

Waste prevention country profile

Estonia

April 2023



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European Environment Agency



Country profile: Estonia

General information

Name of the country/ region	Estonia
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	RIIGI JÄÄTMEKAVA 2014–2020 National Waste Management Plan: https://envir.ee/media/808/download
Duration of programme	2014-2020, extended until new NWMP is approved (scheduled in 2023)
Language	Estonian
Contact person in the country/region	Marika Lillemets, Adviser Department of Environmental Management Ministry of the Environment of Estonia marika.lillemets@envir.ee
Development process of the programme/ revision	<p>The Government of Estonia adopted early 2021 a decision to extend the National Waste Management Plan 2014-2020 retroactively until the end approval of new NWMP. This includes also Estonia's waste prevention plan.</p> <p>A new version of the WPP covering 2022-2028 is under development at the time of preparing this country profile.</p>
Foreseen budget for implementation of the project	<p>No specific budget for the implementation of the programme is included in the programme. For the new period Estonia plans to finance the activities from EU and local funds.</p> <p>Estonia has been supporting waste prevention through the Environmental Investment Centre. The Environmental Investment Centre offers 1-2 times a year a support to waste prevention and re-use activities from circular economy programme. For example, in 2021, the centre supported waste prevention and projects aimed at reusing products or product components.</p>

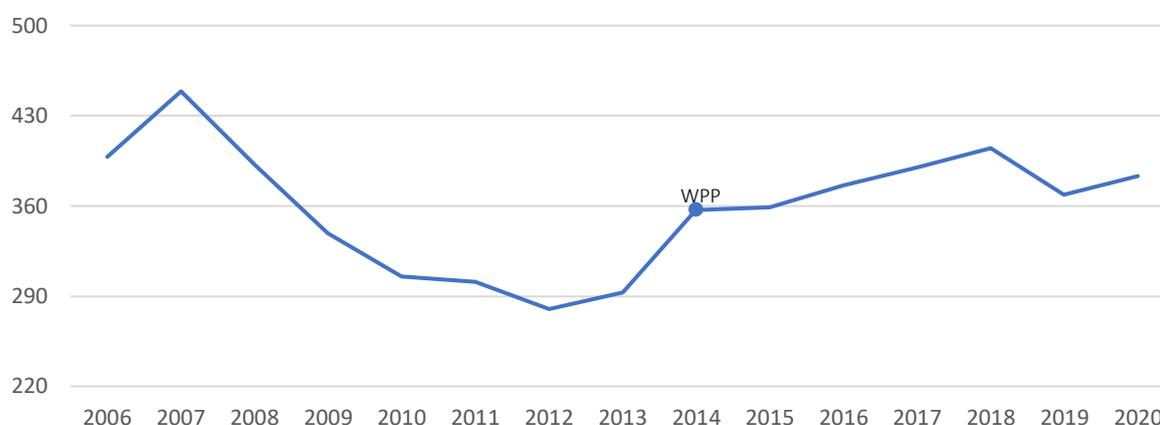
WASTE GENERATION

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

MSW

- During 2006 and 2020 the generation of municipal waste per capita (see Figure 1) has fluctuated between 398 and 383 kg per capita, with a net decrease.
- Waste generation decreased from its highest value in 2007 to 2012, after which generation increased again.
- The trend stagnated shortly after the introduction of Estonia's first waste prevention programme in 2014, however continued increasing again 2016-2018. As such the effect of the WPP's introduction on municipal waste generation cannot be observed.
- Municipal waste generation still remains below the European average value, which is almost 517 kg¹ per capita in 2020.

Figure 1: Municipal waste generation in Estonia (kg per capita), 2006-2020



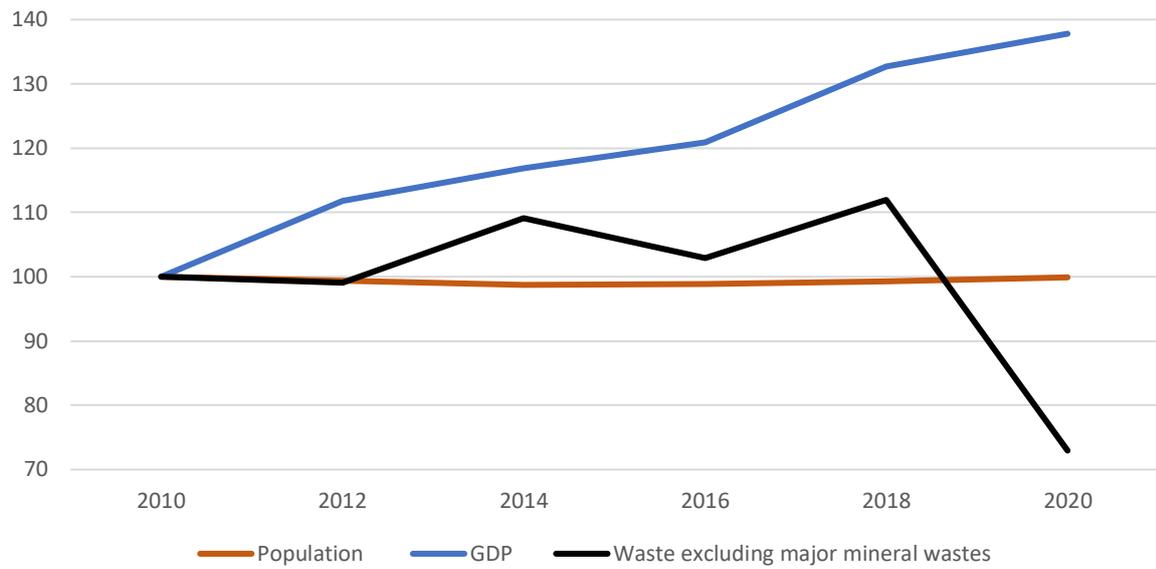
Source: Eurostat [ENV_WASMUN]

Total waste

- Estonia's waste generation (excluding major mineral wastes) has increased by 12% between 2010 and 2018 (see Figure 2).
- At the same time, Estonia's GDP has grown steadily by 38% over the same period. Thus Estonia seems to be on track to decouple total waste generation from economic growth since 2010.
- A link between waste generation and population growth, which has not markedly changed since 2010 cannot be observed.

¹ Based on data collected from Eurostat in September 2022.

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



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 objective of the programme is to support activities that contribute to the more efficient usage of the resources and help to introduce the principles of a circular economy, prevent waste and emissions, and reduce the environmental impact of activities.
2. Sectors covered	<ul style="list-style-type: none">• construction and infrastructure;• industry;• retail;• households;• public services
3. Priority waste types	<ul style="list-style-type: none">• Food/organic;• construction and demolition waste;• hazardous waste;• household/municipal waste;• packaging;• waste electrical and electronic equipment /batteries;• industrial waste (oil shale);
4. Target groups	Waste prevention covers all sectors of the economy

Targets, indicators and monitoring

1. Indicators proposed	In Section 5. Strategic Objectives and Activities (English translated version), a subsection called “Gauges” states that “Due to the lack of data, progress towards the overall target can only be measured in terms of the generation of municipal and packaging waste.”
	This subsection also lists the following examples of “activity/project-based indicators”: <ul style="list-style-type: none">• Reduction of waste during the project implementation period (measured before and after the implementation of the measures).• Reduction of waste per unit of product.• Amount of waste prepared for re - use.
2. Quantitative targets	<ul style="list-style-type: none">• relative growth of MSW generation compared to relative increase in GDP remains less than 50 %.• relative growth of packaging generation is maximally 2/3 compared to relative increase in GDP• Construction and demolition waste recovery rate -> 75%• Electronic waste collection rate 65% of that put on the market three years earlier• Portable batteries and accumulators waste collection rate 45 % of that put on the market three years earlier
3. Monitoring of programme	The quantitative targets of the national waste plans are yearly monitored
4. Evaluation of the programme	The implementation of the waste management plan has been evaluated in connection with its extension. A new version covering 2022-2028 is currently under development (at the time of preparing this country profile).

Prevention measures

Implemented prevention measures according to Article 9

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

<p>Promote and support sustainable consumption models</p>	<ul style="list-style-type: none"> Public procurers use an electronic platform for public procurement. The platform that includes a built-in green public procurement (GPP) criteria for easy GPP implementation. GPP criteria for furniture, cleaning products and services, office paper and office IT products are mandatory for the public sector from the beginning of 2022.² Circular economy white paper was published in 2022 with the aim to promote waste prevention and reuse among other things.³
<p>Encourage the design, manufacturing and use of products that are resource-efficient, durable (including in terms of life span and absence of planned obsolescence), reparable, re-usable and upgradable.</p>	<ul style="list-style-type: none"> Estonia follows the SUP Directive provisions relating to design requirements on packaging⁴. Innovation project on modular renovation elements for buildings (Horizon 2020) develops solution for minimized waste and resource efficiency in construction. Guidelines for packaging design were developed in 2022⁵.
<p>Target products containing critical raw materials to prevent that those materials become waste.</p>	<ul style="list-style-type: none"> Estonia has established system for collection and recycling of CRM containing products and materials (MTÜ EES-Ringlus and MTÜ Eesti Elektroonikaromu). Increased recovery of batteries and WEEE is a core activity in the waste management and prevention plan. Collected waste portable batteries and accumulators are treated outside Estonia, most of waste automotive batteries and accumulators are treated in Estonia (in AS Ecometal). Relevant provisions for reprocessing of potential extractive waste and sidestreams are included as part of the wider national policy on waste or resource efficiency⁶.
<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</p>	<ul style="list-style-type: none"> the packaging undertaking at the point of sale must provide information to the end-user and the consumer on the availability of reusable food containers and beverage cups, including the

² GPP criteria for furniture, cleaning products and services, office paper and office IT products: <https://envir.ee/ringmajandus/ringmajandus/keskkonnahoidlikud-riigihanked>

³ Circular economy white paper: <https://ringmajandus.envir.ee/et/ringmajanduse-visioon>

⁴ Plastic alliance <https://rethinkplasticalliance.eu/wp-content/uploads/2021/06/SUP-Assessment-Design-final.pdf>

⁵ Guidelines for packaging design: <https://ringmajandus.envir.ee/et/abimaterjalid/pakendite-disainijuhend>

⁶ https://weee4future.eitrawmaterials.eu/wp-content/uploads/2020/09/09_report-of-CRM-and-CE.pdf

<p>and furniture, as well as packaging and construction materials and products.</p>	<p>conditions under which the point of sale will accept the sale of ready-to-eat food and beverages in the end-user's or consumer's reusable food container or beverage cup.</p> <ul style="list-style-type: none"> • From 01.01.24 only reusable containers and cutlery may be used for serving food and drink at public events.
<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>	<ul style="list-style-type: none"> • Quality standards for second hand products as well as legal liabilities will be harmonized.
<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>	<ul style="list-style-type: none"> • The national strategy on food waste prevention was developed in 2021 and is currently being revised. • Awareness campaign in September 2022.
<p>Encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and the reprocessing into non-food products.</p>	<ul style="list-style-type: none"> • An interactive guide to food donation has been produced and is available on-line.⁷ • Food donation promotion makes part of the new food waste prevention plan. • Guidelines for safe donation of food were published in 2022.⁸

⁷ An interactive guide for food donation: <https://www.toiduannetamine.ee/>

⁸ Guidelines are available here: <https://pta.agri.ee/ettevotjale-tootjale-ja-turustajale/toidu-tootmine/toidu-annetamine>

<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>	<ul style="list-style-type: none"> • The main hazardous waste fraction in Estonia has been waste from oil shale and oil shale ash. Based on research commissioned by the Ministry of the environment, oil shale ash was excluded from the hazardous waste list in 2019. Classifying oil shale ash as non-hazardous also means greater recycling as e.g in agriculture, cement and road construction.
<p>Reduce the generation of waste, in particular waste that is not suitable for preparing for re-use or recycling.</p>	<ul style="list-style-type: none"> • Scientific basis for improved recycling of oil shale ash has been created and regulation changed enabling further recycling. • Further support to develop solutions for waste minimization and recycling for oil shale waste
<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>	<ul style="list-style-type: none"> • The EU Single Use Plastics Directive will be implemented. • From 01.01.24 only reusable containers and cutlery may be used for serving food and drink at public events. Tallinn innovation smart city competition, organized in cooperation of the Science Park Tehnopol and the City of Tallinn, promoted the Ringo package recycling service as an alternative to single use cups. The deposit-based system uses QR codes for identification of returned packages.
<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>	<ul style="list-style-type: none"> • The City of Tallinn forbids the use of plastic cutlery and serving food and drinks in single-use plastic dishes at public events⁹ • Estonia's marine litter plan Mereprügi plaan, published 2020 by the Ministry of the Environment sets out 100 measures to prevent marine litter.
<p>Develop and support information campaigns to raise awareness about waste prevention and littering.</p>	<ul style="list-style-type: none"> • May-October summer seasons 2020 and 2021 the international sea garbage collector Seabin in the Tallinn Old City Harbour collects marine trash and draws attention to the litter problem. The collector is open for exploration by both children and adults. • Estonia's marine litter plan includes and is intended for information to and guidance of the public. • In international partnership Tallinn University of Technology organized wide dissemination action on raw material-related themes for school students for them to become Raw material Ambassadors to a wider community.¹⁰

⁹ <https://news.err.ee/979560/tallinn-to-ban-single-use-plastic-at-public-events>

¹⁰ <https://eitrawmaterials.eu/project/rmschools-3/>

	<ul style="list-style-type: none">• Annual waste prevention week organized by national and local authorities in 2022 focused on prevention of textile waste.
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Additional implemented prevention measures, not covered by Article 9

FOOD WASTE PREVENTION

Food waste generation

According to the Food Waste Generation Survey, approximately 167,000 tons of food waste is generated in Estonia each year. Almost half of food waste is generated in households, 19% in the food industry, 14% in primary production, 12% in trade and 6% in the catering sector.

Half of the food waste, or about 84,000 tons per year, is food loss, or wasted food. Households waste the most food, the least in the food industry. The total value of food wasted in the whole food supply chain is estimated at € 164 million per year¹¹.

Measures to prevent food waste

Estonia's food waste prevention plan was published in February 2021. The plan is being revised and will be integrated into the new NWMP in 2023. Furthermore, it will be linked to the new NWMP.

The plan includes six areas of action:

- 1) Data collection and measuring food waste quantities;
- 2) Legislative framework and regulative objectives;
- 3) Effective co-operation
- 4) Innovation and R&D
- 5) Promoting food redistribution
- 6) Awareness raising, information and training.

Under these 6 areas of action are 25 more specific actions to be carried out in the coming years, such as creating guidance documents, agreeing on food waste prevention target etc.

REUSE OF PRODUCTS

Data

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 accordingly.

Measures to support ReUse

Various measures to support reuse are already included in the Estonian waste prevention programme, e.g the support for local reuse centres or guidelines for public procurement based on second-hand products.

In order to make it more convenient for home cleaners to deliver used items for reuse and prevent good items from ending up in the trash, the independent Uuskasutuskeskus (“Reuse Centre”) has offered an opportunity to call a donation taxi.

Tallinn organises Climathon Tallinn 2021 a Global Sustainability Hackathon to develop solutions to among others late fall 2021:

- Durable product design
- Improve reuse, repair, disassembly and durability of products
- New service-based business models for under-used items?
- How to raise people's awareness and enable them to make sustainable choices?
- New public-private initiatives to boost circular thinking?
- How to apply more public pressure to companies and governments to act more sustainably?

¹¹ <https://envir.ee/ringmajandus/jaatmed/toidujaatmed>

- How can Tallinn city enable or help these initiatives?
- Digital solutions and data management to support ¹²

New regulations relating to minimising single use packaging has been drawn and will come into effect 2023.

Best practice examples

Uuskasutuskeskus

Uuskasutuskeskus (“Reuse Center”) is a fully independent non-profit organisation running thrift shops across Estonia. Citizens can bring items that they do no longer need themselves and purchase things that they do need at an affordable price e.g. clothes in good condition, furniture, crockery and cutlery, toys, books, footwear, plants and technology. This enables Uuskasutuskeskus to open branches across Estonia and turn re-use into a positive habit for everyone. Uuskasutuskeskus directs any profit not used to cover activity and expansion costs to supporting other socially impactful initiatives, for example Kiusamisvaba Kool (an anti-bullying programme for schools).

With the support from the government, Uuskasutuskeskus will further establish collection points/houses for textile and other products in order to improve re-use.

Reusable packaging solutions for events

There are a number of companies in Estonia that offer reusable packaging rental services (e.g. Ringo Eco; Ringkarp, Panditops).

Several major events took place in the summer of 2022, 2021, and even earlier, with re-use requirements (e.g. Paide Arvamusfestival, Tartu Autovabaduse Puiestee, Viljandi Folk, etc.). Event organisers have pointed out that the use of reusable packaging and reusable packaging at events has more than halved waste generation. Panditops also revealed that during two and a half months in the summer of 2021, Panditops products were used almost 205 000 times at 62 events across Estonia. More than 30,500 disposable cups and plates were avoided at the Patarei Seafood Street in Tallinn in the summer of 2021.

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.

The following table shows which circular strategies are integrated into the Estonian waste prevention programme.

Topic	Addressed in the programme	Comments
Eco-design	-	
Repair, refurbishment and remanufacture	Yes	Support the focus on extending the use phase of products.
Recycling	Yes	Improved recycling rates of municipal solid waste and waste from the industry and construction are core activities in the current plan

¹² <https://www.tallinn.ee/eng/greencapital/Uudis-Climathon-Tallinn-2021-Global-Sustainability-Hackathon>

Economic incentives and finance	Yes	Environmental Investment Centre (EIC) has focused its support to waste prevention projects. The waste management plan has also received funds from EU and local funds.
Circular business models	Yes	E.g. packaging reuse systems
Eco-innovation	Yes	The Environmental Investment Centre (EIC) offers 1-2 times a year a support to waste prevention and reuse activities from the circular economy programme. In 2021 EIC supported waste prevention and projects aimed at reusing products or product components.
Governance, skills and knowledge	Yes	Awareness raising and training are included both in the current waste plan and in the new food waste prevention plan.