

Overview of national waste prevention programmes in Europe



Germany 

2021

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General information

1. Name of the country/region	Germany
2. Coverage of the waste prevention programme (national/regional)	National
3. Type of programme (stand alone or integrated into waste management plan)	Stand-alone programme
4. Title of programme and link to programme	‘Wertschätzen statt wegwerfen’ — Abfallvermeidungsprogramm des Bundes und der Länder. Fortschreibung (‘Valuing instead of discarding’ — waste prevention programme by the federal government and the federal states) https://www.bmu.de/fileadmin/Daten_BMU/Download_PDF/Abfallwirtschaft/fortschreibung_abfallvermeidungsprogramm_bund_laender_bf.pdf
5. Duration of programme	2021-2027
6. Language	German
7. Development process of the programme/revision	The revision of the programme has been based on a scientific research project initiated by the German Environmental Protection Agency (EPA) and the German Ministry of Environment. The review and evaluation of the implementation of the waste prevention plan (WPP) took place within the scope of the project. Based on the analysis of results for the implementation of the WPP at federal, state and municipal levels and an assessment of existing prevention potentials, proposals were made for a possible further development and updating of the programme on prioritised waste streams and corresponding priority prevention approaches. In addition, areas of the WPP needing structural adjustment, changes and further research were identified. (For further information see https://www.umweltbundesamt.de/publikationen/updating-the-waste-prevention-programme-preparing)
8. Budget envisaged for implementation of the project	No specific budget for the implementation of the programme is included in the programme.

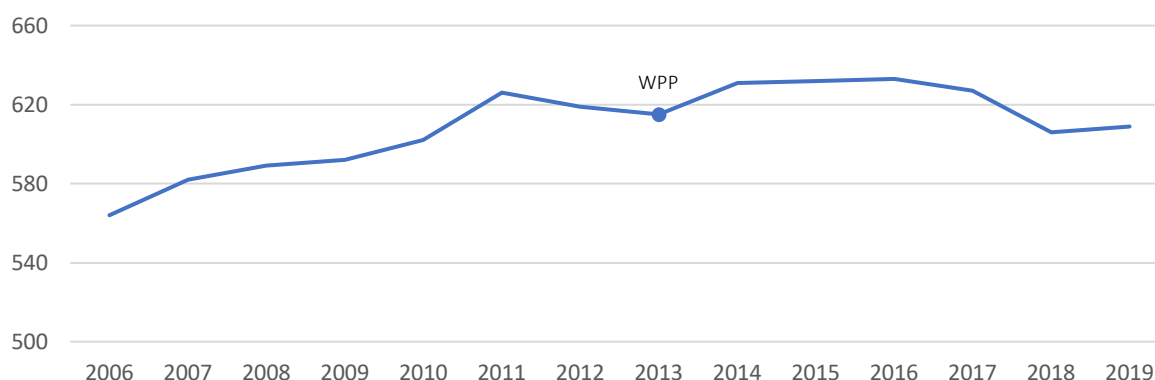
Waste generation

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

Municipal solid waste

- The generation of municipal waste per capita (see Figure 1) increased almost steadily from 564 kg per capita in 2006 and reached its maximum in 2016 with 633 kg per capita.
- The trend stagnated between 2011 and 2013 and stabilised at a higher level after 2014.
- In addition, a decreasing trend can be seen since 2016, reaching a level of 606 kg per capita in 2018. This reflects the implementation of the measures anchored in the WPP and the national resource efficiency programme.
- This positive trend, however, also consists of a steep increase for some waste fractions, such as plastic packaging, and remains significantly above the European average (489 kg per capita/year).
- The 2011-2013 figures for municipal solid waste (MSW) generation are probably influenced by the global financial crisis that developed shortly before this period.
- Germany's first WPP came into force in 2013 and, although MSW generation is influenced by many factors (population, household expenditure), the prevention measures in that WPP might partially explain the positive trend in waste generation from 2014.

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

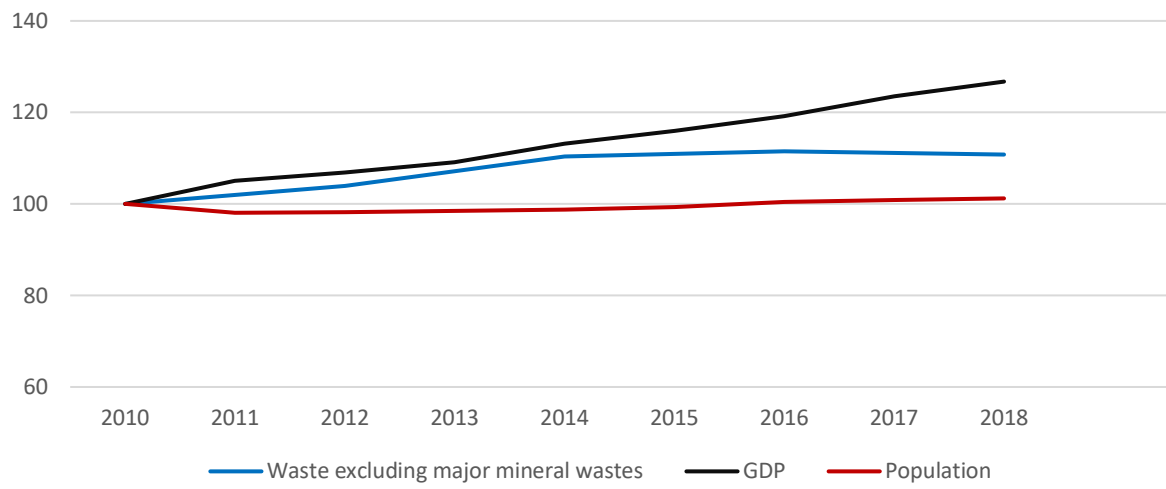


Source: Eurostat Circular Economy Monitoring Framework.

Total waste

- Germany's waste generation (excluding major mineral wastes) increased significantly until 2014 and remained steady in the years that followed (see Figure 2). A similar trend can be observed for Germany's GDP, except that it continued to increase after 2014.
- Although a longer time series is needed to confirm any conclusions on decoupling, Germany seems to be on track to decouple total waste generation from economic growth.
- A link between waste generation, which peaked in 2015, and population growth cannot be observed.
- Like MSW, the measures in Germany's first WPP, implemented in 2013, might partially explain the positive total waste generation trend observed from 2014 onwards.

Figure 2: Growth rate of waste (excluding major mineral wastes), GDP, and population in Germany, 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)	Decoupling of economic well-being from waste generation and related burdens to the environment
2.	Sectors covered	<ul style="list-style-type: none">• Construction and infrastructure• Manufacturing and industry• Retail• Households• Service activities• Hospitality• Public services (including procurement)
3.	Priority waste types	<ul style="list-style-type: none">• Food/organic• Construction and demolition waste• Hazardous waste• Household/municipal waste• Packaging• Waste electrical and electronic equipment/batteries• Manufacturing waste• Bulky waste• Water wastage• Other miscellaneous wastes
4.	Target groups	In addition to the first waste prevention programme that focused on measures by public institutions, the new programme focuses on possible measures by the industry, households and other civil society actors

Targets, indicators and monitoring

1. Indicators proposed	<p>The German waste prevention programme includes several indicators for the reduction of specific waste streams, based on the Sustainable Development Goals (SDGs) and other national legislation, including:</p> <ul style="list-style-type: none">• food waste generation• reuse of specific product groups — indicator to be developed based on the guidance from the European Commission currently under development• municipal solid waste intensity
2. Quantitative targets	<ul style="list-style-type: none">• 70 % beverage containers must be reusable, based on the German packaging law• Halving food waste generation by 2030, based on the SDGs• Continued decrease in MSW at a rate comparable to that between 2004 and 2018
3. Monitoring of programme	<ul style="list-style-type: none">• Waste intensity will be monitored based on annual reports by the German statistical office• The share of reusable packaging is monitored by annual reports in line with German packaging law
4. Evaluation of the programme	<p>The implementation of the programme will be evaluated after 6 years. Based on the annual monitoring of the indicators outlined above, additional measures might be introduced to fulfil the indicated targets</p>

Prevention measures

Prevention measures implemented measures in accordance with Article 9 of the Waste Framework Directive	The German waste prevention programme focuses on planned measures that aim to prevent waste and related environmental burdens. Measures implemented already have been recorded and analysed in a specific research project initiated by Umweltbundesamt (UBA) and the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU) (https://www.umweltbundesamt.de/publikationen/updating-the-waste-prevention-programme-preparing)
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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"> Germany will assess whether a national online platform for leasing and sharing offers can be developed Public procurement will also include products as a service
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"> Public procurement will focus on durable, repairable and waste-light products, e.g. based on the German eco-label ‘Blauer Engel’
Target products containing critical raw materials to prevent those materials becoming waste	<ul style="list-style-type: none"> Germany will support the development of reuse and prevention regulations for batteries at the EU level Two research projects (RePro and ReStra) have identified products containing critical and specific resource-intensive raw materials
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"> Assess whether a reduced VAT rate for repair activities und second-hand products can be implemented The government will continue to provide information about the options for and benefits of reuse Donations for reuse will be deductible for tax purposes Collection of electronic products will be improved to support reuse; also, cooperation with local reuse networks will be improved In cooperation with the federal states, analysis of how reuse and waste prevention could be financed via waste fees will be undertaken

<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>	<ul style="list-style-type: none"> • Quality standards for second-hand products and legal liabilities will be harmonised • Germany will support a stringent and ambitious implementation and the further development of the Eco-design Directive at the EU level
<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"> • Public authorities will support the increased implementation of cost accounting systems for waste generation in companies to set economic incentives for resource efficient production processes • The label ‘Nachhaltiges Bauen’ (sustainable construction) will be supported to set incentives for preventing construction and demolition waste • The online platform ENOB will inform architects and construction companies about financing options for resource-efficient construction • Exchange platforms for construction elements and materials will be financially supported • A specific obligation to explore prevention potentials in construction projects will be evaluated
<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"> • The national strategy on food waste prevention will be implemented and further developed • Successful awareness-raising campaigns such as ‘Zu gut für die Tonne’ (Too good for the bin) will be continued and further developed
<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"> • Options to support food donations will be developed in a specific working group with the federal states • A study on legal options to support food donations will be prepared • Legal risks and liabilities for food donations will be minimised whenever possible

<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>	
<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 German waste management law introduces an obligation for companies to report on returned products and overproduction
<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 Ministry of Environment, in cooperation with the German EPA, has initiated a study that identified the main sources of littering and analysed options for reductions • The EU Single-use Plastics Directive will be implemented
<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"> • Public authorities will ban single-use plastic items in their offices and during public events • Specific single-use plastic products will be banned • Analysis will be undertaken on how reusable cup systems can be supported by regulatory measures • The population will be informed about the environmental benefits of preventing textile waste
<p>Develop and support information campaigns to raise awareness about waste prevention and littering</p>	<ul style="list-style-type: none"> • Public authorities will specifically inform citizens about the environmental burdens linked to online shopping and return of products • An analysis of how waste prevention can be integrated into curricula in schools and universities will be carried out • Awareness-raising activities will be conducted, especially on avoiding single-use plastic products, e.g. providing information about social and environmental costs of littering • Additional campaigns will be initiated focusing on food waste prevention

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

The programme includes a list of research projects that have analysed waste prevention potentials of specific measures or for specific waste streams. Those results have been integrated into the selection and design of planned measures (see below.)

The programme also includes a variety of measures and actions that could be taken by industry, households and other stakeholders. The programme is structured according to specific waste prevention concepts (reuse, economic incentives, etc.) and specific waste streams (single use plastics, food waste, etc.)

Food waste prevention

Food waste generation

In 2015, the total amount of food waste generated in Germany reached almost 11.9 million tonnes, with primary production accounting for 12 % (1.36 million tonnes); processing 18 % (2.17 million tonnes); trade 4 % (0.49 million tonnes) and out-of-home catering for 14 % (1.69 million tonnes). More than half (6.14 million tonnes) was generated by private households, which is equivalent to about 75 kg per person.

Measures to prevent food waste

The German government undertakes various measures to prevent the generation of food waste. For instance, it provides around EUR 16 million for research programmes that investigate resource efficiency, food processing operations and the way consumers throw out food. In March 2020, a voluntary agreement was signed between the Federal Ministry of Food and Agriculture (BMEL) and associations from the food industry, agriculture and the hospitality sector aiming to reduce food waste.

Furthermore, in early 2019, the Federal Cabinet adopted the national strategy for food waste reduction (<https://www.bmel.de/EN/topics/food-and-nutrition/food-waste/national-strategy-for-food-waste-reduction.html>). The strategy identifies potential drivers of food waste and pinpoints challenges and spheres of activities to reduce food waste along the entire food supply chain.

The strategy presents the reduction of food waste as a task for the whole of society, and stakeholders from civil society, entrepreneurs and scientists are called on to contribute.

- This is to be achieved through participation in **sectoral dialogue forums**. Through cooperation between these sectors, specific measures for the reduction of food waste and sector-specific targets are to be established.
- Representatives of the sectoral dialogue forums will participate in one **overarching national dialogue forum** to exchange experiences and views across sectors and assess the measures and progress resulting from the dialogue forums. It gathered for the first time in Berlin on 6 November 2019 in the presence of the Federal Minister of Food, Julia Klöckner.
- The **joint body of the federal government and the *Länder*** is a key component in the implementation process. It undertakes the tasks of an inter-ministerial, cross-Länder governance instrument, monitors the evaluation process and identifies further fields of action.

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

The German EPA initiated a research project that aimed to collect data from reuse facilities to determine the quantities of reused products in Germany. This referred to both the direct reuse of second-hand products and waste products that have passed through the process of preparation for

reuse (end of waste) and are then available for reuse. In addition, the quantities of used products processed via internet-based platforms were estimated and a comprehensive online survey of almost 400 reuse facilities in Germany conducted. Furthermore, online offers were recorded at the auction platform eBay.de over a period of 1 month in a total of five regions. As a result, the total quantities of the product groups considered (electrical and electronic equipment, furniture and textiles) that are already being reused or prepared for reuse in Germany have been estimated to be between 286 366 and 297 201 tonnes per year. Comparing the quantities processed via reuse facilities with the quantities via eBay, the importance of internet-based platforms in the electronic sector has been shown. Conversely, reuse facilities appear to have certain prerequisites for textiles and, particularly, furniture. A follow-up project is planned that will develop a process for an annual collection of data on reuse and its provision to the European Commission. Hence, a database on specific measures will be established by public authorities to support reuse.

Best practice examples

Berlin: model city for green procurement

Studies show that environmentally compatible procurement can achieve high greenhouse gas savings, but also relevant cost savings. In order for the state of Berlin to focus on procurement that promotes and requires environmentally compatible services and products on a binding basis, the 'Administrative Regulation on Procurement and the Environment' came into force on 1 January 2013 (last updated at the beginning of 2019). This applies to all public procurement agencies in Berlin. Using performance sheets, concrete ecological requirement criteria are made binding for the procurement of various products, construction and services. Tools for calculating life cycle costs are also included. In the area of waste prevention, the procurement of beverages in disposable packaging, disposable tableware and cutlery in canteens and refectories and at large events, as well as products whose cardboard transport packaging does not contain at least 70 % recycled material, are not permitted. In the case of products for IT equipment, among other things, the availability of spare parts and the possibility of repairing them or expanding their performance with replaceable components and expansion interfaces must be guaranteed, even several years after production has ceased. Larger construction projects must be built in accordance with the BNB system for sustainable construction: the use of recycled concrete is required, as is a process for recycling materials in the event of the building being dismantled in future. The next update of the administrative regulation is to include the use of recycled plastic packaging.

Kiel on its way to becoming a 'zero waste city'

The state capital Kiel is currently on its way to becoming a 'zero waste city'. Kiel is the first city in Germany to join the international Zero Waste Europe network and is therefore pursuing the goal of avoiding waste at all levels, conserving resources and thus further reducing greenhouse gas emissions. Funded by the BMU and supported by the Wuppertal Institute for Climate, Environment and Energy, the state capital is drawing up a long-term zero waste concept in 2020 in which potentials were assessed, targets defined and measures identified to significantly reduce the amount of waste in the Kiel city area in the coming decades. The basis of the zero waste concept is the five-stage waste hierarchy, in which avoidance is the top priority. To reduce waste across the board and in all sectors, the city administration is involving the general public in a wide-ranging participation process at the concept development stage. As soon as the concept is completed, it will be submitted to the city council for approval and the active implementation phase will begin. With this decision, Kiel is striving to achieve official certification as a 'zero waste city'.

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 German waste prevention programme.

Topic	Addressed in the programme	Comments
Eco-design	Yes	Inter alia by supporting the EU eco-design regulation
Repair, refurbishment and remanufacture	Yes	Several initiatives that focus on extending the use phase of products
Recycling	No	Recycling is covered in the German waste management law
Economic incentives and finance	Yes	Inter alia by assessing how waste prevention can be included in eco-modulated packaging fees
Circular business models	Yes	E.g. national platform for sharing/leasing
Eco-innovation	Yes	E.g. support for the Scan4Chem app
Governance, skills and knowledge	Yes	E.g. by integrating waste prevention into curricula