

# Overview of national waste prevention programmes in Europe



Iceland 

2021

Photo: © Mario Cvitkovic from Pixabay



## General information

Name of the country/region	Iceland
Coverage of the waste prevention programme (national/regional)	National
Type of programme (stand alone or integrated into waste management plan)	Integrated
Title of programme and link to programme	Saman gegn sóun, included in Í átt að hringrásarhagkerfi (Together against waste, included in Towards a circular economy) <a href="https://www.stjornarradid.is/library/02-Rit--skyrslur-og-skrar/Stefna%20um%20me%C3%B0h%C3%B6ndlun%20%C3%BArgangs%202021-2032%20090621.pdf">https://www.stjornarradid.is/library/02-Rit--skyrslur-og-skrar/Stefna%20um%20me%C3%B0h%C3%B6ndlun%20%C3%BArgangs%202021-2032%20090621.pdf</a>
Duration of programme	2016-2027
Language	Icelandic
Development process of the programme/revision	The waste prevention programme 2016-2017 is included in Iceland's strategy for a circular economy 'Í átt að hringrásarhagkerfi' (Towards a circular economy) published in June 2021. The waste prevention policy/programme is to be revised in 2022. It is expected to be a small revision, as the programme is valid until 2027
Budget envisaged for implementation of the project	Cost estimates have been given for some of the planned actions, but no specific budget for the implementation of the waste prevention actions is included in the programme

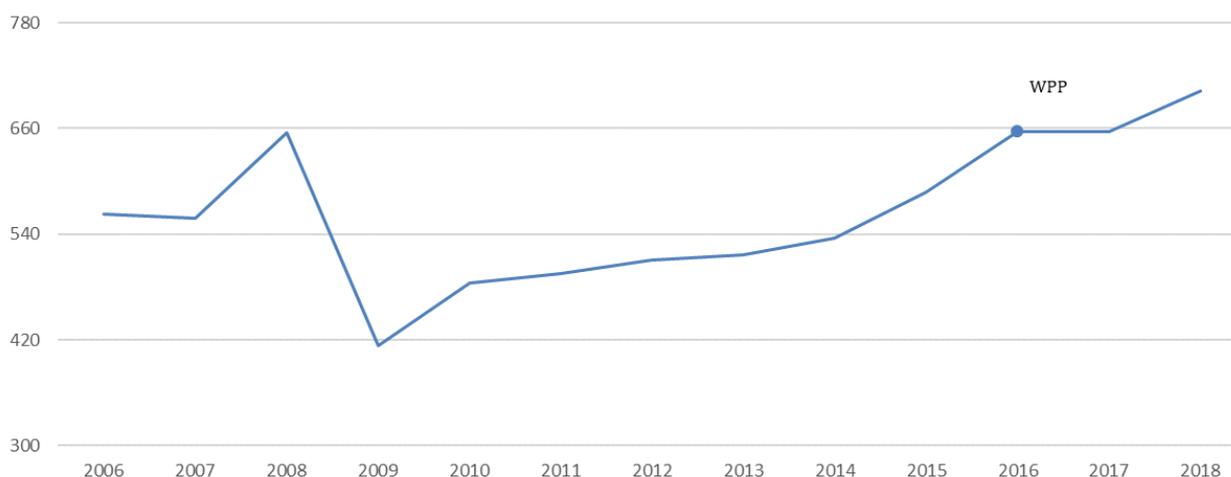
## Waste generation

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

### *Municipal solid waste*

- The generation of municipal solid waste (MSW) per capita fluctuated between 420 and 660 kg/capita per year during the period 2006-2018 (see Figure 1). The drop from 2008 (660 kg/capita) to 2009 (420 kg/capita) was probably influenced by a steep drop in Iceland's economy during the same period) <sup>(1)</sup>. While in 2008 GDP grew by 2.2 % compared with the previous year, GDP in 2009 was 7.7 % lower than in 2008.
- After 2009, waste generation started increasing, while the national economy also improved. Overall, MSW generation was above the European average (491 kg/capita per year in 2018).
- Iceland's waste prevention programme (WPP) came into force in 2016, and the year after that MSW generation stabilised. However, waste generation increased again in 2018. Although MSW generation can be influenced by many factors (e.g. population, household expenditure), the prevention measures in the WPP might partially explain the encouraging trend in waste generation in 2016-2017.

Figure 1: Municipal waste generation in Iceland (kg per capita), 2006-2018



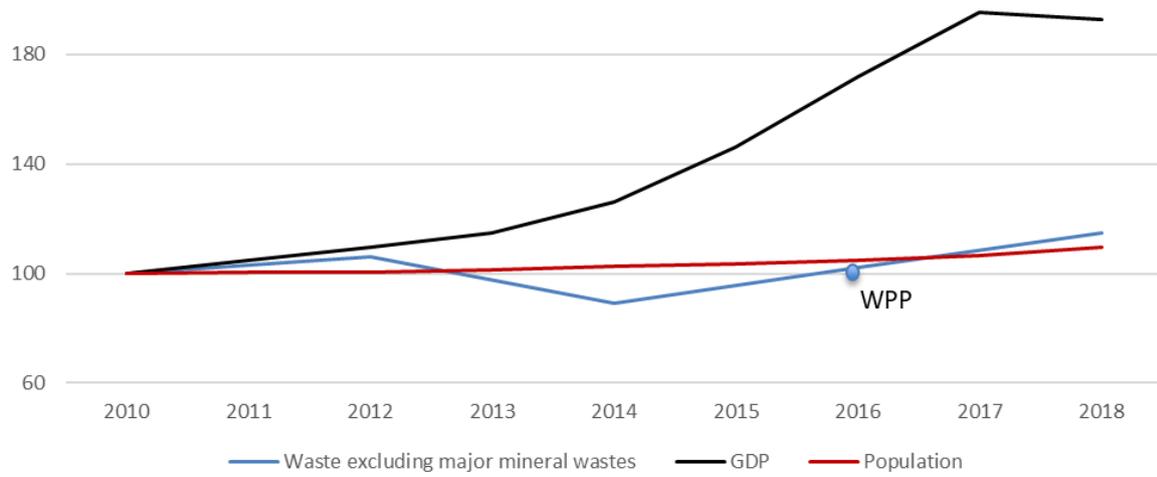
Source: Eurostat Circular Economy Monitoring Framework.

### *Total waste*

- Iceland's waste generation (excluding major mineral wastes) has remained quite stable, with a slight increase between 2014 and 2017 before steadying the year after (see Figure 2). The progress does not follow that of GDP but a decoupling trend can be seen.
- Although a longer time series is needed to confirm that there has been decoupling, Iceland seems to have been on track to decouple total waste generation from economic growth since 2012.
- A link between waste generation and population growth, which increased slightly, cannot be observed.

(1) <https://www.statice.is/statistics/economy/national-accounts/gross-domestic-product/>

Figure 2: Growth rate of waste (excluding major mineral wastes), GDP and population in Iceland, 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 general goals of the policy are to <ul style="list-style-type: none"><li>• reduce waste generation and greenhouse gas emissions</li><li>• improve the efficiency of resource use, with an emphasis on innovation</li><li>• reduce the use of raw materials while reducing the environmental impact</li><li>• reduce the distribution of substances that are harmful to health and the environment</li></ul> Action plans with associated targets will be developed for each key sector during the programme period 2016-2027
2. Sectors covered	<ul style="list-style-type: none"><li>• Food processing</li><li>• Industry (mineral production)</li><li>• Retail</li><li>• Households</li><li>• Food services</li><li>• Packaging</li><li>• Construction</li></ul>
3. Priority waste types	Categories that will be a priority for 2 years at a time: <ul style="list-style-type: none"><li>• food waste (2016-2017)</li><li>• plastic (2018-2019)</li><li>• textiles (2020-2021)</li><li>• electronics (2022-2023)</li><li>• construction (2024-2025)</li><li>• paper (2026-2027)</li></ul> Categories that will be a priority throughout the whole programme (2016-2027): <ul style="list-style-type: none"><li>• waste from aluminium and silicon production</li><li>• packaging</li><li>• meat and fish processing waste</li></ul>
4. Target groups	The programme focuses on measures that can be taken by public institutions, industry, the service sector and households

---

## *Targets, indicators and monitoring*

---

1. Indicators proposed	Current indicators include: <ul style="list-style-type: none"><li>• food and food processing waste generation</li><li>• plastic packaging</li><li>• textiles and footwear</li><li>• beverage packages</li><li>• waste generation in aluminium and silicon metal production</li></ul>
2. Quantitative targets	<ul style="list-style-type: none"><li>• Reduce food waste by 30 % by 2025 in each part of the food supply chain</li><li>• Reduce food waste by 50 % by 2030 in each part of the food supply chain, compared with the 2021 level</li><li>• Reduce the proportion of fish waste from the fish catch processed in Iceland to 0.18 %</li><li>• The percentage of slaughter waste from meat production in Iceland should be a maximum of 30 %</li><li>• The amount of plastic packaging should not exceed 30 kg/inhabitant per year</li><li>• The number of plastic bags should not exceed 40 bags/inhabitant per year by 2025</li><li>• The amount of textiles and footwear should not exceed 10 kg/inhabitant per year</li><li>• The number of returnable beverage packaging per capita should not exceed 400 per year by 2027</li><li>• Waste intensity in the total production of aluminium and silicon minerals should not exceed 14 %</li></ul>
3. Monitoring of programme	<ul style="list-style-type: none"><li>• Selected key waste fractions are monitored annually</li><li>• Progress will be followed up with annual updates of indicators as well as activity/action plans on each topic</li></ul>
4. Evaluation of the programme	The implementation of the programme is scheduled to be evaluated and revised in 2022

---

## Prevention measures

Prevention measures implemented in accordance with Article 9 of the Waste Framework Directive	The Icelandic waste prevention programme will include action plans for a number of key sectors. For example, in 2021 the action plan for plastic was approved and the action plan for food waste drafted
---	--

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

Promote and support sustainable consumption models	<ul style="list-style-type: none"> <li>• The Icelandic government introduced its first policy promoting green procurement in 2003 and it was updated 2013. It includes a common platform supporting contracting authorities in sustainable procurement. Contracting authorities can find environmental requirements for all kinds of procurement in this paper <sup>(2)</sup></li> <li>• The Environment Agency raises awareness through and publishes information on its website ‘Saman gegn sóun’ (‘Together against waste’)</li> </ul>
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	<ul style="list-style-type: none"> <li>• The Nordic Swan Ecolabel, the official ecolabel of the Nordic countries, sets strict environmental requirements relating to, for example, materials, services and construction</li> <li>• The Nordic Swan Ecolabel’s requirements have been introduced in public procurement, especially in the field of printing and cleaning services</li> <li>• A workshop and ‘hackathon’ on extending the life span and the sustainable production of textiles was held in August 2020 <sup>(3)</sup></li> </ul>
Target products containing critical raw materials to prevent those materials becoming waste	<ul style="list-style-type: none"> <li>• According to the waste prevention plan, electronics will be the priority waste streams in 2022-2023 and an action plan will be drafted accordingly. It will include actions to support reuse of electrical appliances</li> <li>• A processing fee has recently been introduced for putting electrical and electronic equipment (EEE) on the market</li> </ul>
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	<ul style="list-style-type: none"> <li>• The Environmental Agency and Ministry of Environment aim to start work shortly on monitoring and supporting actions for reuse</li> </ul>

<sup>(2)</sup> Sigurðardóttir, D., 2017, ‘Sustainable public procurement in Iceland’, *European Procurement & Public Private Partnership Law Review* 12(3), pp. 358-364 (<https://www.jstor.org/stable/pdf/26695471.pdf?refreqid=excelsior%3Afd5e9abecbca3faf2b52f080afee9acc>).

<sup>(3)</sup> Spjaraþon: idea workshop 2020 (<https://samangegnsoun.is/spjarathon/>).

<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 reuse 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>	<ul style="list-style-type: none"> <li>• Public authorities will support companies to implement cost accounting systems for waste generation in order to set economic incentives for resource-efficient production processes</li> <li>• The Nordic Swan Ecolabel will support the German initiative ‘Nachhaltiges Bauen’ (‘sustainable construction’) by setting incentives for reducing construction and demolition waste</li> <li>• FSR (the government construction contracting agency) uses an eco-friendly strategy in its invitations to tender. FSR handles all major building procurements for the Icelandic state in cooperation with Ríkiskaup. FSR has incorporated the Breeam assessment — one of the world’s leading sustainability assessment methods for master planning projects, infrastructure and buildings — in all major procurements. Currently 10 % of FSR contracts are Breeam certified <sup>(4)</sup></li> </ul>
<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 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</p>	<ul style="list-style-type: none"> <li>• The national strategy on food waste prevention will be implemented and developed further</li> </ul>
<p>Encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and reprocessing into non-food products</p>	<ul style="list-style-type: none"> <li>• Together with the federal states, a dedicated working group will develop options to support food donation</li> <li>• A study on legal options to support food donation will be prepared</li> <li>• Legal risks and liabilities for food donations will be minimised wherever possible</li> </ul>

<sup>(4)</sup> <https://www.jstor.org/stable/pdf/26695471.pdf?refreqid=excelsior%3Afd5e9abecbca3faf2b52f080afee9acc>

<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 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</p>	<ul style="list-style-type: none"> <li>• Collaborative projects with merchants are planned to increase the market share of clothing bearing ecolabels or produced using fewer harmful substances, e.g. the Nordic Swan, GOTS22 and Confidence in Textiles</li> </ul>
<p>Reduce the generation of waste, in particular waste that is not suitable for preparing for reuse or recycling</p>	<ul style="list-style-type: none"> <li>• The waste prevention programme includes action plans for preventing waste and reducing harmful substances in construction in 2024-2025</li> <li>• Targets have been set to decrease the waste intensity of aluminium and silicon mineral production</li> </ul>
<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 should ensure that such restrictions are proportionate and non-discriminatory</p>	<ul style="list-style-type: none"> <li>• The Icelandic Government Recycling Fund, which was established in 2003, uses economic incentives to increase recycling, especially of products prone to ending up as marine litter, such as fishing gear</li> <li>• The fund charges manufacturers and importers of, for example, fishing gear a fee, which is used for enhancing recycling. This incentivises Icelandic fishermen and fishing companies to return nets and ropes, as they don't have to pay a recycling fee</li> <li>• An action plan to reduce the use of plastic bags is in place. Stringent measures such as a levy or ban on plastic bags will be taken if statistics show that the set goals of the action plan and the accompanying agreement have not been achieved</li> </ul>
<p>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</p>	<ul style="list-style-type: none"> <li>• Iceland has committed to reducing marine litter in its waters over the next 3 years. The aim is to reduce the use and increase recycling and appropriate treatment of all plastics, especially single-use items and used fishing gear. Focus will be on the prevention of marine litter entering the ocean from land-based and sea-based sources. Monitoring marine litter on Iceland's coastline will be strengthened, as the basis for meaningful action and addressing the main sources of litter</li> <li>• An action plan to reduce the use of plastic bags is in place. Stringent measures such as a levy or ban on plastic bags will be taken if statistics show that the set goals of the action plan and the agreement have not been achieved</li> </ul>

	<ul style="list-style-type: none"> <li>The government and the fishing industry will continue to cooperate on the basis of an existing voluntary agreement on the recovery and recycling of plastic fishing nets, overseen by the Icelandic Recycling Fund. The current recovery rate of fishing nets is close to 90 %, but fees can be added to the price of fishing nets in cases of non-compliance</li> </ul>
<p>Develop and support information campaigns to raise awareness about waste prevention and littering</p>	<ul style="list-style-type: none"> <li>Information on food waste prevention to schools</li> <li>The website ‘Saman gegn sóun’ (‘Together against waste’) provides information on waste prevention and waste prevention projects on key waste fractions: food waste, textiles and plastic (<a href="https://samangegnsoun.is/matarsoun/">https://samangegnsoun.is/matarsoun/</a>)</li> </ul>

---

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

---

## Food waste prevention

### *Food waste generation*

In 2016, households wasted 23 kg/capita of usable food. The 2019 figure was 20 kg/capita. Figures for other parts of the value chain (primary production, food processing, retail, catering and other food services) are not yet available. The plan was to conduct a large survey of the whole food chain in autumn 2021 and, following that, to establish a methodology for estimating food waste using those bigger surveys in accordance with the methodology set down by the EU <sup>(5)</sup>.

### *Measures to prevent food waste*

In the draft action plan for reducing food waste, published on 25 August 2021, the responsible working group defines 24 actions. These actions are divided between the public and private sector. The action plan includes actions focusing on monitoring, education and awareness, food donations and efficient use of by-products.

In June 2020, a working group on food waste published its proposals for measures to reduce food waste. There are 24 proposals; the government is responsible for 14 actions and 10 are in the hands of the business sector. Among the proposed measures for the government are (1) better support for innovation, (2) promoting education and training on food waste, (3) encouraging economical means of food waste prevention, (4) revising regulations and (5) regular monitoring of food waste. Actions for the business sector include (1) awareness raising, (2) better synchronisation of supply and demand in retail, (3) organising food trucks to distribute leftover food and (4) improving the open markets for by-products. Some activities included in the action plan have commenced, even though the plan has not yet been officially approved by the authorities.

The working group includes representatives from Mátis, the Consumer Federation, the Federation of Icelandic Municipalities, the Association of Employers, the Environment Agency, environmental organisations, the Association of Trade Unions, the Farmers' Association of Iceland, the National Association of Icelandic Students, the Federation of Icelandic Graduate Students, the Student Union of Iceland and the Young Environmentalists Association.

## Reuse of products

### *Data*

No data are available.

### *Measures to support reuse*

The Ministry of Environment and Spatial Planning aim to start work on supporting reuse in accordance with the monitoring requirements of the EU. Supporting reuse of textiles is one of the priorities for 2020-2021 in the current programme ('Towards a circular economy', the chapter 'Greener textiles').

The municipality waste organisation for the capital area, Sorpa ([www.sorpa.is](http://www.sorpa.is)), collects textiles for reuse. Textile reuse is organised by the Red Cross, with clothes sorted by volunteers and given to those in need, both in Iceland and overseas. Textiles not suitable for reuse are recycled and used to manufacture rags and blankets, for example. Hertex, a thrift store operated by the Salvation Army, also organises clothing collection for reuse. It has clothing containers near selected Krónan grocery stores. Sorpa also collects other reusable items at its recycling centres. These items go to Góði hirðirinn, Sorpa's thrift store, with all profits from sales going to support aid and charitable work <sup>(6)</sup>.

---

<sup>(5)</sup> *Saman gegn sóun. Viðauki við almenna stefnu um úrgangsförvarnir 2016-2027 (Together against waste. Annex to the general policy on waste prevention 2016-2027)* (<https://www.stjornarradid.is/library/02-Rit--skyrslur-og-skrar/Saman%20gegn%20s%C3%B3un%20-%20%20%C3%BAtg%20vi%C3%B0auka%20mars%202021.pdf>).

<sup>(6)</sup> <https://www.sorpa.is/en/households/nyttjahlutir>

## **Best practice examples**

### *Hackathon for solutions that counter textile waste*

The Environmental Agency arranged a 2-day concept workshop and ‘hackathon’, where participants learned about the textile industry’s waste problem and subsequently developed solutions to counter textile waste.

The main challenges were:

- how to get the public to reduce consumption and extend the life span of their own textiles;
- how to increase public participation in textile recycling;
- how to promote sustainability in textile production;
- how to ensure better and more efficient recycling so that value is not lost.

The winning solution was called The Savings Bank (Spjarasafnið), an Airbnb-type platform for clothing where users can rent out and borrow garments in the short term and when appropriate.

### 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 required to collect and recycle waste.

Approaches to improving circularity are often linked to successful waste prevention. The following table shows which circular strategies are explicitly integrated into Iceland's waste prevention programme.

Topic	Addressed in the programme	Comments
Eco-design	Yes	Textiles
Repair, refurbishment and remanufacture	Yes (in future)	The work on value retention processes will start in the near future
Recycling	Yes	For example, recycling of collected used textiles that are not suitable for reuse. Incentives for fishermen to return used fishing gear for recycling
Economic incentives and finance	Yes	Rewards for food donations such as tax reduction
Circular business models	Yes	For example, by creating stronger links between supply and demand in the food chain
Eco-innovation	Yes	The food waste prevention action plan proposes governmental support for innovation
Governance, skills and knowledge		