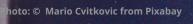
Overview of national waste prevention programmes in Europe







General information

Name of the country/region	Austria
Coverage of the waste prevention programme (national/regional)	National
Type of programme (stand alone or integrated into waste management plan)	Published as part of the federal waste management plan and additionally as a separate publication 'Waste prevention programme 2017'
Title of programme and link to programme	Waste prevention programme 2017 (Abfallvermeidungsprogramm 2017) https://www.bmk.gv.at/themen/klima_umwelt/abfall/abfallvermeidung/avprog.html
Duration of programme	2017-2022
Language	German, English
Development process of the programme/revision	The revision of the Austrian waste prevention programme is based on an extensive evaluation of the 2011 programme (see below), as well as on an analysis of good practice examples for successful waste prevention in other EU Member States. Action areas in the waste prevention programme 2011 and the waste prevention programme 2017 remain the same. Some of the measures in the action areas have been accomplished and some have not. Most progress has been achieved in the field of preventing food waste and reuse (p. 10)
Budget envisaged for implementation of the project	The programme does not include a specific budget for implementation of the programme or specific measures

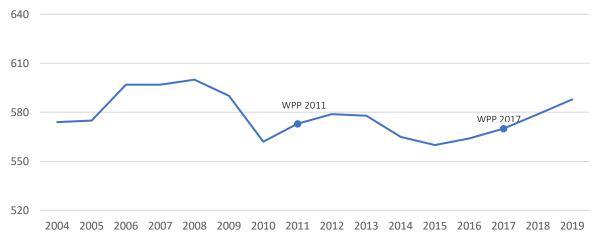
Waste generation

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

Municipal solid waste

- Between 2004 and 2018, Austria's generation of municipal solid waste (MSW) per capita remained fairly stable (see Figure 1). In 2004, the waste generated per capita was 574 kg, reached a peak in 2008 at 600 kg and decreased again over the following 10 years to 588 kg per capita in 2019. Since 2015, there has been a steady increase in MSW generation.
- On average, Austria's waste generation remained above the European average of 489 kg per capita.
- Finally, a declining trend in MSW generation, following the implementation of the waste prevention programme in 2011, can be observed until 2015.

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



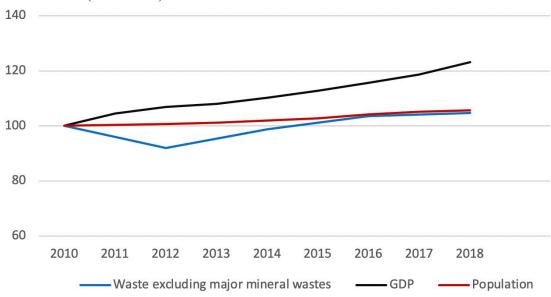
Note: WPP, Waste prevention programme.

Source: Eurostat Circular Economy Monitoring Framework.

Total waste

- Austria's waste generation (excluding major mineral waste) decreased between 2010 and 2012 but increased significantly in the years that followed (see Figure 2).
- As both GDP and population increased steadily throughout this period, both indicators can be seen as factors affecting total waste generation. This also suggests that Austria's economic growth is not yet decoupled from its generation of waste.
- As observed for MSW, the measures implemented in Austria's waste prevention programme in 2011 do not yet show a positive effect on waste generation.

Figure 2: Growth rate of waste (excluding major mineral wastes), GDP and population in Austria, 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 objectives of the Austrian waste prevention programme 2017 are as follows (p. 12): decoupling economic growth from the environmental life cycle effects of Austrian waste (including all upstream chains) reducing emissions minimising dissipation of pollutants reducing pollution conserving resources (with a focus on the conservation of raw materials) The waste prevention programme 2017 envisages an environmentally sound Austrian national economy (p. 13)
2.	Sectors covered	 Construction and demolition Industry and manufacturing Sale, retail, transport Households Private service activities, hotels, restaurants, catering Green (events) public procurement Public services
3.	Priority waste types	 Food/organic Construction and demolition waste Hazardous waste Household/municipal waste Packaging Waste electrical and electronic equipment/batteries Manufacturing waste Bulky waste Other (e.g. textiles, plastics other than packaging, animal-by-products from the processing of meat and fish)
4.	Target groups	The programme aims to encourage all stakeholders to participate in the implementation of waste prevention at a local, regional and provincial level (p. 9); therefore it is aimed at consumers (e.g. households), enterprises (e.g. reuse enterprises, collection centres, waste advisers, public authorities), ministries, regional and local authorities, scientists, etc.

1.	Indicators proposed	The waste prevention programme includes indicators that are divided into core indicators (collected annually) and indicators of the extended indicator set (p. 26). Core indicators: quantity of municipal waste from households and similar facilities per capita per year quantity of mixed municipal waste (residual waste) per capita per year quantity of packaging and paper waste collected separately per capita per year quantity of biogenic waste collected separately per capita per year quantity of problematic substances collected separately per capita per year mass of waste from trade and industry (volume of primary waste minus municipal waste, construction and demolition waste and excavated materials) per capita per year quantities of hazardous waste generated per capita per year construction and demolition waste (excluding excavated soil materials) per capita per year Extended indicator set: 1. Construction and demolition waste: a. reuse and recycling rate b. quantity sent to landfill 2. Mixed municipal waste: a. composition b. quantity of avoidable foodstuffs and leftovers per capita per year
		3. Reuse:a. quantity of reusable used products collected per yearb. number of reuse enterprises
		c. quantity of reuse products sold annually per year
2.	Quantitative targets	The Austrian waste prevention programme sets a quantitative target for food waste, which is in line with the UN 2030 agenda for sustainable development. Avoidable food waste in private households and in the area of trade is to be halved by 2030. In addition, waste prevention targets are set in other documents, e.g. the 2016 Austrian 'Voluntary agreement on shopping bags' set a target of a 50 % reduction in the use of plastic shopping bags by 2019, which is equivalent to an annual reduction of about 25 plastic bags per person
3.	Monitoring of programme	The Austrian waste prevention programme does not include specific information on a monitoring approach; however, it is being carried out as part of the federal waste management plan monitoring (annual status reports) and through various measure-related reports
4.	Evaluation of the programme	The previous programme has been extensively evaluated and formed the basis of the revision. The evaluation was carried

out to determine which of the measures of the 2011 waste prevention programme:

- have already been implemented
- are currently being implemented as of mid-2015
- are still likely to be tackled, and
- are no longer current due to changes in the general conditions or based on new findings

New developments and findings made some adjustments necessary, and a significant part of the planned measures has been completed. However, it was concluded that a number of measures should be continued in the 2017 waste prevention programme and supplemented by new measures (1)

 $^{(^1)\} UBA\ (2017),\ https://www.umweltbundesamt.at/fileadmin/site/publikationen/rep0614.pdf$

Prevention measures

Prevention measures	The Austrian waste prevention programme focuses on planned
implemented in accordance with	measures that aim to prevent waste and related environmental
Article 9 of the Waste	burdens. Already implemented measures have been recorded and
Framework Directive	analysed in a specific evaluation report
	(https://www.umweltbundesamt.at/fileadmin/site/publikationen/rep
	0614.pdf)

The waste prevention programme includes the following measures that are proposed to avoid waste generation (Chapter 1.5):

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

Promote and support sustainable consumption models	 Establishment of sustainable purchase and consumption behaviour through social platforms (e.g. www.bewusstkaufen.at) Information campaigns on waste prevention (behaviour change) Review of the use of social media (including responses to false reports) Raising awareness of waste prevention (single-use plastic bags, coffee capsules, unaddressed post) Raising awareness of ecolabelling Extension or updating of the guidelines concerning the award of the Austrian ecolabel
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	 Information campaign on best practices regarding techniques and technologies that prevent waste Development of waste prevention documentation for technical schools and educational institutions Continuation of the regional programmes concerning corporate environmental protection in the federal provinces Promotion of collection and recovery schemes in waste prevention Continuation of support for environmental management systems (e.g. the EU Ecomanagement and Audit Scheme (EMAS), ISO 14001, Responsible Care) Introduction of public procurement Analysis of the textile industry (textile material flows) Review the creation of a label for sustainable textile collection and recovery
Target products containing critical raw materials to prevent those materials becoming waste	 Increase environmental support in the areas of 'Prevention of hazardous waste' and 'Resource management' Expansion of the collection of waste electrical equipment for reuse in the municipalities

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

- Expansion of the reuse networks in the federal provinces (e.g. reuse of waste electrical equipment)
- Provision of information on the opportunities for reuse
- Examples of best practices regarding collection and treatment of waste equipment
- Information and experience exchange platform for reuse
- Product services, innovative reuse models and business models ('Think tank')
- Procurement guidelines that facilitate reuse (e.g. adaptation of procurement law)
- Development and implementation of guidelines for public bodies on the use of reusable materials
- Verification of tax law measures in the areas of reuse and repair in the framework of a green tax reform
- Extension of the technical service life and repairability of appliances
- Promoting and providing information on repair options (e.g. repair networks, repair cafes)

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

- Introduction of the obligation at EU level to provide information regarding the period of availability of replacement parts and the average service life of products
- Best practice fact sheets on techniques and technologies that prevent waste

Reduce waste generation in processes related to industrial production, extraction of minerals, manufacturing, construction and demolition, taking into account best available techniques

- Pilot projects and measures: (1) to develop innovative low-waste technologies and techniques; (2) to reuse building components or (3) to use components that are related to urban mining
- Promotion of the extension of the useful life of public buildings
- Exchange of know-how and experiences on topics such as the extension of the useful life of buildings and the recyclability of components
- Development of the basic principles for the standardisation of a building material information system
- Development of standards (related to waste prevention, avoidance of harmful substances, reusability of materials, etc.)
- Promotion of the use of recycled building materials
- Implementation of the obligation for the development of a waste management concept for the construction site in the provincial building regulations

Introduction of procurement criteria concerning waste reduction design, durability and reparability Reduce the generation of food waste in Pilot projects optimising the food waste primary production, in processing and mitigation potential Collection of best practice examples and their manufacturing, in retail and other distribution of food, in restaurants and food distribution via the internet services, as well as in households as a Studies on the potential of preventing food waste contribution to the UN Sustainable during production and processing Development Goal to reduce by 50 % per Surveys on the potential avoidable food waste in capita global food waste at the retail and the processing industry consumer levels and to reduce food losses Gathering information on avoidable food waste in the commercial and household sectors along production and supply chains by 2030 Training programmes (e.g. sector-specific training) for employees in production, processing and trade, or teaching (e.g. 'United against Waste') Awareness-raising activities to prevent food waste (e.g. the food initiative 'Food items are precious') Preparation of a quality standard for welfare organisations that pass on foodstuffs Promotion of the Austrian ecolabel in group catering, trade and accommodation services Measures to prevent food waste in the context of public procurement A national and regional awareness campaign targeting households on the topic of preventing food waste Information campaigns related to food expiry dates (e.g. best before date vs use by date) Prevention of food waste during production, processing, in trade and consumption away from Encourage food donation and other Update of the handbook 'Passing on foodstuffs for welfare organisations' redistribution for human consumption, prioritising human use over animal feed and Quality marks for trading companies that pass reprocessing into non-food products on food products Regular training on handling foodstuffs for employees of welfare organisations Promote the reduction of the content of Development of standards on avoidance of hazardous substances in materials and harmful substances, repairability, separability products, without prejudice to harmonised and reusability of building components and legal requirements concerning those materials, product parts and packaging 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 Reduce the generation of waste, in Increase in the amount of information provided particular waste that is not suitable for through waste disposal consultancy for preparing for reuse or recycling establishing sustainable purchasing and usage behaviour Information campaigns on waste prevention opportunities, in particular through consumer behaviour that is geared to quality of life Waste disposal consultancy training in the packaging sector through a packaging coordination centre and promoting waste prevention Identify products that are the main sources Raising awareness on the issue of reusable drink of littering, notably in natural and marine packages at consumer level, e.g. through environments, and take appropriate continuation of the initiative 'Sag's am measures to prevent and reduce litter from Mehrweg' (Use reusables) Raising awareness of waste prevention, in such products; where Member States decide to implement this obligation through market particular regarding disposable carrier bags, restrictions, they should ensure that such beverage cups (e.g. used at large events) and restrictions are proportionate and nonfood packaging The organisation of events held by public discriminatory institutions, enterprises and associations as 'green events' (considering the Austrian EcoLabel for Green Meetings and Green Events) Aim to halt the generation of marine litter Further development of the sustainability agenda as a contribution towards the UN 2008-2017 of the Austrian beverage packaging Sustainable Development Goal to prevent and significantly reduce marine pollution of Verification of voluntary measures for avoiding all kinds microplastics in consumer products Pact 'Zero Pellets Loss' initiative. Since 2015, this joint initiative of the Federal Ministry and the Austrian Chemical Industry Association has been pursuing the goal of preventing plastic pellets from escaping from plants into water bodies. Participating companies commit to comply with a 10-point catalogue of measures. By installing better filters in wastewater plants, setting more precise cleaning guidelines and training staff, the risks of plastic granules escaping at one company have been virtually eliminated Further research projects were also carried out (e.g. PlasticFree Danube) Develop and support information Development of teaching materials and learning campaigns to raise awareness about waste aids on principles, planning techniques and prevention and littering technologies for low-waste construction Inclusion of waste prevention and reuse principles in professional and university education Organisation of green events Raising awareness of the people involved in decision-making regarding waste prevention and

resource conservation measures (including environmental management accounting and

	sustainable participation in consultancy programmes) Dissemination of information regarding the potential for extending the useful life of material goods Raising awareness on the issue of reusable drinks packaging at consumer level (e.g. initiative 'Sag's am Mehrweg')
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Food waste prevention

Food waste generation

The Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) launched a specific agreement on food waste prevention in the retail sector with several specific measures in place until 2030 to achieve the objective of halving food waste generation. This includes a detailed monitoring approach for the implementation of these measures.

In addition, the action programme 'Lebensmittel sind kostbar!' (Food is precious!), which was launched by BMK in cooperation with food producers, trading companies, state representatives, social institutions and all Austrian social partners in 2013 was evaluated and updated. The purpose of the update is to set out the new roadmap to meet international targets, taking into account the achievements of the WWP 2017.

According to the action programme 'Food is precious!' (2), 157 000 tonnes per year of avoidable food waste are generated in Austrian households, around 175 000 tonnes through to-go services and catering, 121 800 tonnes in the food production sector and about 74 000 tonnes in the retail sector.

In the future, food waste generation in Austria will be calculated based on common EU procedures.

Measures to prevent food waste

The Austrian waste prevention programme includes a specific chapter on food waste prevention with various detailed measures (26 measures in total) to reduce food waste generation along the whole value chain:

- pilot projects optimising potential food waste mitigation measures;
- collection of best practice examples and their distribution via the internet;
- studies on the potential of preventing food waste during production and processing;
- surveys on the potential for avoiding food waste in the processing industry;
- gathering information on avoidable food waste in the commercial and household sectors;
- training programmes (e.g. sector-specific training) for employees in production, processing and trade, or teaching (e.g. 'United against Waste');
- awareness-raising activities to prevent food waste (e.g. the food initiative 'Food items are precious');
- updating the handbook 'Passing on foodstuffs' for welfare organisations;
- quality marks for trading companies that pass on food products;
- regular training on handling foodstuffs for employees of welfare organisations;
- preparation of a quality standard for welfare organisations that pass on foodstuffs;
- promotion of the Austrian ecolabel in group catering, trade and accommodation services;
- measures to prevent food waste in the context of public procurement;
- a national and regional awareness-raising campaign targeting households on the topic of preventing food waste;
- continuation of the Viktualia Award;
- information campaigns related to food expiry dates (e.g. best before date vs use by date);
- prevention of food waste during production and processing, in trade and during consumption away from home.

The initiative 'United against Waste' (3), launched in 2014, is a broad network of partners from business, federal, state and non-governmental organisations (NGOs) and science. It aims to promote careful handling of food in restaurants, hotels and catering. The initiative has provided comprehensive

 $^(^{2})$

https://www.bmk.gv.at/themen/klima_umwelt/abfall/abfallvermeidung/lebensmittel/initiative/aktionsprog.html (3) https://united-against-waste.at/

information and services for businesses and, as part of these measures, has developed methods for reducing food waste more effectively in everyday life in the kitchen.

In 2018, the BMK launched the school competition 'Abfallvermeidung macht Schule' (Waste Avoidance in Schools). Students were encouraged to design projects and evolve ideas regarding waste prevention and resource conservation, including food waste. The initiative was open to all schools in Austria and the competition was continued in 2020.

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

Austria has been one of the frontrunners with regard to the establishment of regional reuse and repair networks. The Austrian waste prevention programme also includes a specific chapter on reuse as one of the priority actions.

Various studies have highlighted reuse potentials for specific regions and waste streams. Aggregated figures will be recorded based on the upcoming EU regulation.

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

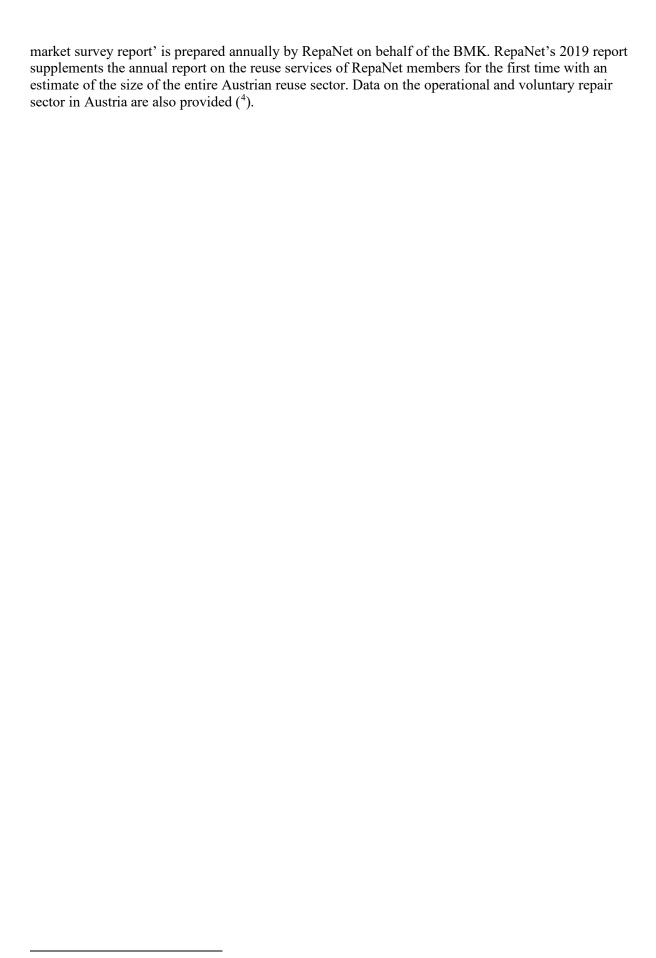
The following measures are mentioned in the Austrian waste prevention programme:

- expansion of the reuse networks in the federal provinces (e.g. reuse of waste electrical equipment);
- expansion of the reuse collection of waste electrical equipment in the municipalities and extension to other usable goods;
- provision of information on the opportunities for reuse;
- examples of best practices regarding collection and treatment of waste equipment;
- a reuse information and experience exchange platform;
- product services, innovative reuse models and business models (e.g. 'Think tank');
- analysis of the textile industry (textile material flows);
- reviewing the creation of a label for sustainable textile collection and recovery;
- procurement guidelines that facilitate reuse (e.g. adaptation of procurement law);
- development and implementation of guidelines for public bodies on the use of reusable materials:
- verification of tax law measures in the areas of reuse and repair in the framework of a green tax reform:
- campaigns concerning reuse.

Since 2014, the Re-Use Box has functioned as a collection system for reusable small goods and is handed out to citizens in different provinces and regions. The purpose of this box is to collect reusable small goods and to sort and prepare them for resale in specific reuse shops (www.re-use.at).

The VAT rate was reduced for certain repair activities (e.g. clothing, bicycles) and repair vouchers have been introduced in some provinces of Austria.

RepaNet — ReUse and Repair Network Austria, sets up repair cafes and builds partnerships with different initiatives all over Austria. Furthermore, RepaNet informs and consults different actors in this field to achieve better legal and more economical frameworks (www.repanet.at). A 'ReUse



⁽⁴⁾ https://www.repanet.at/re-use-toolbox/re-use-repathek/repanet-re-use-markterhebung-2019/

Best practice examples

ReUse-ReVital

ReUse-ReVital is a well-established project in Upper Austria that combats the throwaway mentality and promotes the circular economy. Its motto is 'repairing and reusing products instead of dumping them'.

Supported by the government of Upper Austria, ReVital has built up a large network of recycling centres, processing facilities and shops. People can take their old products (e.g. electrical appliances, furniture, household goods and sports equipment) to 108 local recycling centres. Products in good condition are collected and 'revitalized' at eight processing facilities, where employees repair and refurbish the products as needed. ReVital is proud of its 20 partner shops in all districts of Upper Austria, where the second-hand products are sold at lower prices than new goods. The ReVital logo on the revitalised goods means that they meet high standards in terms of proper functioning, completeness, cleanliness and hygiene safety. ReVital employs around 360 people, including 176 who had previously been long-term unemployed. Hence, the project not only conserves resources and reduces environmental impacts, but it also supports social integration and job creation by helping many people re-enter the job market.

The 48er-Tandler reuse shop — A waste prevention and reuse initiative of the city of Vienna Vienna's Municipal Department 48 (MD 48) is responsible for the city's waste management. It has been active in reuse since 1989, when the city's first reuse shop —called the 48er-Basar — was founded. For the purpose of reuse and waste prevention, usable goods were collected at the city's recycling centres and sold in the 48er-Basar. The 48er-Tandler was opened in 2015 as a further development of the 48er-Basar.

The MD 48 has carried out an extensive campaign to inform citizens about the possibility of taking their reusable goods to one of the recycling centres instead of disposing of them. In addition to items from the recycling centres, unclaimed goods from the city's lost and found service and items from the city's administration that are no longer in use, are given a second chance in the reuse shop. The 48-er Tandler provides a combination of social and economic benefits, as all revenues are donated for charitable purposes and citizens have access to good-quality second-hand goods at affordable prices.

Home of the Future

The Austrian waste prevention programme envisages pilot projects that develop innovative low-waste technologies and techniques in the construction sector. The 'Home of the Future' and 'City of the Future' programmes of the Federal Ministry of Transport, Innovation and Technology aim to develop and introduce sustainable buildings and infrastructure systems. The focus is on energy efficiency and the use of renewable raw materials; however, development goals also include new buildings and renovations of old buildings with significantly reduced use of materials and avoidance of hazardous materials (e.g. polyvinyl chloride (PVC) or chlorofluorocarbons (CFCs)). Specifically, some projects from the 'Building of Tomorrow' programme are concerned with the development of efficient refurbishment concepts, for example of passive houses built before 1995 of lightweight construction materials, to achieve an extension of the service life of these buildings. Some projects also deal with the development of low-pollutant technologies with low material consumption.

Extending the life of buildings through renovation is the focus of the 'Building of Tomorrow' project 'RenewBuilding'. The aim of this project was to determine how to avoid creating additional CO₂ emissions and waste by insulating buildings and to convey the results to students who, as future architects, planners and civil engineers, will be significantly involved in the field of building renovation. Within the framework of 'RenewBuilding', a teaching site for building renovation was operated, practical and theoretical courses on ecological building and renovation were held, and an elearning platform and a knowledge database for ecological renovation was developed (www.renew-building.eu).

United against Waste: Küchenprofi[t] and Moneytor

The United against Waste's consulting programme 'Küchenprofi[t]' offers individual support (over approximately 2 days) to reduce food waste in kitchen businesses and covers issues from the analysis of the causes of waste to the development of specific measures. The programme 'Moneytor' enables commercial kitchen operators to continuously monitor their sites' food waste performance and easily identify the biggest savings opportunities. The system is simple and cost-effective, as the only data collected are the monthly food waste and disposal volumes (https://united-against-waste.at).

GenussBox/TafelBox

These boxes help to reduce the amount of food waste: leftover food from restaurants, commercial kitchens and events can be packed in suitable, environmentally friendly packaging by guests under the motto 'Take it home. It's just too good' (https://tafelbox.at).

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 Austrian waste prevention programme.

Topic	Addressed in the programm	e Comments
Eco-design	Yes	Inter alia by supporting the extension of the technical service life of appliances
Repair, refurbishment and remanufacture	Yes	Several initiatives that focus on extending the use phase of products
Recycling	Yes	For example with regard to the use of recycled materials in the building sector
Economic incentives and finance	Yes	For example tax law measures in the areas of reuse and repair
Circular business models	Yes	For example by providing information on sharing/leasing services
Eco-innovation	Yes	For example in the context of building material passports
Governance, skills and knowledge	Yes	For example teaching materials for low-waste construction