Country profile

Overview of national waste prevention programmes in Europe

Estonia

2021

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European Environment Agency

General information

1	Name of the country/region	Estonia
2	Coverage of the waste prevention programme (national/regional)	National
3	Type of programme (stand alone or integrated into waste management plan)	Integrated into the national waste management plan
4	Title of programme and link to programme	RIIGI JÄÄTMEKAVA 2014–2020 national waste management plan https://envir.ee/media/808/download
5	Duration of programme	2014-2020, extended until 2022
6	Language	Estonian
7	Development process of the programme/revision	In early 2021, the Government of Estonia adopted a decision to extend the national waste management plan 2014-2020 retroactively until the end of 2022. This also includes Estonia's waste prevention plan
8	Budget envisaged for implementation of the project	No specific budget for the implementation of the programme is included in the programme. For the extended new period Estonia plans to finance the activities from SF funds Estonia has been supporting waste prevention through the Environmental Investment Centre. The Environmental Investment Centre offers support once or twice a year to waste prevention and reuse activities from the circular economy programme. For example, in 2021, the centre supported waste prevention and projects aimed at reusing products or product components

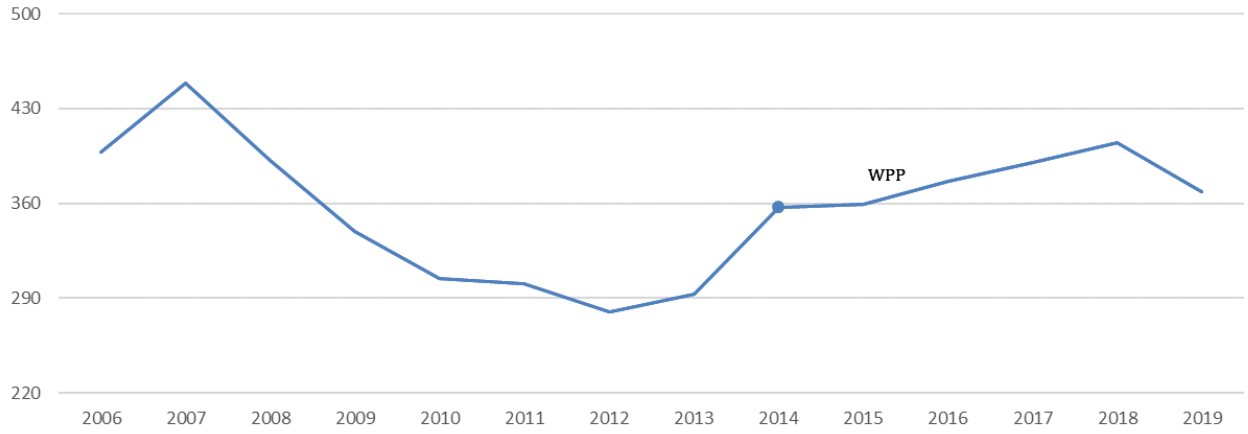
Waste generation

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

Municipal solid waste

- During 2006 and 2019 the generation of municipal waste per capita (see Figure 1) fluctuated between 280 and 450 kg per capita.
- Municipal solid waste (MSW) generation decreased from its highest value in 2007 to 2012, after which it increased again.
- The trend stagnated shortly after the introduction of Estonia's first waste prevention programme (WPP) in 2014, but continued increasing again between 2016 and 2018.
- The last figure, from 2019, indicates a decreasing trend again and does not correlate with household expenditure, which steadily increased between 2012 and 2019 ([1]).
- MSW generation still remains below the 2019 European average value, which is almost 500 kg per capita per year ([2]).

Figure 1: Municipal waste generation in Estonia (kg per capita), 2006-2019



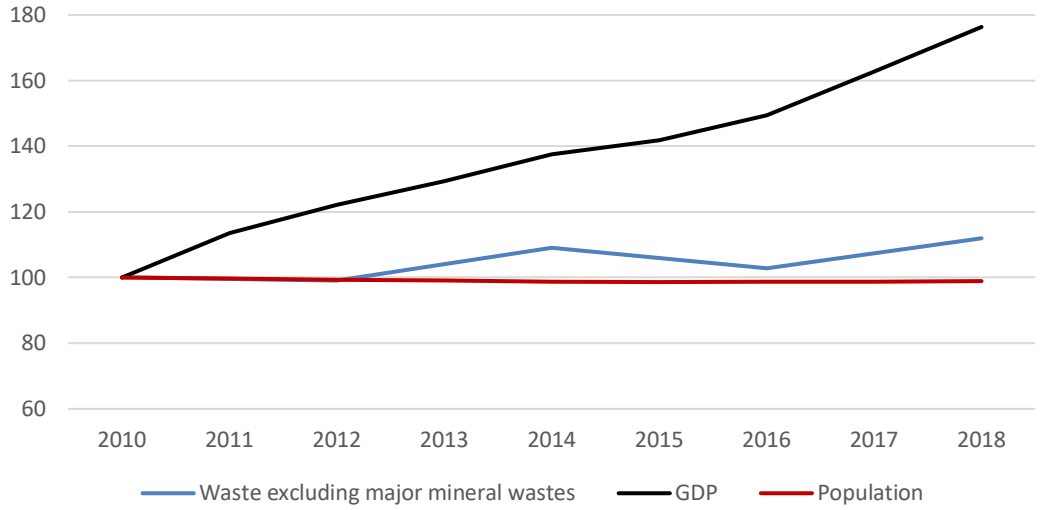
Source: Eurostat Circular Economy Monitoring Framework.

Total waste

- Estonia's waste generation (excluding major mineral wastes) increased only slightly between 2010 and 2018. Between 2014 and 2016 there was even a slight decline in total waste generation (see Figure 2).
- At the same time, Estonia's GDP has grown steadily. Thus, Estonia seems to have been on track to largely decouple total waste generation from economic growth since 2010.
- A link between waste generation and population growth, which has not changed since 2010, cannot be observed.
- Similar to MSW, the measures in Estonia's first WPP, implemented in 2014, might partially explain the positive total waste generation trend observed from 2014 onwards.

([1]) https://www.ceicdata.com/en/indicator/estonia/annual-household-expenditure-per-capita
([2]) https://www.statista.com/topics/7561/waste-management-in-europe/#dossierKeyfigures

Figure 2: Growth rate of waste (excluding major mineral wastes), GDP and population in Estonia, 2010-2018 (2010 = 100)



Source: Eurostat.

Waste prevention programme

Objectives and priorities

1.	Waste prevention objectives of the programme: quantitative objectives (waste reduction) and 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 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	• Construction and infrastructure • Industry • Retail • Households • Public services
3.	Priority waste types	• Food/organic • Construction and demolition waste • Hazardous waste • Household/municipal waste • Packaging • Waste electrical and electronic equipment (WEEE)/batteries • Industrial waste (oil shale)
4.	Target groups	Waste prevention covers all sectors of the economy

Targets, indicators and monitoring

1.	Indicators proposed	Estonia's WPP includes indicators for the decoupling of waste generation from economic growth and separate collection of key waste fractions, enabling improved recovery and consequential reuse
2.	Quantitative targets	• Relative growth of MSW generation compared with relative increase in GDP to remain less than 50 % • Relative growth of packaging waste generation is to be at most two-thirds of the relative increase in GDP • Construction and demolition waste recovery rate to be > 75 % • Electrical and Electronic waste collection rate to be 65 % of that put on the market 3 years earlier • Recovery of portable batteries and accumulators to be 45 % of that put on the market three years earlier
3.	Monitoring of programme	The quantitative targets of the national waste plans are monitored annually
4.	Evaluation of the programme	The implementation of the waste management plan has been evaluated in connection with its extension to 2022

Prevention measures

Prevention measures implemented in accordance with Article 9 of the Waste Framework Directive

Table 1: Specific waste prevention measures structured in accordance with Article 9 of the Waste Framework Directive

Promote and support sustainable consumption models	• Public procurers use an electronic platform for public procurement. The platform includes built-in green public procurement (GPP) criteria for easy GPP implementation
Encourage the design, manufacture and use of products that are resource-efficient, durable (including in terms of life span and absence of planned obsolescence), repairable, reusable and upgradeable	• Estonia follows the provisions in the Single-use Plastics Directive relating to design requirements on packaging ([3]) • Innovation project on modular renovation elements for buildings (Horizon 2020) develops solutions for minimising waste and resource efficiency in construction
Target products containing critical raw materials to prevent those materials becoming waste	• Estonia has established system for collection and recycling of critical raw material-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 waste automotive batteries and accumulators are treated in Estonia (at AS Ecometal) • Relevant provisions for reprocessing of potential extractive waste and side streams are included as part of the wider national policy on waste or resource efficiency ([4])
Encourage the reuse of products and the setting up of systems promoting repair and reuse activities, including in particular for electrical and electronic equipment, textiles and furniture, as well as packaging and construction materials and products	• Single-use beverage cups and food containers will not be provided free of charge to consumers at the point of sale. The price for single-use packaging should not be less than EUR 0.50 and establishments should inform consumers under which conditions reusable containers are accepted (planned measure) • By the end of 2023, establishments must offer their consumers the opportunity to purchase food and beverages in reusable packaging (planned measure) • By the end of 2025, establishments must fully switch to reusable packaging (planned measure) • By 1 January 2023, a local government body is required to ensure that reusable containers and

([3]) Plastic alliance: https://rethinkplasticalliance.eu/wp-content/uploads/2021/06/SUP-Assessment-Design-final.pdf
([4]) https://weee4future.eitrawmaterials.eu/wp-content/uploads/2020/09/09_report-of-CRM-and-CE.pdf

	cutlery are used at public events taking place in its administrative territory (planned measure)
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 reuse of products without compromising their quality and safety	Quality standards for second-hand products as well as legal liabilities will be harmonised
Reduce waste generation in processes related to industrial production, extraction of minerals, manufacturing, construction and demolition, taking into account best available techniques	• New solutions for reducing and recycling Estonia's main waste fraction from the oil shale industry are being explored and piloted • The Estonian government has declared two phase-out dates: for oil shale electricity by 2035 and shale oil production by 2040 at the latest • New methods for reusing and recycling waste, such as producing building materials from old tyres, rubber mats and plastic waste, are continuously being developed • The government has supported projects for increased resource efficiency in industry. Supported are companies in the mining, food, textile, clothing, wood, paper and pulp, printing, chemical, plastic, mineral materials, metal, electronics, vehicles/trailers and the furniture industries
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 UN 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	The national strategy on food waste prevention 2021 will be implemented and further developed. In the future it will be integrated into a new waste management plan and WPP as its addendum
Encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and reprocessing into non-food products	• An interactive guide to food donation has been produced and is available online ([5]) • Food donation promotion makes part of the new food waste prevention plan

([5]) https://www.toiduannetamine.ee/

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 EU 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	• 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 from the beginning of 2020. Classifying oil shale ash as non-hazardous also means greater reuse, e.g. in agriculture, cement and road construction
Reduce the generation of waste, in particular waste that is not suitable for preparing for reuse or recycling	• Scientific basis for improved reuse of oil shale ash created and regulation changed to enable further reuse • Further support to develop solutions for waste minimisation and reuse for oil shale waste
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 should ensure that such restrictions are proportionate and non-discriminatory	• The EU Single-use Plastics Directive will be implemented • By 1 January 2023, a local government body is required to ensure that reusable containers and cutlery are used at public events taking place in its administrative territory (planned measure) • Tallinnovation smart city competition, organised in cooperation with 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 identifying returned packages • There are more service providers that offer reusable food containers and beverage cups and companies that offer reusable utensils for public events. For example: https://www.ringo.eco/ https://bringpack.ee/ https://ringkarp.ee/ http://www.topsiring.ee/ https://eestipandipakend.ee/panditops/
Aim to halt the generation of marine litter as a contribution towards the UN Sustainable Development Goal to prevent and significantly reduce marine pollution of all kinds	• The city of Tallinn forbids the use of plastic cutlery and serving food and drinks in single-use plastic dishes at public events ([6]) • Estonia's marine litter plan, mereprügi plaan, published 2020 by the Ministry of the Environment sets out 100 measures to prevent marine litter
Develop and support information campaigns to raise awareness about waste prevention and littering	• During the May-October summer seasons of 2020 and 2021, the international sea garbage collector 'Seabin' collected marine trash in the Tallinn Old City Harbour and drew attention to

([6]) https://news.err.ee/979560/tallinn-to-ban-single-use-plastic-at-public-events

	the litter problem. The Seabin is open for exploration by both children and adults • Estonia's marine litter plan includes and is intended to provide information and guidance for the public. • In an international partnership Tallinn University of Technology organised a wide dissemination of information on raw material-related themes for school students to allow them to become raw material ambassadors in the wider community ([7]) • Additional campaigns have been initiated focusing on food waste prevention • Annual waste prevention week organised by national and local authorities

Additional implemented prevention measures, not covered by Article 9 of the Waste Framework Directive

([7]) https://eitrawmaterials.eu/project/rmschools-3/

Food waste prevention

Food waste generation
According to a food waste generation survey, approximately 167 000 tonnes of food waste are generated in Estonia each year. Almost half of the 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 tonnes per year, is wasted edible food. Households waste the most food, and the food industry wastes the least. The total value of food wasted across the whole food supply chain is estimated at EUR 164 million per year ([8]).

Measures to prevent food waste
Estonia's food waste prevention plan was published in February 2021 after consultation with a wide group of stakeholders, and the government, together with other concerned parties, is now carrying out the activities that are listed in the plan. The plan is directly related to the national waste management plan 2014-2020, extended until the end of 2022. The food waste prevention plan will be integrated into the new waste management plan and the WPP. Furthermore, it will be also linked to the circular action plan document, which is in development. The plan includes six areas of action:
1. data collection and measuring food waste quantities;
2. legislative framework and regulative objectives;
3. effective cooperation;
4. innovation and research and development;
5. promoting food redistribution;
6. awareness raising, information and training.

Under these six areas of action are 29 more specific actions to be carried out in the coming years, such as creating guidance documents and agreeing on food waste prevention target.

For a more comprehensive mapping of country efforts to prevent food waste, please visit the European Commission's Food Loss and Waste Prevention Hub.

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 WPP, e.g. the support for local reuse centres or guidelines for public procurement based on second-hand products.
To make it more convenient to deliver used items for reuse and prevent good items ending up in the trash, the independent Uuskasutuskeskus (reuse centre) offers households the opportunity to call a donation taxi.
In late autumn 2021, Tallinn organised the Climathon Tallinn 2021 — Global Sustainability Hackathon to develop solutions tackling:
- durable product design;
- improving the 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;

([8]) https://envir.ee/ringmajandus/jaatmed/toidujaatmed

- new public-private initiatives to boost circular thinking;
- how to apply more public pressure to companies and governments to act more sustainably;
- how Tallinn city can enable or help these initiatives;
- digital solutions and data management to support these issues ([9]).

New regulations relating to minimising single-use packaging have been drawn up and will come into effect in 2023.

([9]) https://www.tallinn.ee/eng/greencapital/Uudis-Climathon-Tallinn-2021-Global-Sustainability-Hackathon

Best practice examples

Food waste

One of the main actors in food waste prevention in Estonia is the Estonian Food Bank, which was established in 2010 to help prevent food waste and fight poverty. There are food banks in all counties in Estonia. In 2020, the Estonian Food Bank redistributed 2 470 tonnes of food and 73 % of it was rescued food.

Food waste prevention has also become more important for private citizens. Food sharing is gaining in popularity, and there are several food sharing points in different Estonian towns. For example, recently two food sharing points were opened in Harju County and these use solar power.

Digital solutions, such as Fudler, Food Angels Estonia and ResQ Club, aim to prevent food waste in restaurants, cafes, etc., by offering leftover food at a reduced price.

Uuskasutuskeskus

Uuskasutuskeskus (reuse centre) is a fully independent, non-profit organisation running thrift shops across Estonia. Citizens can bring items that they 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 reuse into a positive habit for everyone. Uuskasutuskeskus directs profits not used to cover activity and expansion costs to supporting other socially impactful initiatives, for example Kiusamisvaba Kool (an anti-bullying programme).

With support from the government, Uuskasutuskeskus will establish more collection points/houses for textiles and other products to improve reuse.

Foxway

Foxway is a circular economy company. Foxway OÜ provides sustainable IT services and electrical and electronic equipment reuse and WEEE recycling (preparing for reuse, etc). Foxway gives used phones and computers a new lease of life, buying up pre-loved but functional smart devices collected from clients by telecommunications companies. The devices are then given a technical check-up, tested and, if necessary, repaired before being put up for sale once again. In doing so, Foxway gives at least a million smartphones a second chance every year.

Ringy OÜ

Ringy aims to reduce the need to extract raw materials through refurbishing and recycling old devices while providing end-users with a cheaper and greener solution to buying new devices; these refurbished devices come with a 12-month warranty. In 2021, Ringy OÜ and World Cleanup Day organised a 2-week period to collect hoarded small electronic items from households. It went quite well, and of the 588 small electronics collected, 137 of these were reused.

Links to the circular economy

Waste prevention is an integral part of the comprehensive transformation towards a circular economy. It reduces not only the input of natural resources into the economy but also the efforts needed 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	No	
Repair, refurbishment and remanufacture	Yes	Support the focus on extending the use phase of products
Recycling	Yes	Improved recycling rates of MSW and waste from industry and construction are core activities in the current plan
Economic incentives and finance	Yes	KIK, the Environmental Investment Centre, has focused its support on waste prevention projects The waste management plan has also received funds from structural funds
Circular business models	Yes	For example, packaging reuse systems
Eco-innovation	Yes	KIK offers support once or twice a year to waste prevention and reuse activities from the circular economy programme. In 2021, KIK supported waste prevention and projects aimed at reusing products or product components
Governance, skills and knowledge	Yes	Awareness raising and training are included in both the current WPP and the new food waste prevention plan