

Waste prevention country profile

Sweden

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European Environment Agency



Draft country profile: Sweden

General information

Name of the country/ region	Sweden
Coverage of the waste prevention programme (national/ regional)	National
Type of programme (stand alone or integrated into waste management plan)	Part of the waste management plan
Title of programme and link to programme	‘Att göra mer med mindre’ (To do more with less) https://www.naturvardsverket.se/Documents/publ-filer/6900/978-91-620-6946-9.pdf?pid=28041
Duration of programme	2018 until 2023. Revised 2020.
Language	Swedish
Contact person in the country/region	Christina Jonsson, the Swedish Environmental Protection Agency, Naturvårdsverket. Christina.Jonsson@naturvardsverket.se
Development process of the programme/ revision	The national waste plan and the waste prevention program 2018–2023 have been revised in 2020 based on the new requirements in the EU waste package and the constitutional amendments made for their implementation (articles 28 and 29). A general update has also been made of obsolete information where new information is available. New information on waste prevention relate to waste prevention instruments and measures and an action plan for reduced food waste 2030.
Foreseen budget for implementation of the project	No specific budget for the implementation of the programme is included in the programme.

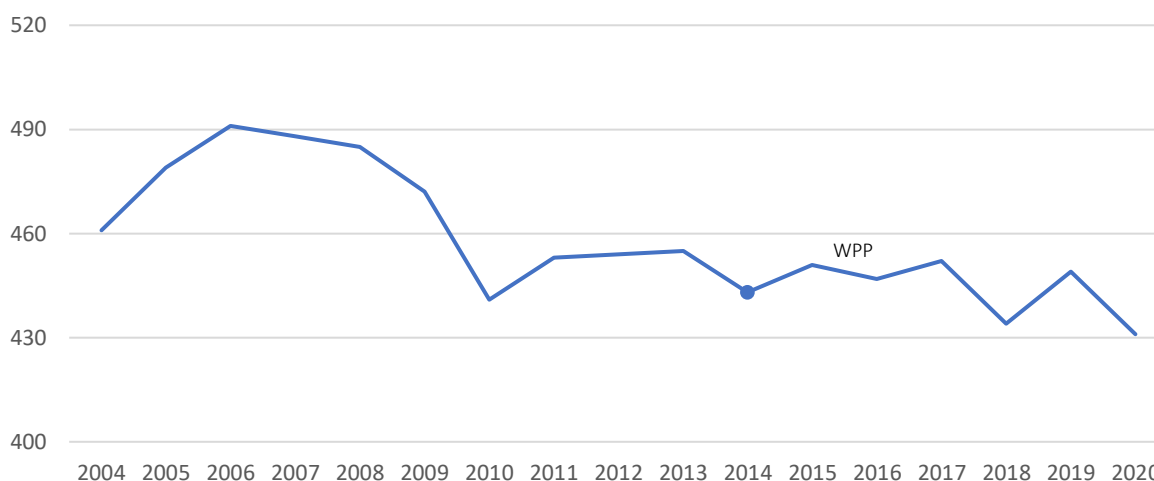
WASTE GENERATION

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

MSW

- During the period 2004-2020 (see Figure 1), the generation of municipal waste per capita has fluctuated between 431 and 491 kg/capita per year. Nonetheless, there has been an overall decrease from 2004 (at 461 kg/capita) to 2020 (at 431 kg/capita), which is lower than the per capita EU average in 2020 of 517 kg¹.
- The generation of municipal waste per capita decreased sharply from its peak value 2006 (490 kg/ capita and year) till 2010 to 441 kg/capita and year.
- An impact of the measures implemented in the waste prevention programme, which came into force 2013 cannot be seen from the statistics on generated municipal solid waste.
- Waste generation is strongly linked to the household expenditure and households' consumption of goods. Sweden's households' expenditure per capita has grown yearly since 2012. In that respect, a slight decoupling effect can be seen.

Figure 1: Municipal waste generation in Sweden (kg per capita), 2004-2020



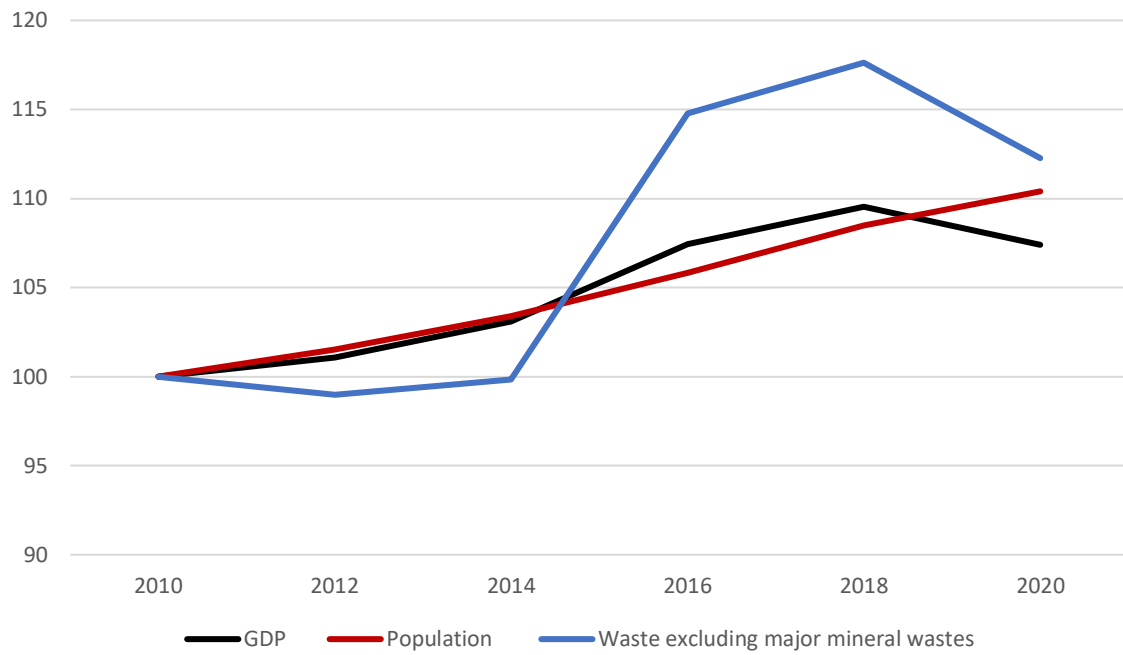
Source: Eurostat [ENV_WASMUN]

Total waste

- Sweden's waste generation (excluding major mineral wastes) remained stable between 2010 and 2014, after which one can see a rapid increase until 2018, before decreasing again in 2020. GDP increased steadily from 2010 to 2018, before decreasing also in 2020 (see Figure 2).
- The decoupling trend during the period 2010 to 2014 seems to have ceased after 2014, when waste generation increased quite sharply and GDP stabilized
- A link between waste generation and population growth cannot clearly 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)	<p>Sweden's revision of the national waste plan and waste prevention program 2018–2023 does not contain any proposals for new goals or new measures. It has been politically 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 in the following way:</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 utilized as much as possible and the impact of the waste on and risks to health and the environment are minimized.</p> <p>The work with waste prevention measures and reduced environmental impact from waste management also directly or indirectly affects several of the other environmental goals, for example Limited climate impact.</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 and batteries
4. Target groups	Private enterprises, public organisations and consumers

Targets, indicators and monitoring

Indicators proposed	<p>The indicators are described in Sweden's environmental policy's environmental goal system and relate to</p> <ul style="list-style-type: none">• food waste generation• packaging• construction and demolition waste .
Quantitative targets	<ul style="list-style-type: none">• More construction and demolition waste is recycled and prepared for reuse• Preparations for reuse, material recycling and other recycling of non-hazardous construction and demolition waste, with the exception of soil and stone, must amount to at least 70% by weight annually until 2025.• Increase the proportion of municipal waste that is prepared for reuse and recycled• By 2025, preparation for reuse and material recycling of municipal waste must have increased to at least 55 w-%, in 2030 to at least 60 w-% and in 2035 to at least 65 w-%.• The reusable proportion of packaging placed on the market in Sweden for the first time, to increase by at least 20 % from 2022 to 2026 and by at least 30 % from 2022 to 2030.• Food waste to be reduced so that the total food waste is reduced by at least 20 w-% per capita from 2020 to 2025.• The share of the food production which reaches the shops and consumers shall 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 minimization• reusable packaging• construction and demolition waste, biannually
Evaluation of the programme	Yearly revision of the intermediate targets

Prevention measures

Implemented prevention measures according to Article 9	<p>The appendix 4 of the combined waste management and waste prevention plan, revised 2020, lists national measures linked to Annex IVa of the Waste Directive and Article 9 (1) (a-m). It describes the Swedish measures for the prevention of waste generation linked to Annex IVa of the Waste Directive and the measures under Article 9 (1) of the Waste Framework Directive. The expected effects of the measures are also described in the appendix.</p> <p>(https://naturvardsverket.se/Documents/publikationer6400/978-91-620-6744-1.pdf?pid=19807).</p>
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Table 1: Specific waste prevention measures structured according to Art 9 WFD

Promote and support sustainable consumption models	<ul style="list-style-type: none"> • On-going study commissioned to 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 % deduction of costs for cleaning, repairing and maintenance services supporting extended life cycles of products (p. 146).
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 .	<ul style="list-style-type: none"> • Sweden's national strategy for circular economy stipulates that Sweden will drive ecodesign for circular economy in the frame of the ecodesign directive. This implies setting criteria for reparability and material recovery. • Information campaigns on hazardous chemicals in textiles
Target products containing critical raw materials to prevent that those materials become 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 waste prevention of products containing critical raw materials and minerals. • The Swedish Energy Agency's R & D programme "Batterifondsprogrammet" (the battery foundation programme) finances projects aiming e.g. at battery reuse, including life and safety aspects. • The regulations (2005:209) and (2008:834) on producer responsibility aim to support design and manufacturing of electronics and batteries with minimal waste generation. • The reuse of (electronic) car components is supported by the regulation of (2007:185) on producer responsibility on cars
Encourage the re-use of products and the setting up of systems promoting repair and re-use activities , including in particular for electrical and electronic equipment, textiles and furniture, as well as packaging and construction materials and products.	<ul style="list-style-type: none"> • Reduced VAT for the reparation of household appliances, bicycles, textiles, ICT. • Quantitative objectives for reusable packaging • The government has supported the construction of manned collection facilities at recycling centres for sorting out goods that can be reused instead of recycled or incinerated.

<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"> • Sweden’s national strategy for circular economy stipulates that Sweden will drive ecodesign for circular economy in the frame of the ecodesign directive. • The project ReAppli aims to develop a digital service for increased reuse of household appliances
<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"> • The demolition declaration presumes an inventory of the construction’s material before demolition leading to facilitated reuse. • A log book of materials used in the construction is required for every new building • Prepare for reuse of construction and demolition waste promoted • The state development programme “Industry leap” (“Industriklivet”) – supports industry’s transformation to circular economy
<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 “More do more” 2018 is being put into practice implemented and further developed. The main foci in the national work on food waste prevention are: • Set a national target and development of monitoring methods. • Active collaboration between all sectors in the food chain • Changed consumer behaviour • Research and innovation
<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"> • A Nordic study, which generated information about bottlenecks and barriers for food donations provides basis for directed further steps to increase food donations. Detailed guidelines are needed e.g. for unbiased interpretation of hygiene rules. • A study on legal options to support food donations will be prepared. A clear guide is needed regarding, for example, date markings, rejections and donations

<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 government supports information initiatives aimed at consumers about environmental and health impacts from textile consumption and gives grants for the development of sustainable business models that contribute to reducing the environmental impact in production and rise in the waste hierarchy. • Tax on chemicals in selected electronics. Possibilities to tax deduction (50-90%) for electronics not containing listed hazardous fire retardants. • Information on hazardous substances in goods: <ul style="list-style-type: none"> ○ Information on environmentally and health hazardous substances in goods is available to all concerned (environmental goal to 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 harmonized 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 rules, REACH and other relevant EU regulations.
<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"> • The strategic RE:Source innovation programme, financed by the Swedish Energy Agency, Sweden's innovation agency Vinnova and the Swedish research council 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 shall ensure that such restrictions are proportionate and non-discriminatory.</p>	<ul style="list-style-type: none"> • The Swedish Maritime Administration carries out macrodebris monitoring on beaches and the seabed to provide an information basis for further actions.
<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 Swedish Maritime Administration action program "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 EPA has initiated an awareness raising campaign to prevent littering
<p>Develop and support information campaigns to raise awareness about waste prevention and littering.</p>	<ul style="list-style-type: none"> • the Swedish Consumer Agency is providing the information service "Hallo consumer!" on environmental choices to support sustainable consumption. • Swedish EPA has provided additional guidelines for the municipalities describing strategic work to reduce littering. Among other things, the municipalities should establish a plan for reduced littering

	<ul style="list-style-type: none"> National Food Administration has run campaigns specially directed to young adults and families with small children to increase awareness of food waste prevention.
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Additional implemented prevention measures, not covered by Article 9

Qualitative and quantitative textile waste prevention 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 2016, approximately 1.3 million tonnes of food waste was generated in Sweden. The figure includes also primary production. A more detailed study conducted in 2018 showed that approximately 1.2 million tonnes were discarded from stores and consumption in Sweden. Households account for the absolute largest share, 917,000 tonnes. This corresponds to approximately 95 kilos per person and year. Swedish households discharge approximately 224,000 tonnes of food and drinks per year. This corresponds to approximately 26 kilos per person.

Measures to prevent food waste

In 2020, the National Food Administration, the Swedish Board of Agriculture and the Swedish Environmental Protection Agency received a new joint and six-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 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 yearly reported

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

For a base line in food losses taking place 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: beef, pork, milk, fish, wheat, potatoes, carrots and strawberries. The follow-up method is also expected to add increased knowledge about food waste and other waste from food production, as the methods will evaluate how the food losses were used when not reaching human consumption. This method is complementary to the food waste monitoring methodology.²

² Lindow K. (2021). Livsmedelsförluster i Sverige. Jordbruksverkets rapport 2:2021. 96 p. (Food losses in Sweden Swedish Board of Agriculture Report 2:2021)

Moreover, on-going work includes e.g. to increase exports of animal products that are not in demand in Sweden and developing innovations aiming to increase the utilisation rate of food material (e.g. broccoli plants, sexing eggs to avoid hatching of rooster eggs, processing of food side streams).

Something that may also help reduce food losses in the future is a new legislation introduced in 2021 banning late cancellations of food orders to the producer.

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 a driving actor in the EU product policy framework for circular economy

- Sweden will work to ensure that the regulations within the EU will aim for non-toxic material cycles, further and broader requirements for product design that contribute to circular economy, and that circular business models for reuse, remanufacturing and recycling are supported and made possible. The European Commission intends to propose common rules at EU level for this in 2021.

Widened deduction for activities aiming for reuse (“RUT” deduction)

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

Tax deduction for increased reuse

- The government intends to introduce a so-called hyper-deduction as well as the opportunity for zero-tax free for renting out movables such as car, clothes, tools or furniture (valid up to a certain amount)

Circular public procurement

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

Improved management of used cars

- The Government sees great potential in being the driving force behind the review of the Directive of on end-of-life vehicles to promote a circular economy through additional requirements for phasing out of particularly dangerous substances, design for reuse and circularity etc. The European Commission will present a proposal to the revised Directive in 2021.

The government has decided to raise the targets for preparation for reuse and material recycling of municipal waste gradually 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 on-going, funded by the *Industry leap* and *Re:source* programmes. Projects relate to 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 for such activities. The aim of the VAT deduction is to support reuse and longer life cycles. The VAT is 12 % for the repair of shoes, bicycles, leather goods, textiles and household textiles. The reduced VAT came into force 1.1.2017 (p. 146).

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

Gothenburgh City has developed the *Fixotek* repair shop concept for its citizens. Fixotek is a meeting place, where the public can repair, borrow and construct to increase the life cycle of goods and materials. A fixotek handbook for organisations and private people is available at Gothenburg's web site.

Gothenburg city has created hands-on guidelines and for how to prevent waste generation in a wide area of activities and how to set up activities specifically aimed at increasing the life span and utility degree of goods. A number of guidelines, designed as e-booklets are available on e.g. waste prevention in offices, elderly care, schools, conference bookings, product library activities and reuse: <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 utility Water and Waste organises pop-up reuse centers, to which the resident can bring items they themselves do not longer want to keep and can be reused. Pop-up recycling centers circulates around the inner and outer city on a defined published schedule on weekends though-out the year.

Links to circular economy

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

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

Topic	Addressed in the programme	Comments
Eco-design	Yes	The responsibility is moving from the Sweden's national Energy Agency to coordination between three different ministries, thus taking a wider national approach and responsibility.

Repair, refurbishment and remanufacture	Yes	VAT deduction for repair etc.
Recycling	No	
Economic incentives and finance	Yes	The ministry is supporting the industry's move towards circularity (The Industry Leap- Industriklivet)
Circular business models	Yes	The ministry is supporting the industry's move towards circularity (The Industry Leap- Industriklivet)
Eco-innovation	Yes	The innovation fond Vinnova – hs 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) contain's over 100 actions in various sector.A significant number of these actions relate directly to waste prevention.