

Waste prevention country profile

Slovenia

April 2023



© Joël Cavallaro, Well with Nature/EEA



European Environment Agency



Country profile: Slovenia

General information

Name of the country/ region	Slovenia
Coverage of the waste prevention programme (national/ regional)	National
Type of programme (stand alone or integrated into waste management plan)	Integrated into the national waste management plan
Title of programme and link to programme	<i>"Program ravnanja z odpadki i program preprečevanja odpadkov Republike Slovenije"</i> (2022) https://www.gov.si/assets/ministrstva/MOP/Operativni-programi/op_odpadki_2022.pdf
Duration of programme	2022-
Language	Slovenian
Contact person in the country/region	Jana Miklavčič (jana.miklavcic@gov.si), Head of the Waste Division Ministry of the Environment and Spatial Planning, Republic of Slovenia
Development process of the programme/ revision	<p>The program is revised every four years (or at the end of a program) to develop/update an operational program for waste management and waste prevention.</p> <p>According to the current program, regardless of the frequency of a prescribed auditing, the appropriateness of the selected measures is assessed annually against the goals for the period between 2020 and 2035.</p>
Foreseen budget for implementation of the project	No costs of waste prevention measures are specified.

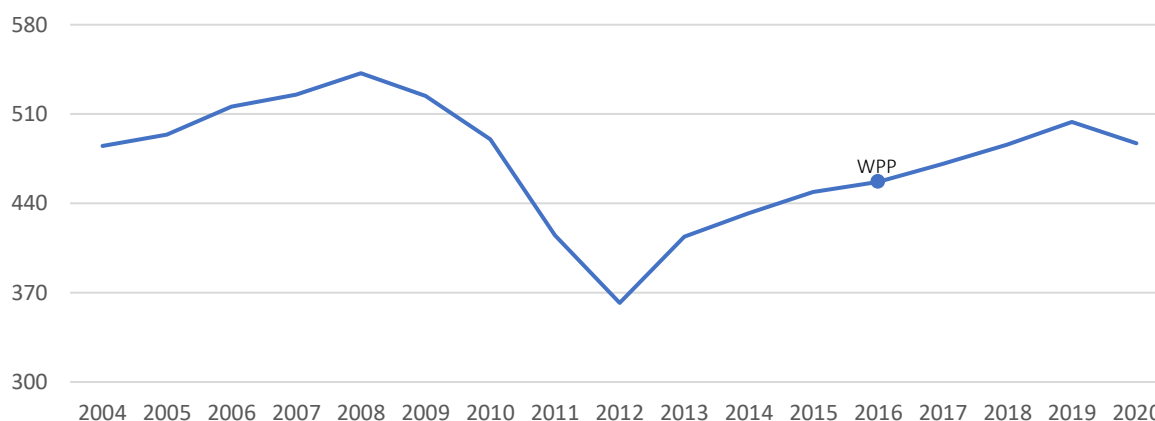
WASTE GENERATION

The following figures illustrate the progress towards waste prevention and decoupling of waste generation from economic growth in Slovenia.

MSW

- During 2004-2020 municipal waste generation per capita has been fluctuating, but returned to its 2004 level in 2020(see Figure 1).
- During 2004-2008, the waste generation increased steadily, but later on has reaching its lowest level in 2012. The downwards trend can probably be associated with the global financial crisis manifested around 2008.
- During 2012-2019, an increasing trend in waste generation took place can be observed with 362 kg in 2014 to 504 kg in 2019, which is likely to be influenced by the growth in, e.g., population and household expenditure. In 2020 a slight decrease was observed to 487 kg/capita, which is likely to be related to a decrease in GDP.
- Overall, the average annual MSW generation of 487 kg is below the EU average of 517 kg¹ per capita in 2020.

Figure 1: Municipal waste generation Slovenia during 2004-2020 (annual kg per capita).



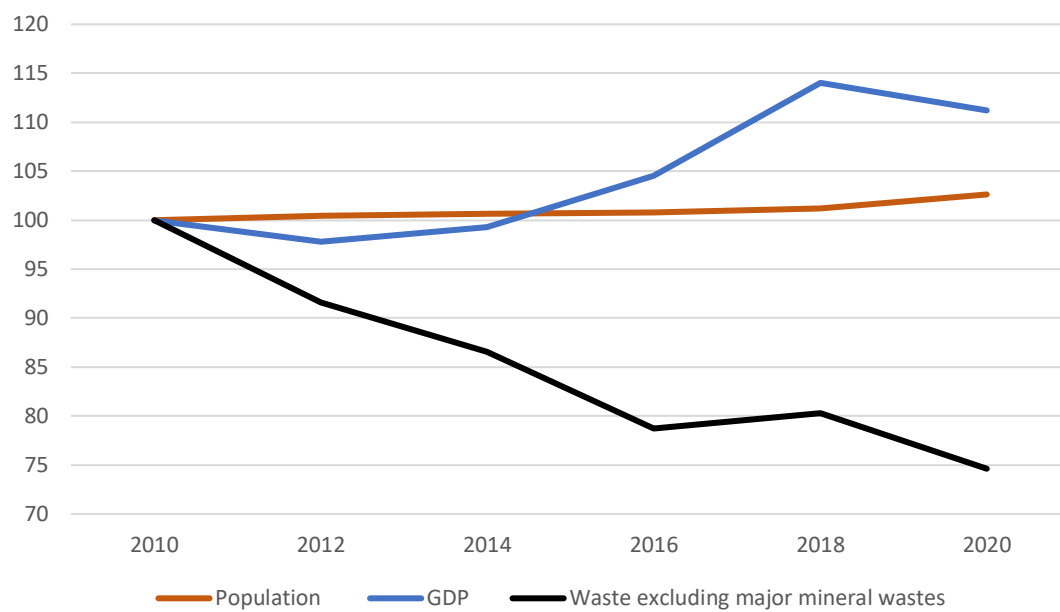
Source: Eurostat [ENV_WASMUN]

Total waste

- Slovenia's waste generation continuously decreased from 2010 to 2016 showing a slow increase throughout the years after.
- GDP remained at a constant level between 2010 and 2013 and has risen steadily since 2014-2019, with a slight decrease in 2020.
- A link between waste generation and population growth, whose trend remained unchanged, cannot be observed.

Figure 2: Growth rate of waste (excluding major mineral wastes), GDP (main GDP aggregates, chain linked), and population, 2010-2020, (2010=100)

¹ Based on data collected from Eurostat in September 2022.



Source: Eurostat [ENV_WASGEN, NAMA_10_PC, DEMO_GIND]

WASTE PREVENTION PROGRAMME

Objectives and priorities

1. Waste prevention objectives of the Programme - quantitative objectives (waste reduction) - qualitative objectives (reduction of hazardous substances/ environmental impacts)	The Slovenian Waste Prevention Programme sets the following objectives: <ul style="list-style-type: none">• reducing material consumption as well as environmental burdens,• creating closed material loops,• supporting technologies and techniques that use less resources,• encouraging a transition to sustainable patterns of production and consumption,• stimulating market demand for efficient services by public procurement,• reducing the risks to human health and damage to the environment,• reusing items, materials or products,• reducing the levels of pollutants in products,• reducing emissions released to air, water and soil throughout the life cycle of products.
2. Sectors covered	<ul style="list-style-type: none">• households,• public and private sectors.
3. Priority waste types	<ul style="list-style-type: none">• construction and demolition waste,• food waste,• household/municipal waste,• waste electrical and electronic equipment,• bulky waste,• textile and clothing waste,• waste lightweight plastic carrier bags.
4. Target groups	N/A

Targets, indicators and monitoring

1. Indicators proposed	<ol style="list-style-type: none">1) For waste prevention in households:<ol style="list-style-type: none">a. the amount of municipal waste generated in households,b. the amount plastic bags;2) For prevention of food waste:<ol style="list-style-type: none">a. the amount of food waste;3) For prevention of WEEE:<ol style="list-style-type: none">a. the amount of prepared for reuse and reused WEEE;
------------------------	---

	<ol style="list-style-type: none"> 4) For prevention of certain waste from single use products and prevention of littering: <ol style="list-style-type: none"> a. the amount of single-use plastic products put onto the market and their waste; 5) For prevention of bulky waste: <ol style="list-style-type: none"> a. the amount of bulky waste and its reuse; 6) For prevention of textile waste: <ol style="list-style-type: none"> a. the amount of waste textiles and clothing; 7) For prevention of waste in the public sector: <ol style="list-style-type: none"> a. the amount of waste from the public sector.
2. Quantitative targets	The Slovenian waste prevention programme refers to existing quantitative targets (e.g., reducing single-use plastic items at the EU level), but it does not set any additional quantitative targets for the programme itself.
3. Monitoring of programme	The Slovenian waste prevention programme is derived from scenario assessments and the evolution of the generation of major waste streams and their recycling rates. The progress of the programme is assessed by monitoring the indicators developed for this programme (see above).
4. Evaluation of the programme	N/A

Prevention measures

Implemented prevention measures according to Article 9

Table 1: Specific waste prevention measures structured according to Art 9 WFD

Promote and support sustainable consumption models	<p>Regarding the aim to prevent waste from the public sector:</p> <ul style="list-style-type: none"> - registration of generated waste; - extended use of products used for business purposes; - double-sided printing or storing documents in electronic version; - sustainable furniture; - green public procurement; - employee education and awareness to reduce waste generation at work; - raising awareness and giving initiatives to enforce good practices to others ministries and public services.
Encourage the design, manufacturing and use of products that are resource-efficient, durable (including in terms	

<p>of life span and absence of planned obsolescence), reparable, re-usable and upgradable.</p>	
<p>Target products containing critical raw materials to prevent that those materials become waste.</p>	<p>Include measures to promote WEEE prevention, such as:</p> <ul style="list-style-type: none"> - awareness raising regarding the reuse of WEEE; - promotion of servicing (e.g. explaining the opportunity of and facilitating the accessibility of repair services closer to users); - establishment of infrastructures/networks for the collection of WEEE for reuse; - formalising the regulation regarding the preparation for reuse of WEEE; - establishing a method of reporting, measurement of WEEE prevention.
<p>Encourage the re-use of products and the setting up of systems promoting repair and re-use activities, including in particular for electrical and electronic equipment, textiles and furniture, as well as packaging and construction materials and products.</p>	<p>See above</p>
<p>Encourage, as appropriate and without prejudice to intellectual property rights , the availability of spare parts, instruction manuals, technical information, or other instruments, equipment or software enabling the repair and re-use of products without compromising their quality and safety.</p>	
<p>Reduce waste generation in processes related to industrial production, extraction of minerals, manufacturing, construction and demolition, taking into account best available techniques.</p>	
<p>Reduce the generation of food waste in primary production, in processing and manufacturing, in retail and other distribution of food, in restaurants and food services as well as in households as a contribution to the United Nations Sustainable Development Goal to reduce by 50 % per capita global food waste at the retail and consumer levels and to reduce food losses along production and supply chains by 2030.</p>	<p>Measures that address food waste prevention in general:</p> <ul style="list-style-type: none"> - establish the starting points, milestones, and goals for food waste prevention; - improve the planning of procedures, such as monitoring, evaluation and knowledge exchange regarding food waste prevention; - include food waste reduction as a part of the environmental and climate action plans or strategies; - improve data quality related to social, economic, environmental impacts; - expand measures to prevent food loss and prevent food waste in food supply chains. <p>Primary production:</p> <ul style="list-style-type: none"> - organize and carry out training on food waste prevention. <p>Food processing and production:</p> <ul style="list-style-type: none"> - organize and carry out training on food waste prevention.

	<p>Food retails and distribution:</p> <ul style="list-style-type: none"> - increase consumer awareness about food waste in local retail chains (e.g., use advertising about waste prevention), - address behavioural issues related to food labelling; - educate about proper food storage. <p>Restaurants and catering activities:</p> <ul style="list-style-type: none"> - develop and disseminate educational and guidance materials for businesses; - organize, enable and implement information and/or campaigns, such as, e.g.: <i>"take all you can eat - but don't forget eat all you take"</i>, - introduce a possibility (including consumer information) for the catering companies to allow consumers to take home the leftovers; - inform the local community about catering services that offer leftover food that is still good to be use to people in need. <p>Households:</p> <ul style="list-style-type: none"> - to influence the change in the behaviour of consumers, that could influence the entire food supply chain; - actively cooperate with non-governmental and organizations responsible for consumer protection to influence and inform consumers about food waste protection; - develop and distribute guidelines for consumers to correctly understand labels of food expiration dates; - organize education activities targeting the prevention of food waste generation.
<p>Encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and the reprocessing into non-food products.</p>	<p>See above</p>
<p>Promote the reduction of the content of hazardous substances in materials and products, without prejudice to harmonised legal requirements concerning those materials and products laid down at Union level, and ensure that any supplier of an article as defined in point 33 of Article 3 of Regulation (EC) No. 1907/2006 of the European Parliament and of the Council provides the information pursuant to article 33(1) of that regulation to the European Chemicals Agency as from 5 January 2021.</p>	

<p>Reduce the generation of waste, in particular waste that is not suitable for preparing for re-use or recycling.</p>	<p>Reuse measures to prevent bulky waste:</p> <ul style="list-style-type: none"> - analysis of material flows of bulky waste by individual fractions; - incentives for reuse; - ensure access to preparation for reuse for bulky waste at waste collection centers; - raising awareness of reuse through education. <p>Regarding prevention of textile waste and reuse of clothing:</p> <ul style="list-style-type: none"> - raising awareness and promoting the reuse of clothing; - incentives for dialogue on enhanced cooperation between producers, importers and collectors of used clothing; - ensure access to preparation for reuse for suitable textile waste at collection centers; - awareness raising about reuse for adults and schoolchildren.
<p>Identify products that are the main sources of littering, notably in natural and marine environments, and take appropriate measures to prevent and reduce litter from such products, where Member States decide to implement this obligation through market restrictions, they shall ensure that such restrictions are proportionate and non-discriminatory.</p>	<p>Measures to prevent plastic waste from single-use products including the prevention of littering (mainly based on requirements of EU Directive 2019/904):</p> <ul style="list-style-type: none"> - ban certain single-use plastic products on the Slovenian market and control over it; - reducing the consumption of cups for beverage and food containers (e.g., single use containers intended for immediate consumption, ready to be consumed food without any further preparation) (period 2022-2026); - achieving the goal for reduced consumption of lightweight plastic carrier bags (until 2025); - establishing producer responsibility for certain single-use plastic products, including an obligation for raising awareness of available alternative reusable products (until 2023); - obligation to produce caps and stoppers for beverage containers up to a volume of 3 liters so that they cannot be removed from containers during and after their use (until 2024); - the minimum goal of separate collection of waste bottles is 77% by 2025 and 90% by 2029, including the introduction of a deposit-refund schemes; - implementation of commitments from the European Plastic Pact regarding waste prevention.
<p>Aim to halt the generation of marine litter as a contribution towards the United Nations Sustainable Development Goal to prevent and significantly reduce marine pollution of all kinds.</p>	<p>Recording the consumption of lightweight plastic carrier bags and their monitoring.</p>
<p>Develop and support information campaigns to raise awareness about waste prevention and littering.</p>	<p>Information campaigns to raise awareness throughout various media channels (also see above).</p>

Additional implemented prevention measures, not covered by Article 9

FOOD WASTE PREVENTION

Food waste generation

In 2019, the national food loss as waste amounted to 67 kg/per capita or 140,804 tonnes. 50% (70kt) were generated by households, 31% (44.4kt) - by restaurants and food service providers, 10% (14.5kt) - by retail and other food distribution services, and 9% (12.1 kt) – in primary production, processing and manufacturing chains. Around 38% of the total waste was edible and 62% - inedible.

Measures to prevent food waste:

In Slovenia, measures to reduce food losses and food waste are included in the strategy for fewer food losses and waste for the entire food supply chain, developed by the Ministry of Agriculture, Forestry and Food (not yet adopted). The strategy will be accompanied by an action plan that lays down the goals, timetables and responsible authorities. It includes the following activities:

- improving the efficiency of sustainable production and processing, more efficient distribution, marketing and sales;
- information, awareness raising and cooperation;
- education and training;
- stakeholder cooperation; and
- supporting legislative measures.

For example, through the EAT Circular project, sponsored by the European Institute of Innovation and Technology - Climate Knowledge and Innovation Community (KIC), different training sessions are offered for the public and private actors on strategies to reduce the ‘food print’ (the amount of wasted food). Topics covered included policy aspects, best practices, processes, business models and technologies to measure food waste/surpluses, divert it from loss, including final disposal.

Furthermore, a non-governmental organisation, Ecologists Without Borders (Ekologi brez meja) carried out a project ‘*Food waste prevention in the public sector and households – Don’t throw away food!*’, which was co-financed by the Ministry of the Environment and Spatial Planning. The main focus was to prevent food waste in hospitals and retirement homes. Its results include a toolkit for monitoring food waste, the awareness-raising campaign ‘*Just eat it!*’ and workshops for inter-generational integration (e.g. elderly teaching children about good practices in food waste prevention).

The Agriculture Act defines the possibility to co-finance the purchase of technical equipment for humanitarian organizations that distribute donated food, together with the Ministry of Agriculture, Forestry and Food. Within the framework of tax legislation (Act on rules on the implementation of the Value Added Tax), the own price or purchase price of donated food is equal to 0 if the total value of donated goods does not exceed 2% of the donor’s revenue. A working group for food donation, established in 2013, aimed to solve the issues that humanitarian organizations face when redistributing food.

REUSE OF PRODUCTS

Data

In Slovenia, there are 10 waste preparation plants for reuse with a total capacity of 4,957 t waste.

With regard to the Commission Implementing Decision (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2021.010.01.0001.01.ENG&toc=OJ%3AL%3A2021%3A010%3ATOC), this section will be updated by the EEA accordingly.

Measures to support reuse

According to the Waste Management and Waste Prevention Program of Slovenia, following reuse measures to prevent bulky waste are proposed:

- analysis of the material flow of bulky waste by individual fractions;
- incentives for re-use;
- raising awareness of re-use through education.

Measures for the reuse/prevention of textile waste and clothing waste include, e.g.:

- raising awareness and promoting the re-use of clothing;
- incentives for a dialogue and cooperation between manufacturers, importers and collectors of used clothes;
- raising awareness of re-use through education for schoolchildren and adults.

In addition, there are 10 waste preparation plants for reuse of other waste fraction representing the total amount of ca. 5,000 tonnes:

- waste cartridges (waste printing toners);
- waste wooden packaging (pallets);
- waste clothing, footwear and textiles;
- bulky waste.

Waste cartridges are to be cleaned and refilled. Waste wooden pallets are to be replaced for damaged parts. Waste footwear, clothing and textiles are to be sorted by type and quality. Clothing and footwear of better quality are to be directed to second-hand shops, inferior quality textiles are to be cut into cleaning cloths for industrial applications. Wooden furniture is to be inspected and, if necessary, repaired and painted and intended for re-use for the same purpose. The remaining other bulky waste is to be transformed into new usable items.

Best practice examples

Slovenian Network - Centers of reuse CPU²

Reuse Centre Ltd., Social Enterprise is the first social enterprise in Slovenia, established in 2012, with the main objective to solve the environmental and social problems. The Reuse Centre developed a new model for implementing socially responsible businesses in Slovenia, which connects municipalities and public waste management companies, allowing the development of new green jobs and promoting resource savings.

The USE-REUSE network runs centres across the country which takes in unwanted, but viable products, before selling them on as second-hand goods. They are also members of the international RREUSE network.

Reuse centres within this network carry out:

- environmental management to support the principles of reuse and recycling;
- focus on developing awareness about environmental services;
- facilitate the employment of hard-to-employ and disadvantaged persons;

² <https://www.interregeurope.eu/policylearning/good-practices/item/313/slovenian-network-centers-of-reuse-cpu/>

- processing, repairing and innovatively renovating particular types of still useful products, upcycling;
- selling second-hand goods;
- working on increasing awareness about waste generation and reusing old things and sustainable consumption;
- encourage and promote the reuse of upcycling products;
- training and employing people from vulnerable groups with the purpose of returning them to the labour market and ensuring social safety.

Reuse Centre has an important effect on the general public in raising its environmental awareness and spreading the awareness about the limited resources, conservation, recycling and reuse.

Initiative Zero Waste Hotel³

Hotel Ribno is the first Zero Waste hotel in Slovenia. The hotel aims to provide high quality services for the guests to enjoy and for the benefit of nature. The hotel is planning to sort 90% of all collected waste, reduce annual waste by 30% and use 30% less water and energy. They will do this by introducing the following:

- Sorting waste for collection;
- Reusing of towels and bed linen;
- Refillable soap or shampoo dispensers as well as reusable containers for sugar, jam, honey and other food in the hotel's restaurant and kitchen;
- Working with local suppliers.

In May 2018, Hotel Ribno was awarded the Zero Waste Hotel certification. A ceremony has marked the completion of an important stage in the series of measures and changes that the hotel had adopted. The changes are visible in every part of the hotel and its surroundings. Waste measurements showed that the total volume of waste decreased considerably, as did the share of mixed waste, which now stands at an impressive 8% of total waste. The change process involved the hotel management and all the staff, who were actively searching for solutions and opportunities for further improvement.

Flea market Ljubljana: Breg Embankment Antique Market⁴

Traditionally held on Sundays in the old city centre of Ljubljana, Breg Embankment Antique Market, which has a high esteem among the locals. It showcases various objects from the recent and distant past, many of which are still fit for use, such as antiques, art pieces, furniture, decorative items and kitchenware, and all kinds of bric-a-brac of collectible or simply nostalgic value.

Links to circular economy

Waste prevention is an integral part of the comprehensive transformation towards a circular economy. It reduces the input of natural resources into the economy as well as the necessary efforts to collect and recycle waste.

Approaches for improving circularity are often highly interlinked with successful waste prevention. The following table shows which circular strategies are explicitly integrated into the waste prevention programme of Slovenia.

Topic	Addressed in the programme	Comments
Eco-design	Yes	e.g. in construction sector

³ <https://www.bled.si/en/inspiration/blog/2021020410113157/zero-waste-tourism-in-bled/>

⁴ <https://www.fleamarket.com/listing/breg-embankment-antique-market/>

Repair, refurbishment and remanufacture	Yes	e.g. of bulky waste and textiles
Recycling	No	Not explicitly mentioned
Economic incentives and finance	Yes	e.g. payments for lightweight plastic bags
Circular business models	Yes	e.g. start-up programmes to identify and implement potential waste prevention in businesses;
Eco-innovation	No	
Governance, skills and knowledge	Yes	e.g. provide an incentive to change the school curriculum, so there is a greater focus on education about the prevention of food waste;