

Overview of national waste prevention programmes in Europe



Sweden 

2021

Photo: © Mario Cvitkovic from Pixabay

General information

1	Name of the country/region	Sweden
2	Coverage of the waste prevention programme (national/regional)	National
3	Type of programme (stand alone or integrated into waste management plan)	Part of the waste management plan
4	Title of programme and link to programme	Att göra mer med mindre — nationell avfallsplan och avfallsförebyggande program 2018-2023 (To do more with less — national waste management plan and waste prevention programme 2018-2023) http://naturvardsverket.diva-portal.org/smash/record.jsf?pid=diva2%3A1501648&dswid=-2300#:~:text=Den%20nationella%20avfallsplanen%20och%20avfallsf%C3%B6rebyggande,och%20resurseffektivt%20samh%C3%A4lle2%20fr%C3%A5n%202014.
5	Duration of programme	2018-2023. Revised 2020.
6	Language	Swedish
7	Development process of the programme/revision	The national waste plan and the waste prevention programme 2018-2023 were revised in 2020 based on the new requirements in the EU waste package and the constitutional amendments made for their implementation (Waste Framework Directive, Articles 28 and 29). They were also generally updated to remove information made obsolete by new information becoming available. New information on waste prevention related to waste prevention instruments and measures, and an action plan for reduced food waste 2030 have been added.
8	Budget envisaged for implementation of the programme	No specific budget for the implementation of the programme is included in the programme.

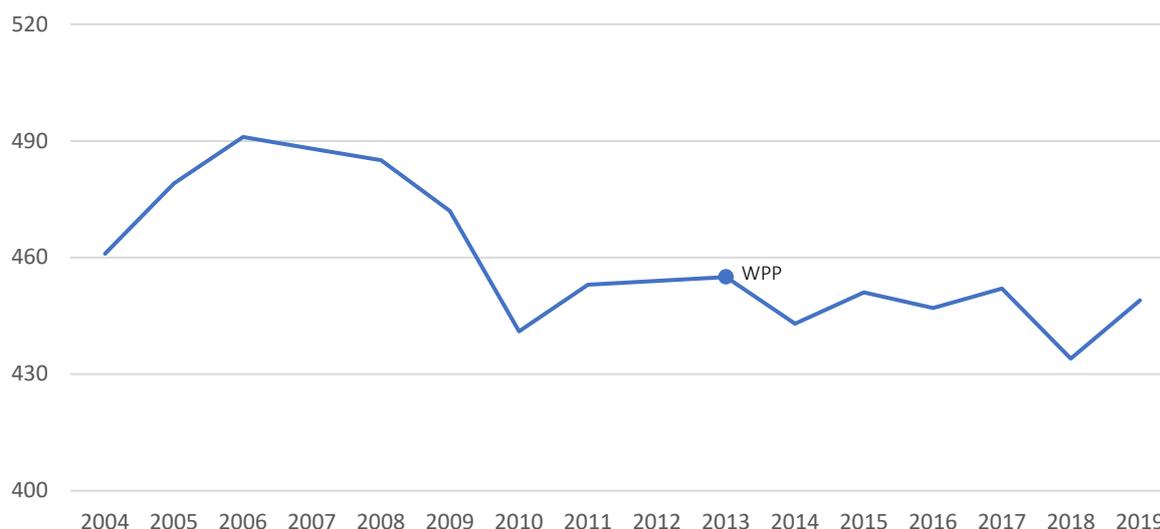
Waste generation

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

Municipal solid waste

- During the period 2004-2019 (see Figure 1), the generation of municipal solid waste (MSW) per capita fluctuated between 435 and 490 kg per capita per year. The trend has been slightly decreasing, as waste generation in 2004 was 461 kg per capita compared with an average 449 kg per capita in 2019.
- The generation of MSW per capita decreased sharply from its peak value in 2006 (490 kg per capita) until 2010 (441 kg per capita). Since then, MSW generation has remained between 440 and 450 kg per capita, which is below the European average of 489 kg per capita per year.
- An impact of the measures implemented in the waste prevention programme, which came into force 2013, cannot be seen from the statistics on the amount of MSW generated.
- Waste generation is strongly linked to household expenditure and consumption of goods. Sweden's household expenditure per capita has grown annually since 2012. In that respect, a slight decoupling effect can be seen.

Figure 1: Municipal waste generation in Sweden (kg per capita), 2004-2019

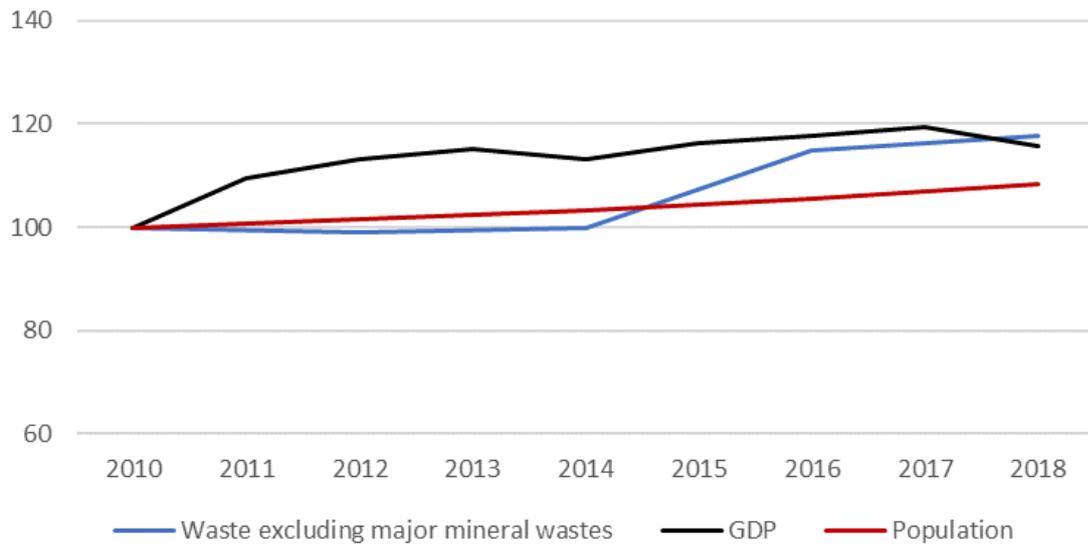


Source: Eurostat Circular Economy Monitoring Framework.

Total waste

- Sweden's waste generation (excluding major mineral wastes) remained stable between 2010 and 2014, after which there was a slight increase. The same trend is not seen in either Sweden's GDP or its population (see Figure 2).
- The decoupling trend during the period 2010-2014 seems to have ended after 2014, when waste generation increased quite sharply and GDP stabilised.
- A link between waste generation and population growth is not clear.

Figure 2: Growth rate of waste (excluding major mineral wastes), GDP and population in Sweden, 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)	<p>Sweden's revision of the national waste plan and waste prevention programme 2018-2023 does not contain any proposals for new goals or new measures. It has been directed by set environmental goals, instruments and measures, as well as ongoing work and analysis of the current situation</p> <p>Sweden's goals for waste prevention are mainly addressed under Sweden's environmental quality goal 'Good built environment' where waste prevention is addressed as follows:</p> <p>Waste management is efficient for society, easy to use for consumers and waste generation is prevented while the resources in the generated waste are utilised as much as possible and the impact of the waste on and risks to health and the environment are minimised</p> <p>The work on waste prevention measures and reduced environmental impact from waste management also directly or indirectly affects several of the other environmental goals, e.g. limiting the impact of climate change</p>
2.	Sectors covered	The programme is not limited to specific sectors
3.	Priority waste types	<ul style="list-style-type: none">• Food waste• Construction and demolition waste• Textiles• Waste electrical and electronic equipment• Plastic• Littering
4.	Target groups	Private enterprises, public organisations and consumers

Targets, indicators and monitoring

Indicators proposed	The indicators are described in Sweden's environmental policy's environmental goal system and relate to: <ul style="list-style-type: none">• food waste generation• packaging• construction and demolition waste
Quantitative targets	<ul style="list-style-type: none">• The reusable proportion of packaging placed on the market in Sweden for the first time is to increase by at least 20 % from 2022 to 2026 and by at least 30 % from 2022 to 2030• Food waste is to be reduced so that the total food waste is reduced by at least 20 % by weight per capita from 2020 to 2025• The share of food production that reaches shops and consumers is to increase by 2025
Monitoring of programme	<ul style="list-style-type: none">• Municipal waste generation• Food waste milestones in accordance with the Swedish programme for food waste minimisation• Reusable packaging• Construction and demolition waste, biannually
Evaluation of the programme	Yearly revision of the intermediate targets

Prevention measures

Prevention measures implemented in accordance with Article 9 of the waste Framework Directive	Appendix 4 of the combined waste management and waste prevention plan, revised in 2020, lists national measures linked to Annex IVa of the Waste Framework Directive and Article 9(1)(a-m). It describes the Swedish measures for preventing waste generation linked to Annex IVa of the directive and the measures under Article 9(1) of the directive. The expected effects of the measures are also described in the appendix of the combined plan.
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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"> • Ongoing study commissioned by the Swedish Consumer Agency on barriers to sustainable consumption and how these barriers can be removed • A general model for structured procurement of circular products is being developed as a joint action between public and private actors • The consumer can apply for up to 50 % of the costs of cleaning, repairing and maintenance services supporting extended product life cycles (p. 146 of the combined plan)
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"> • Sweden's national strategy for a circular economy stipulates that the country will drive eco-design for the circular economy in the framework of the Eco-design Directive. This implies setting criteria for repairability and material recovery • Information campaigns on hazardous chemicals in textiles
Target products containing critical raw materials to prevent those materials becoming waste	<ul style="list-style-type: none"> • State mapping of critical raw materials by Sweden's geological survey provides the basis for future work on preventing wasting products containing critical raw materials and minerals • The Swedish Energy Agency's research and development programme 'Batterifondsprogrammet' (the battery foundation programme) finances projects aimed at, for example, battery reuse, including life span and safety aspects • EU Regulations (EC) No 209/2005 and (EC) No 834/2008 on producer responsibility aim to support the design and manufacture of electronics and batteries generating minimal waste • The reuse of (electronic) car components is supported by Regulation (EC) No 185/2007 on producer responsibility on cars
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	<ul style="list-style-type: none"> • Reduced VAT for the reparation of household appliances, bicycles, textiles, information and communications technology • Quantitative objectives for reusable packaging

and furniture, as well as packaging and construction materials and products	<ul style="list-style-type: none"> The government has supported the construction of staffed collection facilities at recycling centres for sorting goods that can be reused instead of recycled or incinerated
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	<ul style="list-style-type: none"> Sweden's national strategy for a circular economy stipulates that Sweden will drive eco-design for a circular economy in the framework of the Eco-design Directive
Reduce waste generation in processes related to industrial production, extraction of minerals, manufacturing, construction and demolition, taking into account best available techniques	<ul style="list-style-type: none"> The demolition declaration presumes an inventory of the materials used in construction before demolition of building, thereby facilitating reuse of the materials A log book of materials used in the construction of every new building is required Preparation for the reuse of construction and demolition waste has been promoted The state development programme 'Industrial Leap' ('Industriklivet') supports industry's transformation to a circular economy
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>The 2018 national strategy on food waste prevention 'More to do more' is being implemented and further developed. The main focuses in the national work on food waste prevention are:</p> <ul style="list-style-type: none"> setting a national target and developing monitoring methods active collaboration between all sectors in the food chain changing consumer behaviour research and innovation
Encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and reprocessing into non-food products	<ul style="list-style-type: none"> The Swedish Food Agency has provided guidance on donating and redistributing food ⁽¹⁾

(1) [Skänka mat – livsmedelsdonationer \(livsmedelsverket.se\)](#)

<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"> • The government supports information initiatives aimed at consumers on the environmental and health impacts of the textile sector and gives grants for the development of sustainable business models that contribute to reducing the environmental impacts of textile production and prioritise the waste hierarchy • Tax on chemicals in selected electronics Possibilities for tax deductions (50-90 %) for electronics not containing listed hazardous fire retardants • Ensuring that: <ul style="list-style-type: none"> ○ information on substances hazardous to the environment and health contained in goods is available to all concerned (environmental goal for 2020 reached) ○ information on substances that are hazardous to health and the environment contained in materials and articles is made available throughout the product's life cycle through harmonised systems that include priority product groups ○ the substitution principle and its application are strengthened in connection with restrictions, permit testing and other relevant aspects of EU chemicals legislation, including the REACH Regulation and other relevant EU regulations
<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"> • The strategic RE:Source innovation programme, financed by the Swedish Energy Agency, Sweden's innovation agency (Vinnova) and the Swedish Research Council for Sustainable Development (Formas), targets development of processes for a wide ranges of waste material streams, e.g. for ashes, problematic plastic fractions, composites and sludge
<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"> • The Swedish Agency for Marine and Water Management carries out macrodebris monitoring on beaches and the seabed to provide baseline information for further actions
<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"> • The Swedish Agency for Marine and Water Management action programme 'Good marine environment 2020' (God Havsmiljö 2020) includes several actions against marine littering, e.g. collection of discarded fish nets and fishing tools and beach cleaning campaigns • The Swedish Environmental Protection Agency has initiated an awareness-raising campaign to prevent littering

Develop and support information campaigns to raise awareness about waste prevention and littering

- The Swedish Consumer Agency is providing the information service ‘Hallo consumer!’ on environmental choices to support sustainable consumption
- The Swedish Environmental Protection Agency has provided additional guidelines, describing strategic work to reduce littering, for municipalities. Among other things, municipalities should establish a plan for reducing littering
- The Swedish Food Agency has run campaigns specially directed at young adults and families with small children to increase awareness of preventing food waste

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

Qualitative and quantitative prevention of textile waste is a strong focus in Sweden. Actions include awareness raising and informing the consumer about hazardous chemicals in textiles. Producer responsibility for certain textiles has also been suggested (Official Reports of the Swedish Government)

Food waste prevention

Food waste generation

In 2018, approximately 1.3 million tonnes of food waste were generated in Sweden. The figure also includes primary production. Households account for the absolute largest share, 917 000 tonnes (includes food disposed of down the drain). This corresponds to approximately 95 kg per person per year.

Measures to prevent food waste

In 2020, the Swedish Food Agency, the Swedish Board of Agriculture and the Swedish Environmental Protection Agency received a new joint, 6-year government assignment to reduce food waste. The government's mission is part of the national food strategy and the authorities must work together to reduce food waste throughout the food chain, in line with the action plan to reduce food waste 'More to do more! Action plan for reduced food waste 2030' ('Fler gör mer! Handlingsplan för minskat matsvinn 2030'). This involves actions in all parts of the farm-to-fork chain. Implemented actions will be reported annually to the government.

The Swedish Food Agency has co-financed a voluntary agreement in the food industry 'Cooperation for reduced food waste', which was launched in 2020. The food industry, together with public authorities, will develop measurement methods and measures to reduce food waste. Developed measurement methods will provide the knowledge needed to choose the right measures for reducing food waste.

To determine baseline information on food lost in the first part of the farm-to-fork chain, a national method for monitoring food losses has been developed. The national method is based on eight product flows: (1) beef, (2) pork, (3) milk, (4) fish, (5) wheat, (6) potatoes, (7) carrots and (8) strawberries. The follow-up method is also expected to increase knowledge about food waste and other waste from food production, as the methods will evaluate how the food lost was used when not consumed by humans. This method is complementary to the food waste monitoring methodology ⁽²⁾.

Moreover, ongoing work includes increasing exports of animal products that are not in demand in Sweden and developing innovations aiming to increase the use of food material (e.g. broccoli plants, sexing eggs to avoid hatching eggs that would hatch cockerels, processing of food side streams).

Something that may also help reduce food losses in the future is new legislation introduced in 2021 banning late cancellations of food orders placed with producers.

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 by the EEA accordingly.

Measures to support reuse

Various measures to support reuse are included in the Swedish waste management plan and its circular economy strategy.

Sweden is one of the countries driving the EU product policy framework for a circular economy:

⁽²⁾ Lindow K., 2021, *Livsmedelsförluster i Sverige*, Jordbruksverkets rapport 2 [*Food losses in Sweden*, Swedish Board of Agriculture Report 2].

- Sweden will work to ensure that the regulations within the EU will aim for non-toxic material cycles and further and broader requirements for product design contributing to a circular economy, and that circular business models for reuse, remanufacturing and recycling are supported and made possible.

Widened tax deduction for activities aiming for reuse ('RUT' deduction):

- The government has in its budget bill for 2021 proposed that the RUT deduction (cleaning, maintenance) be extended to include the transport of household goods to second-hand shops, flea markets, etc., for reuse.

Tax deduction for increased reuse:

- The government intends to introduce what it calls a hyper-deduction and the opportunity for zero tax on renting out movables such as cars, clothes, tools or furniture (valid up to a certain amount).

Circular public procurement:

- In 2020, the government commissioned the Procurement Authority to review how strategic procurement can promote a circular economy throughout the procurement process. An important aspect of the work is how to increase the degree of reuse.

Improved management of used cars:

- The government sees great potential in being the driving force behind the review of the Directive on end-of-life vehicles to promote a circular economy through additional requirements for the phasing out of particularly dangerous substances, design for reuse and circularity, etc.

The government has decided to gradually raise the targets for the preparation for reuse and material recycling of municipal waste until 2035. EU targets for municipal waste have been introduced in Sweden as a new milestone in the environmental goal system.

Several publicly funded research projects on reuse are ongoing, funded by the 'Industrial Leap' and 'RE:Source' programmes. Projects relate to the reuse of ashes, gypsum boards, plastics, electronics, composites, etc. (<https://resource-sip.se/projektdatabas-engelska/>).

Best practice examples

Reduced VAT

Sweden supports the repair of certain goods by allowing a lower VAT rate for such activities. The aim of the VAT deduction is to support reuse and longer life cycles. The VAT rate is 12 % for the repair of shoes, bicycles, leather goods, textiles and household textiles. The reduced VAT rate came into force on 1 January 2017 (p. 146 of the combined plan).

Circular Gothenburg — repair shops and complete guidelines and toolboxes for waste prevention

Gothenburg city has developed the 'Fixotek' repair shop concept for its citizens. Fixotek is a meeting place where the public can repair, borrow and construct new goods from recycled materials to increase the life cycle of goods and materials. A Fixotek handbook for organisations and private citizens is available at Gothenburg's website.

Gothenburg city has created practical guidelines on how to prevent waste generation across a wide range of activities and how to set up activities specifically aimed at increasing both the life span and the utility of goods. A number of guidelines, designed as e-booklets, are available, e.g. on waste prevention in offices, elderly care homes, schools and conference bookings, and on product library activities and reuse. See: <https://goteborg.se/wps/portal/start/foretag/tillstand-och-regler/avfall-och-atervinning/regler-ansvar/forebygg-avfall-i-goteborgs-stad> (in Swedish).

Pop-up reuse centres in Stockholm

Stockholm's water and waste utility department organises pop-up reuse centres, to which residents can bring items they themselves no longer want to keep but that can be reused. Pop-up recycling centres circulate around the inner and outer city on a published schedule at weekends throughout the year.

National information initiative — Textilsmart

Textilsmart is an information initiative with the goal of increasing consumers' understanding of why today's textile consumption is not sustainable and assisting with tips and facts that inspire more conscious consumption. The campaign is carried out by the Swedish Environmental Protection Agency, the Swedish Consumer Agency and the Swedish Chemicals Agency.

[Textilsmart samarbete med Nationellt F/ACT Movement — Naturvårdsverket \(naturvardsverket.se\)](#)

Hallå konsument

Hallå konsument (Hello Consumer) is a nationwide information service that is coordinated by the Swedish Consumer Agency and handles consumer-related questions concerning sustainable shopping. [About Hallå konsument | Hallå konsument — Konsumentverket \(hallakonsument.se\)](#)

The Swedish Environmental Protection Agency's roadmap for sustainable plastic use

The roadmap gives an overall picture of and a guide to where we are going and what we mean by sustainable plastic use. The intention is to create a unified understanding of the changes that need to take place and which development areas are particularly important to work on. Decision-makers in both business and the public sector should be able to use the roadmap.

[Naturvårdsverkets färdplan för en hållbar plastanvändning \(naturvardsverket.se\)](#)

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 the Swedish waste prevention programme.

Topic	Addressed in the programme	Comments
Eco-design	Yes	The responsibility is moving from Sweden's national energy agency to coordination between relevant agencies, thus taking a wider national approach and responsibility
Repair, refurbishment and remanufacture	Yes	VAT deduction for repair, etc.
Recycling	Yes	For example, extended producer responsibility schemes
Economic incentives and finance	Yes	The ministry is supporting the industry's move towards circularity (Industrial Leap — Industriklivet)
Circular business models	Yes	The ministry is supporting the industry's move towards circularity (Industrial Leap — Industriklivet)
Eco-innovation	Yes	The innovation agency, Vinnova, has a strong circular economy focus in its funding programme
Governance, skills and knowledge	Yes	Involvement of several ministries and public agencies. Sweden's national circular economy action plan (2021) contains over 100 actions in various sectors. A significant number of these actions relate directly to waste prevention