 2030.

Further information about the practice is available [here](#).

Most EU Member States are using GPP as a voluntary mechanism, but Italy and Slovenia have introduced mandatory GPP for public authorities, including criteria on waste prevention and reuse. The benefits associated with GPP implementation are not limited to environmental impact, but can also include social, health, economic or political benefits.

Two Interreg Europe Projects are directly dealing with the topic of green public procurement: [GPP4GROWTH](#), aiming to improve resource efficiency policies that promote eco-innovation and green growth through green public procurement, and [GPP-STREAM](#), which focuses on improving governance and implementation of green public procurement in different policies. Green public procurement is also an important element in circular economy projects such as [ENHANCE](#) or [REDUCES](#).



#### **Good practice 5: Measures to Promote the Greening of Public Procurement (Catalonia, Spain)**

Green public procurement is intended to contribute to the reduction of the negative impacts of production and consumption, promote eco-innovation and the transformation of the markets towards a green and circular economy. The Government of Catalonia published an Agreement on Public Procurement Measures, and General Directorate of Environmental Quality and Climate Change developed guidelines to enable greening of public contracts. EMAS has been considered in the following guidelines:

- a) Guidelines for environmentally friendly and zero waste events
- b) Guidelines for environmentally friendly textile products (including ecodesign)
- c) Guidelines for the adoption of environmental criteria in maintenance contracts for building installations, including waste minimisation.
- d) Guide to the greening of canteens, including food waste prevention.

Although the guidelines were developed for public administrations, they are likewise available to be used by the private sector.

Further information about the practice is available [here](#).

#### **Good practice 6: Regional GPP Plan (Liguria, Italy)**

Building on their previous work, the region of Liguria developed a new Green Public Procurement (GPP) Plan to foster circular economy awareness and implementation in the regional market. The main goal of GPP regional Plan is to implement GPP through the insertion of CAM (minimum environmental criteria) in public tenders and procedures for the green purchases of goods and services. The plan innovatively targets and involves training sessions for both the public administration and the private sector to increase GPP market demand. Circular public procurement is an approach by which public authorities purchase jobs, goods or services that seek to contribute to a closed energy and material loops in supply chains, while minimizing, and best case avoiding, negative environmental impacts and the creation of waste throughout the life cycle of such works, goods or services.

From the public administration side, the plan aims to increase capacity building on the drafting and evaluation of green tenders; from the private side, it aims to increase capacity building in enterprises on environmental sustainability criteria and certifications. In particular, SMEs should acquire knowledge and adopt European Sustainability Tools such as EMAS, PEF, EU ECOLABEL, and LCA studies. By increasing SMEs' knowledge on green certifications, the plan aims to increase circular economy awareness as well as SMEs' participation to GPP tenders. The presence of such EU tools, in particular EMAS, is indeed rewarded in the tender evaluation. Adoption of Sustainability European will inherently lead to resource efficiency and waste prevention.

Further information about the practice is available [here](#).

Construction industry accounts for [38% of global carbon emissions](#), [50% of raw materials consumption](#), and **33% of waste production** and water consumption. At the same time, local authorities manage a vast portfolio of public buildings, and can make a big impact to market conditions, through targeted actions, such as their use of public procurement. The City of Hamburg (a [good practice](#) identified in the [REPLACE](#) project) strives to reduce the construction-related emissions by examining whether renovation is possible instead of building demolitions.

The use of renewable materials such as wood and recycled materials such as RC-concrete is always preferred in public and publicly supported construction projects. The city started to support the use of wood as a construction material in 2017, driven by the need of reducing CO<sub>2</sub> emissions from the building sector, which account for around 40% of local greenhouse gas emissions. Hamburg's approach to use of sustainable construction materials to protect climate and prevent waste is described in further detail in a Policy Learning Platform [video](#).



#### **Good practice 7: Green Guide on Environmental Criteria for Regional Public Procurement in Building Sector (Valencia, Spain)**

Promoting sustainability criteria in public procurement serves to create a more environmentally friendly construction sector, has an exemplary value, but can also influence the private sector to transition to new forms of production and more responsible consumption, making circularity and resource efficiency a priority. The regional government of Valencia has developed a green guide to promote acquisition of services and contracts with the lowest possible environmental impact. The regional government hopes that green public procurement in the construction sector will aid them with

- achieving a sustainable growth and more rational use of public funds,
- promoting the procurement of environmentally friendly goods and services,
- valuing the useful life of products and services to the detriment of programmed obsolescence,
- incorporating circularity criteria to achieve an efficient use of resources,
- encouraging the inclusion of quality and environmental management systems.

The guide describes how environmental measures can be included in different phases of public procurement, which are developed through a series of functional sheets. The sheets are organised into three thematic categories: passive design measures, active design measures (including 2 subgroups related to resource efficiency: energy and water), and products and services (including 3 subgroups: products, waste management and environmental certificates). The guide facilitates the tendering and contracting of construction works, but also the harmonisation within the sector. It aims to unify technical and economic references, quality control, environmental and technological criteria, as well as enable the optimisation of the used resources, reduce execution times, and avoid confusion, conflicts, delays, and cost overruns in the procedures.

Further information about the practice is available [here](#).

## Citizen participation and education

As both consumers and waste producers, citizens play a key role in waste prevention. Public institutions responsible for local waste management can involve citizens in a range of activities including information, communication, consultation and active participation. It can take a long time to **change behaviour patterns** but there are strategies to speed up the adoption of new habits. These include informing and educating to change attitudes, offering financial and social incentives, or transforming institutional structures<sup>1</sup>. Information and communication technology offers opportunities to drive strategic behaviour change and increased engagement in waste management and prevention. Interactive platforms, such as websites, apps and citizen surveys provide incentives, quantify actions, and increase pressure on service providers, and thereby improve waste management with greater citizen engagement. The city of Apeldoorn engages citizens in circular economy through a number of tools, including annual litter clean-up events, litter monitoring through an app, organisation of zero waste cafés and zero waste walking tours, mapping of zero waste packaging stores and organisation of their annual zero waste week.

Collaborative governance and involvement of citizens in decision making increases engagement. When developing a zero waste or waste prevention strategy, local authorities can organise a participatory community workshop for relevant stakeholders, NGOs, organisations and residents. Such events provide an opportunity to present the current waste management data and collect feedback and ideas from the participants. The community can also participate in setting the goals, which can increase their engagement in achieving them later.



[Zero waste week Apeldoorn](#)



Source: [Guide for zero waste municipalities](#), Zero Waste Europe

<sup>1</sup> Izdebska, Olga & Knieling, Jörg. (2020). Citizen involvement in waste management and circular economy in cities: Key elements for planning and implementation. *European Spatial Research and Policy*. 27. 115-129. 10.18778/1231-1952.27.2.08.

## Awareness raising campaigns

Awareness campaigns are an important tool in waste prevention and are usually used to increase support, stimulate action and mobilise local knowledge and resources. The aim is to inform and educate the targeted audience about a specific issue, in order to increase their concern and change attitudes and behaviour. Best results are achieved through a combination of [different communication strategies](#), such as dissemination of printed materials, holding public meetings and trainings, organizing events and workshops, creating educational materials, professional consultation, communication and information through social media, newspapers, television, radio, videos, posters, etc., using informal networks for information dissemination.

To ensure a waste prevention awareness raising campaign is successful, it is important to develop a solid strategy, form a coalition with organisations and stakeholders involved in waste prevention (at local, regional and national levels), communicate clearly, use a variety of communication tools and consider the timing. In an Interreg Europe Policy Learning Platform peer review on '[Fostering citizen engagement in circular economy](#)' for the City of Maribor, communication was identified as extremely important for awareness raising and continuous engagement. For example, the Dutch municipality of Apeldoorn is heavily using social media, produces a monthly newsletter, annual summary video and a circular economy guidebook for politicians.



[EWWWR](#)

The thematic focus of waste prevention campaigns is often on reduction of resource use, packaging and food waste prevention. Among the most visible waste prevention campaigns in Europe is the [European Week for Waste Reduction](#), in which numerous regions and countries take part. Each year, there is a different focus area – in 2022, it was textiles, with 100 events taking place, and almost 132 500 participants.



### Good practice 8: E-learning course on construction and demolition waste: prevention and recovery (Alentejo, Portugal)

The e-learning course was organized under the (De)construct for Circular Economy project and aimed to educate and raise awareness through actions targeted at the various agents along the Construction and Demolition Waste (CDW) value chain. The course was designed to increase interaction among different actors, in order to promote a more sustainable value chain organization, which would be in line with the principles of circular economy. The online course covered the 13 municipalities of CIMBAL's region, and the target audience were municipal technicians and other regional entities involved in the field of construction and demolition waste.

The course lasts four weeks and consists of four learning modules. The students go through the modules in phases and at their own pace. The focus of the e-learning course is on circularity in construction and demolition waste management, and includes lessons such as introduction to circular economy, life cycle assessment or environmental footprint. Life cycle analysis presents a structure based on an efficient use of resources, helping accelerate the transition to a circular economy. Learning about LCA and other methods can improve sustainability and resource efficiency in the CDW sector.

Further information about the practice is available [here](#).

## Recommendations and key learnings

Examples from Interreg Europe projects and the wider Interreg Europe community can be a source of inspiration for many, and it can provide real benefits to those who wish to engage in waste prevention policies. A summary of the main lessons learnt from the investigation of such experiences is provided below, in the form of advice for policy makers.

- **Lead by example** as in [Ireland](#), implement various waste prevention measures in public institutions and governmental departments.
- **Establish waste prevention targets and legislation.** Legislative and regulatory targets are one of the most important tools available to municipalities wanting to transition towards a circular economy and prevent waste generation. Get inspired by waste reduction targets in [Flanders](#) and [Catalonia](#).
- **Develop a Zero Waste Strategy** as in [Ljubljana](#).
- Make **food donations** obligatory as in [France](#).
- Create specific **funds from Extended Producer Responsibility (EPR) schemes** to finance waste prevention measures.
- **Adopt green and circular public procurement criteria** that prioritise waste prevention. Make use of available circular public procurement frameworks and choose from a variety of tools, including life cycle costing based calculators, ISO standards, Environmental Management Systems or eco-labels. Get inspired by the good practices from [LCA4REGIONS](#) project: [Slovenia](#)'s approach to green public procurement, the [ENHANCE](#) project and its green public procurement strategy from [Catalonia](#), as well as the regional green public procurement plan from [Liguria](#), a training course from Andalusia from the [GPP4GROWTH](#) project, or the [REDUCES](#) project involving green public procurement in the construction sector in [Valencia](#).
- **Involve citizens** via information, communication, consultation and active participation. Make use of information and communication technology and try innovative methods of communication.
- **Encourage active citizen participation** through events, such as the globally known [Disco Soup](#) focused on food waste prevention, acknowledged by the [CECI](#) project.
- **Raise citizen and stakeholder awareness** about the importance of waste prevention. Use a wide range of communication channels for the highest reach. Inform households, organise workshops and special events. Get inspired by the Interreg Europe Policy Learning Platform Peer Review on '[Fostering citizen engagement in circular economy](#)' for the City of Maribor.
- **Support waste prevention education** in schools, as seen in the good practice from the [CircE](#) project – a [food waste prevention campaign](#) in Italian elementary schools, or as in the [LCA4REGIONS](#) good practice, an [e-learning course](#) for participants in the construction and demolition waste value chain in Portugal.
- **Collaborate with NGOs** and other organisations involved in waste prevention. Join forces for a bigger impact.

## The Interreg Europe Policy Learning Platform supporting regions and municipalities in the adoption of waste prevention policies

Interreg Europe, through its [Policy Learning Platform](#), provides a number of services to both ongoing projects and the wider regional policy [Community](#). As well as operating the [Good Practice Database](#), drawing together the best of the good practices identified by projects, and providing a [Knowledge Hub](#) of policy briefs and articles, the Policy Learning Platform offers on-demand [Expert Support](#), including a helpdesk, a matchmaking service and peer reviews to assist regions in their transition:

- Via the [Policy Helpdesk](#), policy-makers may submit their questions to receive a set of resources ranging from inspiring good practices from across Europe, policy briefs, webinar recordings, information about upcoming events, available European support and contacts of relevant people, as well as recommendations on matchmaking and peer review opportunities.
- A [Matchmaking](#) session is a thematic discussion hosted and moderated by the Policy Learning Platform, designed around the policy needs and questions put forward by the requesting public authority or agency. It brings together peers from other European regions to present their experience and successes, to provide inspiration for overcoming regional challenges.
- [Peer Reviews](#) are the deepest and most intensive of the on-demand services, bringing together peers from a number of regions for a two-day work session, to examine the specific territorial and thematic context of the requesting region, discuss with stakeholders, and devise recommendations.

### Interreg Europe Policy Learning Platform information

- Policy Brief on [sustainable waste management in a circular economy](#)
- Policy Brief on [Reuse and Repair in a Circular and Social Economy](#)
- Webinar recordings from Circular waste management series on collection and recycling of [electronic waste](#), [plastic waste](#) and [construction and demolition waste](#)
- Online workshop recording on [Reuse and Repair in a Circular and Social Economy](#)
- [Good practice Circular and Wood Construction in Hamburg](#)
- [Story on Wood as a sustainable construction material](#)
- [Story on Circular building sites in Brussels](#)
- News on Waste prevention: [3 key learnings from the Styrian re-use map](#)
- Peer review learnings on ['Fostering citizen engagement in circular economy'](#)
- Peer review learnings on [Waste prevention and separate waste collection in a circular economy](#)

### Other sources

- [Waste Framework Directive Review](#): Why we need waste prevention targets now, a joint paper by EEB, ECOS, Recycling Network, Reuse and Zero Waste Europe
- [Circular public procurement: a framework for cities](#) by Ellen McArthur Foundation
- [Roadmap: Circular Public Procurement](#) by Circular Europe Network
- [Guide for Zero Waste Municipalities](#) by Zero Waste Europe
- [Guidance for evaluating waste prevention programmes](#) by European Environmental Agency
- The [European Green Deal](#)
- The [new Circular Economy Action Plan](#)
- The revised [EU waste legislation](#)

Interreg Europe Policy Learning Platform  
Environment and resource efficiency

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*Contact us to share your views on this policy brief!*



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