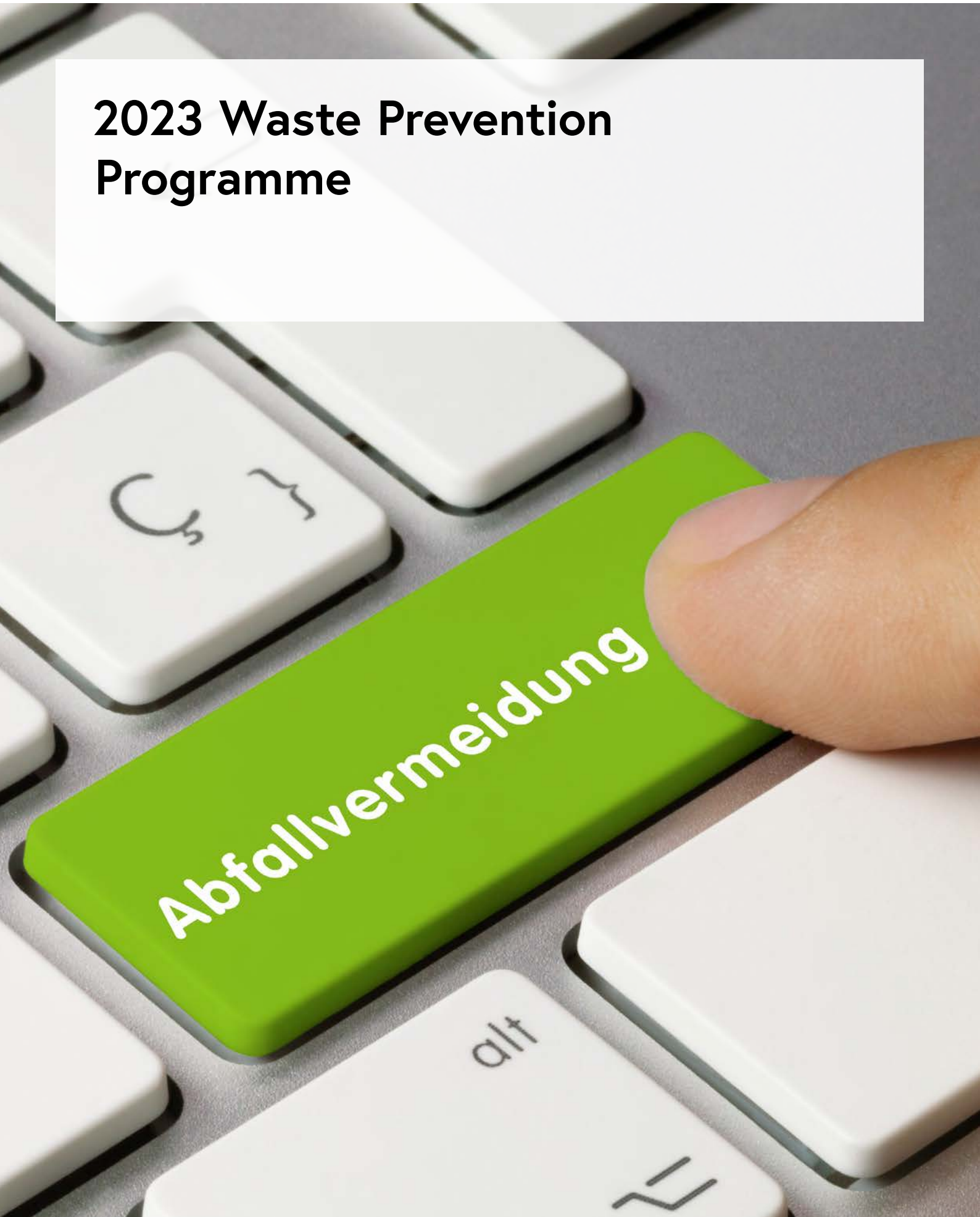
Federal Ministry
Republic of Austria
Climate Action, Environment,
Energy, Mobility,
Innovation and Technology

2023 Waste Prevention Programme



2023 Waste Prevention Programme

Federal Waste Management Plan (BAWP) 2023
Part 3

Vienna, 2023

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1 Introduction

The finite nature of resources and the environmental impact associated with their utilisation require a rapid departure from the often wasteful management of resources to date. The demand for raw materials must be increasingly aligned with planetary boundaries.

Austria is one of the model nations in terms of environmental policy and waste management, yet a "throwaway society" is still present in many areas in this country. In terms of waste volumes, waste prevention is a top priority both internationally and nationally and has considerable potential for reducing environmental and climate pollution. Together with the increase in resource efficiency and the utilisation of waste as a resource, it forms the core of a functioning circular economy.

Waste prevention is prioritised in the European Waste Framework Directive[1] as well as in the EU Circular Economy Action Plan[2], the European Green Deal[3], national environmental laws (particularly waste management laws) and strategic documents (e.g.: waste management plans). According to the EU Waste Framework Directive and the Waste Management Act 2002[4] (AWG 2002), waste prevention refers to all measures that are taken before a product becomes waste and that reduce the following:

- The amount of waste, including the reuse of products or the extension of their lifespan;
- The adverse effects on the environment and human health;
- The level of pollutants in products.

Waste prevention is facing ever greater challenges and expectations. Implementing the prevention potential must be seen as a process for society as a whole and not just as a single programme or a bundle of measures. The Waste Prevention Programme (WPP) is designed as a programme for Austria as a whole and invites all stakeholders, whether in the business or private sector, to participate in its implementation at local, regional and national level.

An WPP is not just a plan in which measures are defined, but rather a process in which the effectiveness of the plan is continuously evaluated and the plan is adapted to changing requirements at regular intervals. In line with this principle, the WPP 2023 is designed as a further development of the WPP 2017 (BMNT 2017) (Figure 1).

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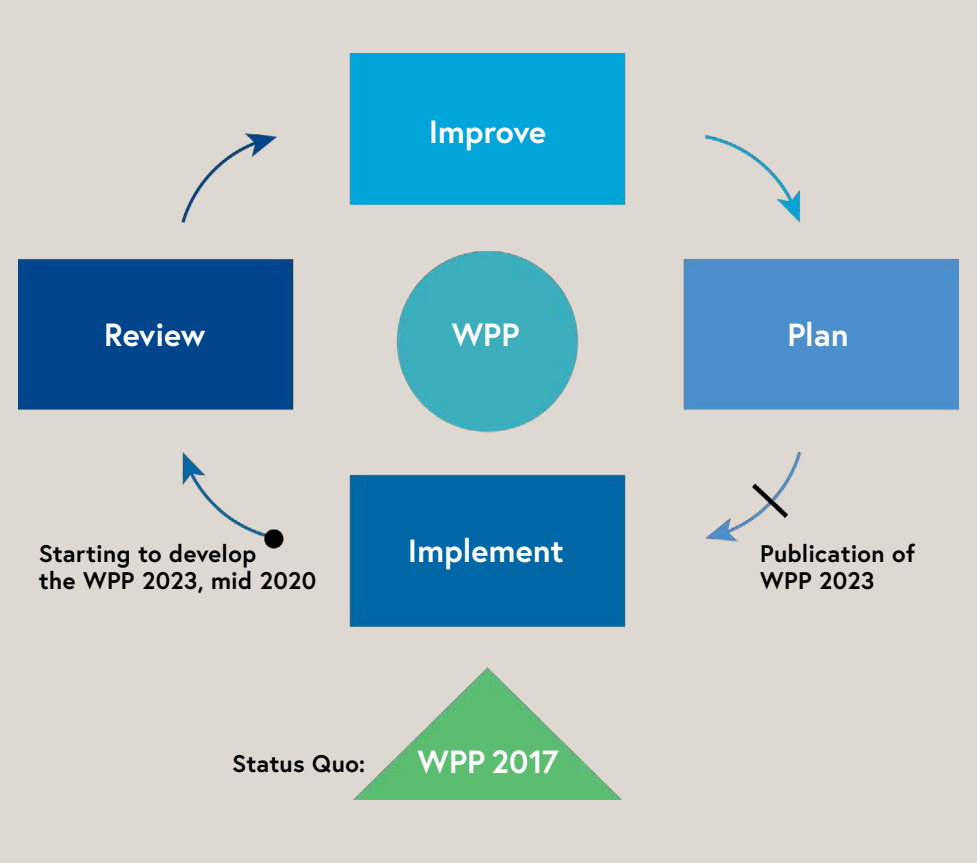
1 2008/98/EC (eur-lex.europa.eu/legal-content/DE/ALL/?uri=celex%3A32008L0098)
2 COM/2020/98 final (eur-lex.europa.eu/legal-content/DE/ALL/?uri=COM%3A2020%3A98%3AFIN)
3 COM/2019/640 final (eur-lex.europa.eu/legal-content/DE/TXT/?uri=COM%3A2019%3A640%3AFIN)
4 Federal Law Gazette I No. 102/2002 as amended (ris.bka.gv.at/Dokumente/BgblPdf/2002_102_1/2002_102_1.pdf)

Figure 1: Flow chart for the further development of the WPP 2017 to the WPP 2023

Source: Environment Agency Austria



1.1 Framework conditions at the national level

1.1.1 Legal framework

Waste prevention is defined as a priority in the waste hierarchy, ahead of preparation for reuse and recycling. The requirements for the WPP are described in the AWG 2002 (section 9).

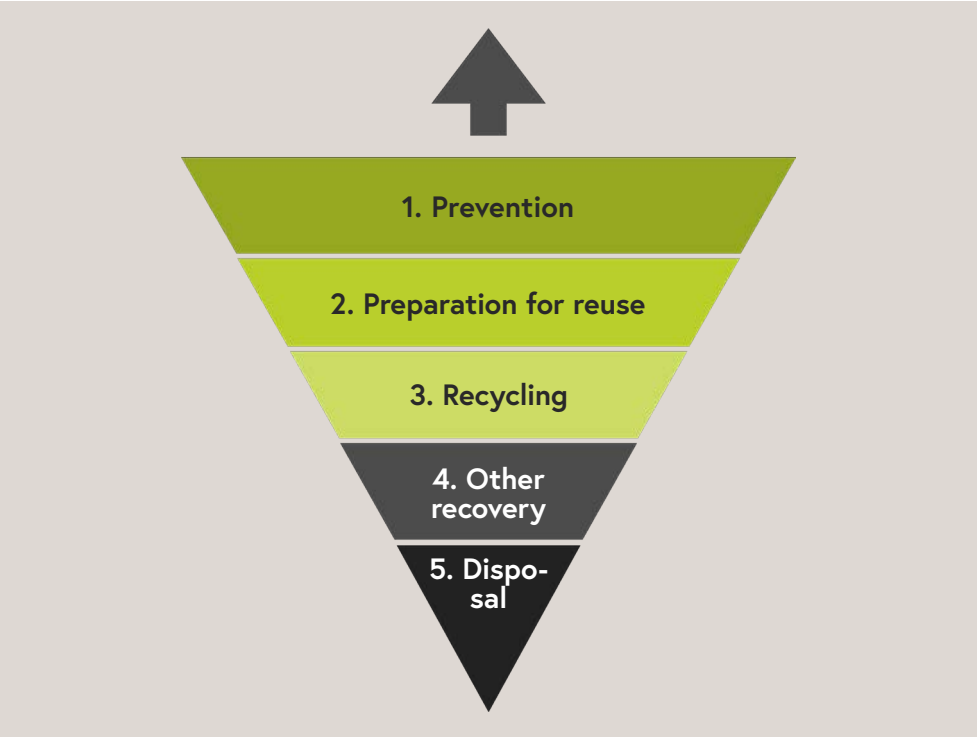


Figure 2: Waste hierarchy in accordance with AWG 2002

Source: Environment Agency Austria

1.1.2 Austrian Government Programme 2020-2024

The Austrian Government Programme 2020-2024 "Out of Responsibility for Austria" (BKA 2020) also focuses on the challenges posed by protecting the environment, combating the climate crisis, and strengthening sustainability. To this end, the circular economy must be actively promoted according to the principles of "prevent, reuse, and recycle" and waste policy must be organised in line with the motto "Today's waste is tomorrow's raw material". In particular, priorities have been set in the areas of low-pollutant material cycles, the reuse and repair of products, the reduction of food waste, the reduction of plastics and microplastics as well as sustainable and energy-saving construction. Support for Austrian environmental technology companies and programmes for "green chemistry" and innovative business models (e.g.: chemical leasing) is also to be stepped up.

1.2 Developments at the level of the United Nations and the European Union

1.2.1 UN development goals - Sustainable Development Goals (SDGs)

17 Sustainable Development Goals (SDGs)[5]were adopted by the representatives of the 193 member states in New York as part of the UN Sustainable Development Summit in September 2015 with the "2030 Agenda for Sustainable Development". The international community aims to use the SDGs to eradicate poverty, promote gender equality, improve healthcare, combat climate change, and protect the environment by the end of 2030. Austria has also committed itself to these sustainable development goals. Goal 12: "Ensure sustainable consumption and production patterns" is of key importance to waste prevention. Target achievement in Austria is monitored with the help of an Austria-specific indicator set developed by Statistics Austria, which is based on the international indicator set developed by the United Nations (UN)[6] and the established statistical publication "How is Austria?"[7]. An initial version of the national indicators has been available on the Statistics Austria website under the thematic focus "Agenda 2030 - Sustainable Development Goals"[8] since December 2017.

1.2.2 Initiatives for the circular economy in the European Union

In December 2015, the European Commission adopted the communication "Closing the loop - An EU Action Plan for the Circular Economy"[9] with the aim of stimulating Europe's transition to a circular economy, increasing global competitiveness, promoting sustainable economic growth, and creating new jobs. The initiative comprises 54 measures covering the entire value chain. The proposed measures aim to close the loop of product life cycles through increased recycling and reuse, including improving the reusability, durability and repairability of products.

In March 2020, the European Commission presented a new Circular Economy Action Plan "for a cleaner and more competitive Europe"[10]. This is at the centre of the European Green Deal, the EU's roadmap to achieving climate neutrality. The 2020 Action Plan focuses on sustainable products and waste prevention. The three building blocks for a sustainable product policy include product design, more sustainable production processes and strengthening the position of consumers. Seven "central product value creation groups", in which the most resources are used and in which there is a high

5 sdgs.un.org/goals
6 unstats.un.org/sdgs/indicators/indicators-list
7 statistik.at/services/tools/services/publikationen/detail/1086
8 www.statistik.at/services/tools/services/indikatorensysteme/sdgs
9 COM(2015) 614 final: (ec.europa.eu/transparency/documents-register/detail?ref=COM(2015)614&lang=en)
10 COM/2020/98 final: (eur-lex.europa.eu/legal-content/DE/ALL/?uri=COM%3A2020%3A98%3AFIN)

circular potential, are prioritised: Electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings and the food sector.

1.2.3 EU Legislative Package on the Circular Economy

The revised EU Legislative Package on the Circular Economy came into force in July 2018. The amended Waste Framework Directive[11] explicitly emphasises that waste prevention is the best way to conserve natural resources. Member States should take appropriate measures to prevent waste from generating, to promote innovative production, business and consumption models and to extend the life of products and reuse.

Adapting consumer behaviour is also considered essential to promoting sustainable production. As part of the measures to reduce waste, Member States should therefore plan ongoing communication and information initiatives to raise awareness of waste prevention and littering.

In line with the United Nations target, the aim is to halve global per capita food waste at the retail and consumer level by 2030, and reduce food losses along the production and supply chain. Member states are called upon to take measures against littering to encourage consumers to change their behaviour. Manufacturers should promote the sustainable use of their products and contribute to the proper disposal of their products at the end of their useful life. The revised Packaging Directive[12] promotes reusable packaging and sets targets for recycling packaging waste. The member states are also required to reduce the consumption of lightweight plastic carrier bags to a maximum of 90 bags per capita and year by the end of 2019 and to 40 bags per capita and year by the end of 2025, or to implement the ban on the free distribution of carrier bags.

1.2.4 EU Plastic Strategy and Single-use Plastic Directive

The European Strategy for Plastics (EU Plastics Strategy)[13] published by the European Commission in January 2018 forms a key part of the European Union's Circular Economy package. In future, both the design and manufacture of plastic products will consider the requirements of prevention, reuse, repair and high-quality recycling, and more sustainable materials will be developed and promoted. At the same time, the market for recycled plastics is to be promoted. The strategy also focuses on reducing the amount of plastic entering the environment as a result of littering from single-use plastic products on the one hand and microplastics generated, for example, by the wear and tear of vehicle tyres, the washing of synthetic clothing or the deliberate addition of plastics to cosmetics or paints, among other things.

80% to 85% of marine litter (as measured by litter counts on European beaches) is plastic, 50% of which is single-use plastic items and 27% of which is fishing-related

11 2008/98/EC (eur-lex.europa.eu/legal-content/DE/ALL/?uri=celex%3A32008L0098)
12 94/62/EC (eur-lex.europa.eu/legal-content/DE/ALL/?uri=CELEX%3A31994L0062)
13 eea.europa.eu/policy-documents/com-2018-28-final-a

items. This is why the Single-Use Plastics Directive[14] came into force in July 2019, which includes numerous measures to reduce or ban certain single-use plastic products.

1.2.5 The European Green Deal

The European Green Deal[15], which was presented by the European Commission (EC) in December 2019, is the roadmap for a sustainable EU economy. It includes measures to promote the efficient use of resources by transitioning to a clean and circular economy, halting climate change, tackling biodiversity loss, and reducing pollution. It also identifies what investments are needed, what financial instruments are available and how to ensure a just and inclusive transition. The Green Deal covers all sectors of the economy – with a focus on transport, energy, agriculture and buildings as well as the steel, cement, ICT, textile and chemical industries.

In May 2020, the European Commission presented a core element of the European Green Deal, namely the "Farm to Fork"[16] strategy. It aims to establish a fair, healthy and environmentally friendly food system.

The associated action plan lists 27 legislative and non-legislative measures. In particular, the EC announced that, based on the new EU methodology for quantifying food waste and the data expected from the Member States for 2022, a reference value would be set and legally binding targets for reducing food waste across the EU would be proposed.

1.2.6 EU textile strategy

In March 2022, the European Commission published the EU Strategy for Sustainable and Circular Textiles[17]. This is aimed at durable, reusable, repairable and recyclable products. The strategy also aims to tackle the issue of problematic chemicals in textile materials and promote investment, research and innovation.

1.2.7 EU framework for a sustainable product policy

As part of the new action plan for the circular economy, the European Commission is also announcing a legislative initiative for a sustainable product policy[18] to make products fit for a climate-neutral, resource-efficient circular economy and reduce waste. The initiative also addresses the presence of harmful substances in products such as electronics and ICT equipment, textiles, furniture, steel, cement and chemicals.

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14 2019/904/EU (eur-lex.europa.eu/legal-content/DE/TXT/?uri=celex%3A32019L0904)

15 COM/2019/640 final (eur-lex.europa.eu/legal-content/DE/TXT/?uri=COM%3A2019%3A640%3AFIN)

16 COM(2020)381 final (eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX%3A52020DC0381)

17 COM(2022) 141 final (eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022DC0141)

18 europarl.europa.eu/legislative-train/theme-a-european-green-deal/file-sustainable-products-initiative

1.2.8 EU Ecodesign Directive

The Ecodesign Directive[19] sets out minimum design requirements to reduce the consumption of energy and resources by energy-related products. The product groups for which implementing ordinances are issued are defined in work programmes. The Commission is targeting more product-specific requirements for the first time with its third work programme 2016-2019[20], such as durability (minimum shelf life of products or important components), repairability (availability of spare parts and repair instructions, repair-friendly design), retrofittability, dismantlability (easy removal of certain components) and the transfer of information (labelling of plastic parts).

In 2019, ten implementing regulations were adopted and obligations regarding the minimum durability of lighting products, a minimum period for the availability of spare parts for refrigerators, washing machines, dishwashers and spare parts that can be replaced with generally available tools were defined.

1.2.9 EU action plan for pollution-free air, water and soil

In order to reduce environmental pollution, the "Zero Pollution"[21] action plan aims to improve water quality by 2030 by reducing the amount of plastic waste entering the sea by 50% and microplastics in the environment by 30%. The significant reduction in the overall volume of waste and a 50% reduction in residual waste also represent further milestones in 2030.

1.2.10 EU Chemical Strategy for Sustainability

The European Commission adopted its Chemical Strategy for Sustainability[22] in October 2020. The strategy forms part of the EU's zero-pollutant target and aims to better protect citizens and the environment from harmful chemicals and drive innovation by promoting the use of safe and sustainable chemicals. In particular, the strategy aims to ban the most harmful chemicals in consumer products. New chemicals and materials must be as inherently safe and sustainable as possible, from production to end of life.

19 2009/125/EC (eur-lex.europa.eu/legal-content/DE/ALL/?uri=celex%3A32009L0125)
20 COM(2016) 773 (eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016DC0773)
21 COM(2021)400 final (eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM%3A2021%3A400%3AFIN)
22 COM(2020)667 final (eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A667%3AFIN)

2
Vision, goals and fields of action

Only achievable together! The WPP 2023 is a programme for all stakeholders and is intended to identify approaches for preventing waste at all levels. To implement the programme, everyone needs to be involved – on the production side and the consumption side.

Waste prevention faces many challenges, especially when waste prevention measures conflict with the consumption and production interests of the affluent society. The environmental impact of resource consumption is often underestimated. Furthermore, the rapid development of the environmental policy framework at international, European and national level in recent years, as well as global crises (e.g.: COVID-19), have had a significant impact. New priorities for the subsequent period, e.g.: single-use plastic articles or textiles, must be taken into consideration as a result.

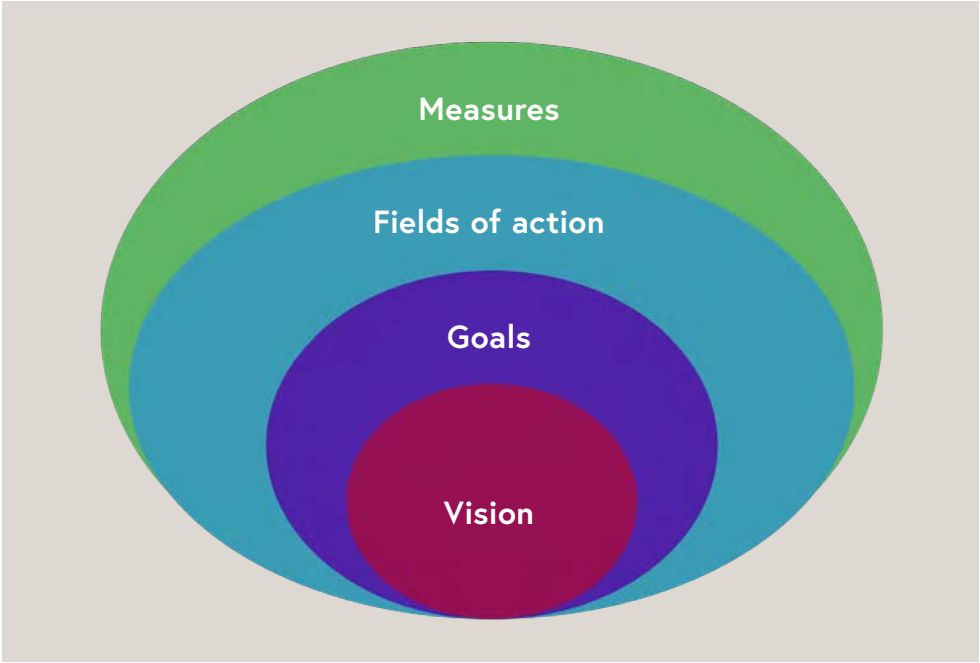


Figure 3: WPP 2023 - Development from the vision to the measures

Source: Environment Agency Austria

The WPP is based on a vision of how the Austrian economy and consumption should function in the future and derives the measures from the objectives and fields of action (= priorities). The programme contains measures that are already underway, measures that have been adapted to the current framework conditions and new measures, some of which extend beyond 2028. A large number of stakeholders are responsible for developing and implementing the measures, and their interaction ultimately determines the degree of the WPP's success.

2.1 Vision

The vision for the material and waste management system in Austria can be described as follows for the WPP 2023:

- The objectives of the AWG 2002 have been achieved in Austria with a high level of effectiveness and efficiency. Resource conservation and environmental compatibility have been ensured in the long term, in particular by promoting a circular economy;
- Relevant information on material and waste flows is routinely recorded, visualised and communicated;
- The pollutant content of products has been reduced. The dissipation of pollutants during product manufacture, product utilisation and the recovery or disposal of waste has been significantly reduced;
- The overall use of raw materials has been successfully reduced, particularly for materials whose availability is limited, and material recycling has been further expanded;
- The production and use of resource-efficient, durable, repairable and reusable products is the focus throughout Austria, particularly for electrical and electronic equipment, textiles, furniture, packaging and building materials;
- Cost transparency, extensive responsibility on the part of producers and distributors of products and therefore the sustainable use of resources have become established;
- The topic of waste prevention is anchored in the (primary, secondary and relevant tertiary) education system;
- A regular exchange of experience and information between stakeholders is ensured;
- The stakeholders have extensive knowledge of and implement measures in all areas of waste prevention;
- Littering has been curbed;
- A significant step has been taken from a throwaway society to a sustainable society.

2.2 Goals

The aim of waste prevention is to reduce the environmental impact associated with the manufacture and use of products and the generation of waste. The aim is to ensure the protection of the environment and human health and to decouple economic growth from the environmental impacts associated with waste volumes. The targets based on the AWG 2002 have been adapted to consider current developments at national and European level. This results in the following goals for the WPP 2023:

- Increasing waste prevention, conserving resources and increasing the efficiency of resource use;
- Decoupling economic growth from the environmental impact of waste;
- Changing values and adapting behaviour towards sustainable production and consumption;
- Reducing emissions;
- Reducing pollutants;
- Minimising the dissipation of pollutants;
- And adapting behaviour to curb littering.

2.3 Fields of action

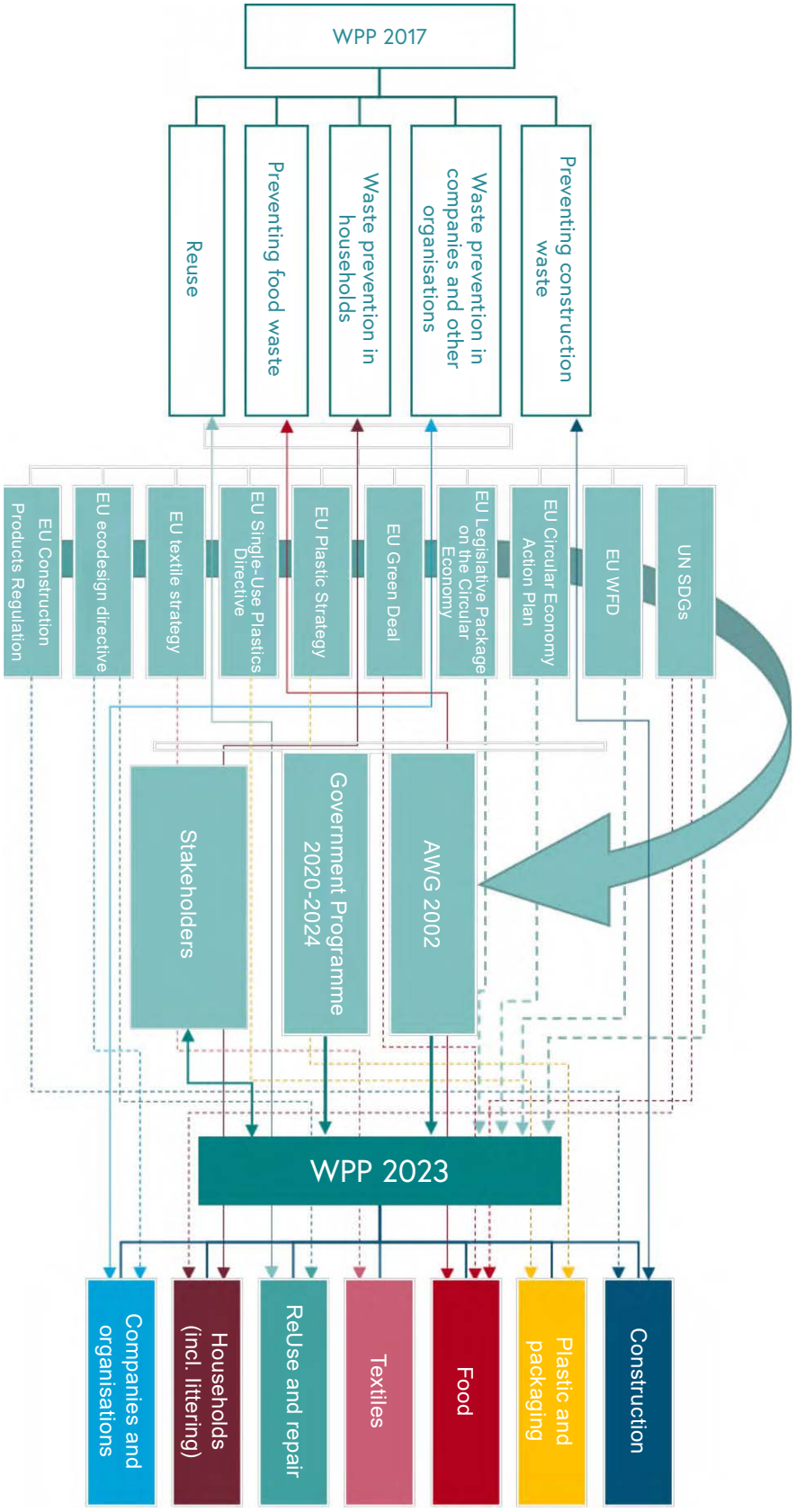
Priorities are set in the form of "fields of action" as a means of realising these goals effectively and efficiently. The definition of "fields of action" serves to bundle the planned measures in such a way that a synergistic effect is achieved.
The field of action (and subsequently the measures) of the WPP 2023 are based on the legal framework and the evaluation of the WPP 2017, the analysis of the challenges to be expected in the coming years, the inclusion of best practice examples from other EU Member States and the involvement of stakeholders and their contribution to the development of the WPP and will be defined as follows:

- Construction;
- Plastic and packaging;
- Food;
- Textiles;
- Reuse and repair;
- Households (incl. littering);
- Companies and organisations.

The figure below shows the main factors influencing the derivation of the fields of action.

Figure 4: Key influencing factors for determining the fields of action for the WPP 2023

Source: Environment Agency Austria



3 Measures from the Waste Prevention Programme 2023

Continuing the tried and tested and tackling new things! The WPP 2023 contains a mix of measures from the WPP 2017, the implementation of which has already begun or which have been adapted, and new measures.

The measures selected for the fields of action are those that appear relevant to the stated objectives of the WPP in the coming years. In principle, the WPP covers all material flows, but prioritises certain areas that have been selected based on the following criteria, among others:

- Material flows with a particularly high environmental impact (e.g.: building materials, hazardous waste, textiles, food, plastics);
- Areas with a higher potential for waste prevention (e.g.: food waste, reuse and repair, packaging waste);
- Approaches to sustainable consumption, e.g.: extending the useful life or moving away from a throwaway culture (e.g.: reuse, packaging, textiles).

The timeframe for implementing these measures should be considered medium-term, with the evaluation of the WPP usually beginning after a period of four years. It can be assumed that not all measures of the WPP 2023 will have been completed by the next update. Overall, the WPP 2023 is intended to act as a driver towards an environmentally friendly and circular Austrian economy and society. The programme is intended to contribute to Austria's sustainable development and to reducing the burden on both the climate and the environment.

3.1 "Construction" field of action

3.1.1 Background/problems

Construction and demolition waste plays a special role from an environmental policy perspective due to the large amount of material used and waste it generates. Construction and demolition waste are materials produced during construction and demolition activities in building construction or civil engineering. 90% of this waste is generated when buildings are demolished, remodelled and renovated. Around 10 % of waste is generated when constructing new buildings (BMLFUW 2003). In terms of building construction, this mainly involves concrete, brick and other masonry demolition waste as well as excavated material and, in smaller quantities, wood, metals, plastics and hazardous waste. In addition to excavated material, civil engineering also produces cuttings of formwork timber, reinforcing steel and demolished concrete and asphalt.

The need to prevent construction and demolition waste arises primarily:

- due to the major environmental impact and impairment of the landscape caused by the extraction of raw materials for the construction industry;
- due to the high material and energy consumption for the production of building materials and the comparatively large amount of waste generated in the construction industry;
- due to the lack of awareness that closed-loop recycling should be considered as early as the planning phase of a building;
- due to the lack of information about the composition of existing buildings and
- due to the difficulty of reusing building components if they consist of material composites that are difficult to separate.

The majority of (mineral) construction and demolition waste is recyclable, but there is little confidence in the quality of the recycled material obtained from it. Economic conditions, such as raw material prices, can also present obstacles to recycling and reuse. In the European Green Deal and the EU Circular Economy Action Plan from 2020, the construction industry is cited as one of the sectors where the most resources are consumed and where there is great potential for a circular economy. The planning and tendering phase in particular has a decisive impact on the service life of buildings and the reusability and recyclability of the materials used. The Waste Framework Directive[23] has set annual recycling and recovery targets of 70% for non-hazardous construction and demolition waste from 2020[24] onwards. According to the EU Construction Products Regulation[25], one of the requirements of a building is that it is designed, constructed, and demolished in such a way that natural resources can be used sustainably and the following is guaranteed:

- Environmentally friendly raw materials and secondary building materials must be used for the structure;
- The durability of the structure is ensured;
- The building, its building materials and parts should be able to be reused or recycled after demolition.

Possible changes in the building use should be taken into consideration at the planning stage so as to design the structure to be as durable as possible. It is necessary to use materials that contain as few pollutants or contaminants as possible in terms of reuse or recycling. The separability of the materials, which is only possible to a limited extent or at great expense with the increased use of composite materials, also plays a decisive role.

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23 2008/98/EC (eur-lex.europa.eu/legal-content/DE/ALL/?uri=celex%3A32008L0098)
24 includes preparation for reuse, recycling and other types of material recovery.
25 305/2011/EU (oib.or.at/sites/default/files/bpv.pdf)

Attention must also be paid to "dismantling with a view to recovery" while demolition work is underway (regardless of the scope) so that recovered materials and building parts from the construction industry can be put to further use and therefore remain in the material cycle.
The following framework conditions/challenges, among others, should be taken into consideration as a means of counteracting the negative environmental impact and the increasing volume of construction and demolition waste:

- The untapped potential for extending the service life of buildings/parts of buildings must be taken advantage of in the near future. The change of use of existing buildings (e.g.: converting of a factory hall into lofts, to cite a practical example) also plays a key role here;
- The extent to which building materials such as concrete, bricks and steel are recovered is very high in Austria and is reflected in the amount of recycled building materials produced. However, it is not only heavy building materials that are recycled, but also large-volume insulation materials, for example. Material recycling options for lighter building materials, such as insulation materials, should therefore be promoted;
- Components or building materials that contain hazardous substances or additives (e.g.: plastic fibres in screeds) are problematic. Knowledge of the composition is important in the course of reuse or material recycling;
- Building materials and components that consist of several materials or components should be easy to separate at the end of their useful life so that the separately collected material flows can then be reused and recycled.

3.1.2 Goals and expected outcome

The main objectives of the "Construction" field of action are:

- Considering waste management aspects in the planning of buildings and in the development and use of building materials;
- Promoting techniques and technologies to extend the life and useful life of buildings and parts of buildings;
- Extending the useful life by changing the use of existing (public) buildings (e.g.: office space into flats);
- Preventing hazardous substances or easily separating hazardous and non-hazardous substances;
- Increasing the use of recycled building materials in order to save resources (raw materials, energy) and promote the circular economy.

This should lead to an increase in the material efficiency of buildings and a reduction in the use of materials. The measures should contribute to extending the useful life of entire buildings or parts of buildings, promote dismantling with a view to recovery, and reusing the resulting components. A reduction in waste volumes and an improvement in the quality of construction waste can be expected in the long term. Waste management issues are increasingly being taken into consideration in the relevant education sector.

Figure 5: One of the goals: Conserving resources by reusing and using recycled building materials

Source: stock.adobe.com – nordroden

3.1.3 Indicators

The following indicators are used to evaluate the measures:

- Total waste generated in the construction industry in relation to gross value added in the construction sector [kg/€1,000];
- Volume of reused construction materials and products [tonnes per annum];
- Rate at which construction and demolition waste is recycled (excl. excavated material) [%].

3.1.4 Measures

The planned catalogue of measures for the “Construction” field of action is described in the following table and the relevant stakeholders for implementation are shown.

Table 1: Catalogue of measures for the "Construction" field of action

No	Measure	Federation/provinces of Austria/ municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
B1	Research into and the development of technologies and techniques that conserve resources/prevent waste as well as implementing pilot projects (e.g. flexible building design, modular construction, preventing pollutants and contaminants, the separability of components and building materials, extracting and marketing entire components from building demolition)	√	√	-	√	√	√
B2	The development of a standard for sustainable, recycling-friendly construction (e.g.: in an OIB Guideline 7 of the Austrian Institute of Construction Engineering)	√	√	-	-	√	-
B3	Integrating relevant topics (including dismantling with a view to reusing and recovering) in education and training, especially at higher technical colleges, universities and universities of applied sciences, but also in teaching/vocational schools, and creating teaching and learning aids as well as sharing knowledge and experience in the education sector	√	√	-	-	-	√
B4	Promoting "construction that conserves resources" and "dismantling with a view to recovery" in building planning (focus in construction on high flexibility with regard to changes of use (e.g.: by using appropriate floor plan designs, room heights) and construction methods with easy separability/dismantling, especially for reuse)	√	√	√	√	√	-

No	Measure	Federation/provinces of Austria/ municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
B5	Promoting the extension of the useful life of public buildings and mandatory application of the building and civil engineering criteria of the national Action Plan for Sustainable Public Procurement (naBe) in public tenders/contracts	√	-	-	-	-	-
B6	Increased use of natural, renewable and biodegradable raw materials for all load-bearing and non-load-bearing products and structures, in particular insulating materials, and applying restrictions to the use of building materials containing non-separable plastics, e.g.: thermal insulation mortar, screeds	√	√	√	√	√	-
B7	Networking stakeholders to increase the likelihood of reusing components (e.g.: through platforms, events)	√	√	√	√	-	-
B8	Examining the possibilities of taking measures that conserve resources into consideration in housing subsidies (e.g.: surcharges for implementing sustainable construction in housing subsidies)	√	-	-	-	-	-
B9	Mandatory specification of a quota for reused components and recycled building materials used in construction projects and review of a mandatory quota	√	√	√	√	-	-

3.2 "Plastic and packaging" field of action

3.2.1 Background/problems

Due to their diverse, functional properties, plastics can be found in all areas of life and have become an integral part of everyday business and private life. As a result, the demand for plastics is constantly increasing, with one third being used for packaging (Plas et al. 2022). Around 1.04 million tonnes of plastic waste ("unmixed" plastic waste, such as plastic packaging, plus the plastic content of waste containing plastic, such as small electrical appliances) was generated throughout Austria in 2020. From 2014 to 2020, there was an increase in total packaging consumption of 10.3 % (plastic packaging: + 1.3 %). In 2020, around 296,000 tonnes of plastic packaging were produced in Austria, of which around 31% was recycled.

The EU has taken measures to significantly reduce plastic waste in response to the increase in plastic production, the steadily rising volumes of plastic waste and the negative environmental impact associated with wasteful handling. The strategy for plastics[26], which forms a key part of the circular economy package, aims to develop a sustainable, circular plastics value chain. The Single-Use Plastics Directive[27] also specifies numerous measures to reduce the consumption of certain single-use plastic products, limit the careless disposal of these products in the environment, and improve how we manage plastic as a resource. The new action plan for the circular economy[28] stipulates that packaging and plastics are among the central product value chains with high circular potential. The European Commission will propose binding requirements for the recycled content and waste reduction measures for important products such as packaging, building materials and vehicles to increase the use of recycled plastics and contribute to a more sustainable use of plastics. For example, all packaging on the EU market should be able to be reused or recycled in an economically viable way by 2030. The following challenges, among others, must be overcome to counteract the increasing quantities of short-lived single-use plastic products and packaging waste and prevent microplastics from entering the environment:

- The consumption of single-use plastic items (in particular single-use beverage cups, single-use crockery and cutlery), which are disposed of after a short or single use, should be significantly reduced;
- Taking product protection into account, the amount of packaging should be limited to what is absolutely necessary (e.g.: avoiding or reducing outer packaging);

26 COM/2018/028 final (eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A28%3AFIN)
27 2019/904/EU (eur-lex.europa.eu/legal-content/DE/ALL/?uri=celex%3A32019L0904)
28 COM/2020/98 final (eur-lex.europa.eu/legal-content/DE/ALL/?uri=COM%3A2020%3A98%3AFIN)

- Packaging should increasingly be designed (product design) in such a way that it is reusable and can be recycled as often as possible. Strengthening reusable systems and unpackaged systems plays an important role here;
- Single-use packaging should be designed in such a way that it can be easily sorted and economically recycled;
- Low-pollutant recycling of plastics requires the substitution of hazardous substances or their elimination before they are returned to the material cycle;
- Plastic film from agriculture and tree covers from forestry are often not collected after use, which results in plastic entering the soil;
- An increasing problem is the entry of microplastics into the environment, which is caused, for example, by their addition to certain product categories (such as cosmetics, detergents, paints), by the wear and tear of products (such as tyres, paints and synthetic clothing) or by littered objects. Special precautions must therefore be taken to prevent them for entering the environment;
- Packaging waste in particular is increasingly being carelessly thrown away ("littered") despite the existence of a collection infrastructure and this is due to an increased use of public spaces and changes in consumer behaviour,. This phenomenon can be curbed by raising awareness and promoting reusable systems, among other things.

3.2.2 Goals and expected outcome

The main objectives of the "Plastics and packaging" field of action are:

- Reducing the use of short-lived plastic products;
- Reducing the use of packaging materials;
- Increasing recycling;
- Changing consumer habits (e.g.: buying reusable instead of single-use, repairing/ renting instead of buying new);
- Increasing the recyclability of plastics;
- Increasing the use of secondary materials in plastic products;
- Reducing hazardous substances in plastics;
- Preventing plastics from entering the environment (littering[29] and microplastics).

The measures in this field of action should make a significant contribution to reducing single-use products made of plastic and packaging materials and the associated negative environmental impacts. Awareness-raising measures are intended to motivate consumers to make their purchasing decisions with regard to reusable packaging and durable, repairable products. The supply of reusable packaging will increase and unpackaged systems will gain in importance. The recyclability and recyclate content of plastics will

29 The waste prevention programme must also include measures to prevent littering according to section 9 AWG 2002 (when implementing the European Waste Framework Directive).

increase due to the mix of measures. The European Chemicals Agency's SCIP [30]database provides more transparency about hazardous chemicals in products and indirectly also ensures substitution. Litter and microplastics are also to prevented from entering the environment or their impact reduced.

3.2.3 Indicators:

The following indicators are used to evaluate the measures:

- Packaging placed on the market per packaging material [tonnes per annum], [kg per annum];
- Recycling rate per packaging material [%];
- Reusable rate – packaging [%];
- Reusable rate – drinks containers (in relation to filling volume) [%];
- The quantity of beverage cups and food packaging placed on the market that are subject to the Single-Use Plastics Directive [tonnes per annum].

3.2.4 Measures

The planned catalogue of measures for the "Plastics and packaging" field of action is described in the following table and the relevant stakeholders for implementation are shown.

30 SCIP: Substances of concern in articles as such or in complex objects (products).

Table 2: Catalogue of measures for the "Plastics and packaging" field of action

No	Measure	Federation/ provinces of Austria/ municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
K1	Research and development of new solutions for weight reduction, reuse and recycling of plastics, especially those in the area of packaging	√	√	-	√	√	-
K2	Introducing a deposit for single-use drinks containers made of plastic or metal	√	√	-	-	-	-
K3	Developing measures to further reduce the consumption of single-use plastic products by 20% (reduction in consumption, beverage cups, food packaging, plastic films in mailing (catalogues, magazines)) and evaluating the rate at which single-use beverage cups and packaging are consumed	√	√	-	√	√	-
K4	Continuing to hold a stakeholder dialogue for packaging	√	√	-	√	√	-
K5	Supporting EU activities such as: - The global agreement against plastic pollution, - limiting the volume and weight of packaging to the minimum for product protection	√	√	-	-	-	-
K6	Implementing educational measures which address the problem of short-lived plastic products and the positive image of reusable alternatives and products with a high proportion of recycled materials, including as a result of - (Specialist) support for environmental/waste counselling regarding single-use plastic beverage cups/ tableware and their alternatives; - The provision of teaching and informative materials (especially to-go and take-away consumption); - Promoting the European Week for Waste Reduction	√	√	√	√	-	√

No	Measure	Federation/ provinces of Austria/ municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
K7	Changing the product design with regard to freedom from harmful substances, material reduction, material selection, extended use and recyclability of plastic products	-	√	-	-	√	-
K8	Promoting durable products and products with a high recycled content in public procurement	√	-	-	-	√	-
K9	Supporting the ban on the use of microplastics in products at EU level (as a product/product component) and conducting investigations into the prevention/ reduction of microplastics in the environment (e.g.: using washing processes, sports fields, tyre abrasion) (see Microplastics Action Plan 2022-2025)	√	√	-	√	√	-
K10	Using biodegradable, verifiably renewable raw materials for products that are used in agriculture/forestry to remain in nature	-	√	-	-	-	-
K11	Measures to promote reusable packaging: - Supporting projects to establish new reusable solutions, especially plastic-free options, also to reduce littering; - Examining the extension of the reusable cup and crockery requirement at major events, e.g.: at state level; - Promoting the use of reusable crockery and the provision of washing facilities (e.g.: for reusable crockery for take-away, reusable cups); - Examining a mandatory reusable product range for take-away products (e.g.: coffee-to-go); - Cost-effective supply of reusable alternatives to disposable beverage cups and take-away packaging at the point of sale; - Testing the use of reusable packaging for food in communal catering; - Promoting standardised reusable (standard) containers, such as 0.33 l beer bottles, and strengthening reusable systems in the distribution of goods (e.g.: in online retail)	√	√	-	√	√	-

No	Measure	Federation/ provinces of Austria/ municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
K12	Increased transparency on harmful substances in products using the European Chemicals Agency's (ECHA) SCIP database to inform the recycling industry and consumers	√	√	-	-	-	√
K13	Promoting unpackaged systems and filling systems: - for individual product groups (e.g.: detergents) in the retail sector, including training sales staff to actively promote reusable solutions or to fill containers they have brought with them; - Creating a guide for the catering and retail sectors; - An increase in the number of publicly accessible water fountains	√	√	-	√	√	-
K14	Streamlining the packaging design to make it easier to empty residues	-	√	-	-	√	-

3.3 "Food" field of action

3.3.1 Background/problems

It is estimated that around 88 million tonnes of food - around 20% of all food produced – is wasted every year in the European Union along the entire value chain (agriculture, production and processing, trade, restaurant and food service catering, households) (EEA 2020). This leads to unacceptable social, environmental and economic impacts. The reduction of food waste is therefore of particular importance: in the medium to long term, land, water and energy consumption associated with production can be reduced and biodiversity losses minimised. Food waste also offers considerable potential for reducing greenhouse gas emissions.

A fundamental distinction must be made between avoidable and non-avoidable food waste: While it is virtually impossible to avoid leftovers[31] when processing and using (fresh) products, food waste, originally packaged and opened food can be largely avoided through careful planning, purchasing, storage, processing and use.

The urgency and challenge of combating food waste is emphasised at international level by UN SDG Goal 12.3, but the European Commission's 2015 Circular Economy Package also shares this goal. It calls for an EU-wide reduction in food waste of 30% by 2025 and 50% by 2030.

It should be noted that the generation (and therefore also the prevention) of waste generally correlates with production volumes and the resulting supply. This applies in particular to food, whose useful life and recyclability can only be extended to a very limited extent compared to other product groups. The more food is produced and subsequently sold (in the sense of oversupply) (in relation to the number of consumers), the greater the potential for resulting waste.

The complete consumption of the food offered and sold on the Austrian market would probably lead to a massive health policy problem and therefore cannot be used as a solution to the problem. The measures mentioned to prevent food waste would therefore ultimately have to lead to reduced demand at the consumer level and ultimately at the food retail level in order to achieve the desired goals, which remains to be seen.

In Austria, it is estimated that around 640,000 tonnes of avoidable food waste (excluding food waste from agriculture and processing) are produced each year, with the largest proportion occurring in households, followed by restaurant and food service catering. This corresponds to around 71 kg per capita per year. In households, considerable quantities of opened and originally packaged food (=avoidable food waste) are disposed of. Common reasons include a lack of planning for shopping and meals (unplanned indulgence purchases), incorrect storage or preservation of food and a lack of knowledge about extending the shelf life (e.g.: preserving). The best-before date (BBD) is still often wrongly associated with the idea that food is inedible after this date. However, XXL packs and the increase in restaurant and food service catering (especially

31 This includes mainly non-edible components such as bones or banana peels.

the to-go range and delivery services) are also often the reason for more food being thrown away.

Numerous activities have been organised at national level in recent years to combat food waste. The Ministry of the Environment's "Food is precious!" initiative, which has been in place since 2013 and managed in close cooperation with businesses, the provinces, municipalities and waste management associations, employees, consumers and social organisations, aims to prevent and reduce food waste in a targeted and sustainable manner throughout Austria. To date, around 100 organisations/companies from a wide range of sectors have been won as cooperation partners, who for their part are taking consistent action against food waste. Numerous activities have been carried out to date as part of the initiative, such as the development and implementation of the "Food is precious!" initiative (BMNT 2019). (BMNT 2019), the voluntary agreement to prevent food waste at food companies[32], the introduction of the Tafelbox or GenussBox at events, in the catering and hotel industry and at catering companies, the establishment of an online platform for food sharing, the development and implementation of the "United Against Waste" platform and the guidelines for distributing food waste to welfare services.

Building on the measures taken so far, the Austrian Government Programme 2020-2024 also sets out a further action plan against food waste along the entire value chain in partnership with Austrian retailers, producers, and charitable organisations. This action plan forms part of the WPP 2023 (Chapter 8).
In particular, the prevention of food waste should continue to:

- Sustainably manage food in the areas of agriculture, production, processing and retail;
- Promote the coordination of supply and demand in food distribution and expand the infrastructure for buffering between supply and demand;
- Sustainably manage food in canteen kitchens, hotels and the catering industry;
- Raise awareness of the impact of food waste and the skills needed to counteract it;
- Raise awareness, especially among consumers, that food is edible even after the best-before date;
- Provide support to overcome behavioural barriers to achieve needs-based food consumption.

32 bmk.gv.at/themen/klima_umwelt/abfall/abfallvermeidung/lebensmittel/partner/pakt

3.3.2 Goals and expected outcome

The long-term goal is to reduce the amount of avoidable food waste in Austria in all areas of the value chain, i.e.: from production to consumption. In particular, the UN's 2030 Agenda for Sustainable Development aims to halve the per-capita volume of avoidable food waste at the retail and consumer level by 2030, and reduce food losses along the production and supply chain, including post-harvest losses.

Figure 6: Variable portion sizes can prevent food waste

Source: stock.adobe.com – kpn1968

The measures defined are intended to support a more demand-orientated production, processing and distribution of food. The potential to prevent waste in companies and in distribution is to be realised to a greater extent. In particular, food that cannot be sold should increasingly be distributed elsewhere, e.g.: to social markets and food banks. However, post-harvest losses, goods of inferior quality, unharvested food (including from private home gardens) and alternative regional sales opportunities should also be included in future. Preventing food waste in canteen kitchens, the catering industry and accommodation establishments is increasing, particularly with a focus on the to-go sector and delivery services. Gaining information about ways to avoid food waste along the entire value chain, especially in the household sector, should motivate people to get involved. Consumers' expectations regarding the constant availability of the entire product range still need to be adjusted in some cases. Integrating the topic in nurseries and schools, in training courses and programmes and in industry-specific training courses contributes significantly to raising awareness, sharing knowledge, and implementing measures. Overall, this will improve the nutritional situation while at the same time reduce the consumption of resources and the amount of avoidable food waste as well as the effort required for waste treatment.

3.3.3 Indicators:

The following indicators are used to evaluate the measures:

- Volume of food waste [kg per capita per annum];
- Volume of food waste from agriculture [tonnes per annum][33];
- Volume of food waste from processing and production [tonnes per annum; alternatively in kg per company per annum];
- Volume of (avoidable) food waste from retailers [tonnes per annum];
- Volume of food waste from food retailers [tonnes per annum];
- Volume of (avoidable) food waste in restaurants and food services [tonnes per annum];
- Volume of (avoidable) food waste from private households [tonnes per annum, kg per capita per annum; alternatively: in kg per household per annum];
- Volume of avoidable food waste from the consumer sector[34] [tonnes per annum, kg per capita per annum].

3.3.4 Measures

The following table sets out the measures for the "Food" field of action and the relevant stakeholders for implementation. Specific measures from the enclosed 'Food is precious!' initiative must also be implemented for the various stages of the value chain (Chapter 8).

33 Data is used in accordance with the EU food waste reporting obligation. It is methodically specified which waste from agriculture is to be taken into consideration (see Commission Delegated Decision (EU) 2019/1597 dated 3 May 2019).

34 This includes: Retailers, restaurants and food services, households.

Table 3: Catalogue of measures for the "Food" field of action

No	Measure	Federation/ provinces of Austria/ municipalities	Economy	Consumers	NGOs /Civil society organisations	Research	Training and further education
L1	Continuing the work of the national coordination centre and the associated working groups	√	√	√	√	√	√
L2	Continuing and expanding voluntary agreements, such as the cooperation "Agreement 2017-2030 on preventing food waste at food companies"	√	√	-	-	-	-
L3	Continuing to network stakeholders, e.g.: at the stakeholder dialogue on preventing food waste	√	√	√	√	√	√
L4	Research into the potential of avoidable food waste and food losses, realising this potential for prevention, and continuing existing funding channels	√	√	-	-	√	-
L5	Implementing educational measures to prevent food waste, in particular for low-waste consumer behaviour, in the area of relevant personnel or industry-specific and for educators	√	√	-	√	√	√
L6	Taking advantage of opportunities in the context of public procurement or in public institutions (e.g.: hospitals)	√	-	-	-	-	√
L7	Strengthening alternative, regional sales opportunities	√	√	√	√	√	-
L8	Promoting further processing and distribution	-	√	-	√	√	-
L9	Promoting a more demand-orientated approach to planning at all stages of the value chain (from production to consumption) and adapting the concept of returned goods	-	√	√	√	-	√
L10	Expanding or supporting already established strategies to other areas, in particular wholesale and processing: - Distributing products; - Staff training courses	√	√	√	√	√	√
L11	Promoting the distribution of edible food to welfare organisations	√	√	-	√	-	√

3.4 "Textiles" field of action

3.4.1 Background/problems

The textiles sector, including the fashion industry, has a significant environmental footprint along its value chain and is cited in the European Green Deal as one of the most resource-intensive sectors. Natural fibres such as cotton and wool are produced using vast agricultural areas and large amounts of water, energy and chemicals, while the production of synthetic fibres is mostly based on fossil raw materials. The use of chemicals and additives in textile production has a significant impact on local and regional waters. A large proportion of production often takes place in countries where appropriate regulatory frameworks are lacking or are inadequately implemented. Washing and drying textiles in the use phase consumes considerable amounts of water and energy as well as releases chemicals and microplastics into rivers and ultimately into the marine environment.

In light of the rise in clothing consumption in recent years and the trend on the fashion market towards "fast fashion" (inexpensive and frequently changing fashion collections), there has been a massive increase in the consumption of clothing, shoes, textile accessories and household and home textiles[35]. In conjunction with an ever shorter useful life, the amount of used textiles produced each year is also growing rapidly. Economically unstable phases, such as the COVID-19 crisis, are also having an impact on the market and the volume of waste. The recycling of used textiles is also still associated with a number of problems, which means that only less than one per cent[36] of all materials used in clothing worldwide are used to produce new clothing.

The European Union has therefore stipulated that textile waste (including clothing, household textiles and mattresses) must be collected separately in all member states by 2025 at the latest. A decision will be made by the end of 2024 on whether targets for the reuse and recycling of textile waste will be set. A comprehensive EU textile strategy has been developed in view of the complexity of the textile value chain. The strategy is intended to help make textile products and services more environmentally friendly, pollutant-free, durable, repairable – in other words: recyclable. The new requirements for the design of textiles are to be defined as part of the Ecodesign Directive for sustainable products. Higher quality, innovation and reuse in the textile sector are also to be stimulated and alternatives to fast fashion launched. The topic of textiles is also included as a priority in other European Commission initiatives.

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35 Household textiles include textile products that are used in the household for personal use. Examples include bed and table linen, towels, bath towels and tea towels. Textiles that are used for furnishings, on the other hand, are categorised as home textiles. These include, for example, carpets, curtains, mattresses, blankets, decorative and upholstery fabrics and upholstered furniture.

36 europarl.europa.eu/RegData/etudes/BRIE/2019/633143/EPRS_BRI(2019)633143_EN.pdf

It is estimated that 19kg of textiles are purchased per capita in Austria every year. This corresponds to around 60 items of clothing[37] per person per year. Clothing and shoes account for around 5% of household spending in Austria. 2020, a total of around 38,000 tonnes of used textiles[38] were collected separately and prepared for reuse in Austria and abroad. A much larger quantity is currently contained in mixed municipal waste (residual waste) (according to sorting analyses[39], an average of 3.8% textiles and 1.2% shoes[40]). In 2020, this corresponded to a mass of around 90,000 tonnes that will be used for energy recovery. This results in a total annual per capita volume of around 15.5 kg of used textiles. The concepts of "reduce", "reuse" and "recycle" must be promoted and implemented in the future to counteract the negative environmental impact of textile production and the increasing quantities of textile waste:

- **Reduction** essentially comprises reduced production, the lower/more efficient/sustainable consumption of resources in production, significantly less consumption or sustainable purchasing behaviour and an extension of the useful life.
- **Reuse** includes the various options for passing down items (within the family and circle of acquaintances, clothing donations, swap meets, second-hand platforms), making use of the concept of "borrowing instead of buying" and extending the useful life of clothing (by repairing clothing, re-purposing defective clothing, returned clothing or stock that can no longer be used in new products).
- **Recycling** includes, on the one hand, recycling into wiping cloths, insulation material or similar applications and, on the other hand, fibre recycling, which can be carried out either mechanically or chemically. In the latter case, new fibres are obtained from used textiles and these are reused to produce new goods.

It is essential to involve all players along the entire textile value chain to drive forward the development of new business, behavioural and consumption models.

3.4.2 Goals and expected outcome

The key objectives of the "Textiles": field of action are:

- Reducing overproduction and overconsumption, in particular by moving away from fast fashion;
- Increasing the longevity/lifespan of textiles;

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37 with an average weight of 320 g per unit.

38 (BMK 2021a). In this context, used textiles include clean and wearable clothing and shoes, undamaged belts and bags as well as clean and usable curtains, table and bed linen.

39 Calculated average value based on the residual waste analyses carried out in all provinces in 2018/2019.

40 When it comes to commercial residual waste, only the portion that has a household-like composition is taken into consideration. This results in a weighted textile content of 4.27% for the total volume of SN 91101 "Municipal waste and similar commercial waste" (EAA, 2022).

- Extending the useful life in the initial use phase in conjunction with increasing reuse;
- Changing purchasing habits (conscious shopping) and the usage behaviour of consumers (borrowing instead of buying).

The measures are intended to make a significant contribution to increasing the durability of textiles and the associated reduction in textile waste. This includes promoting slow fashion in particular. A significant reduction in consumption, more sustainable and quality-oriented purchasing behaviour and an extension of the useful life of textiles, including the promotion of repair and reuse, are also expected among the general public and public institutions. More textiles that are no longer used are to be passed down instead of being disposed of with residual waste.

3.4.3 Indicators:

The following indicators are used to evaluate the measures:

- Mass of used textiles collected separately [kg per capita per annum];
- Volume of reused products – product category: Textiles [tonnes per annum, kg per capita per annum].

3.4.4 Measures

The following sets out the catalogue of measures for the “Textiles" field of action and the relevant stakeholders for implementation are shown.

Table 4: Catalogue of measures for the "Textiles" field of action

No	Measure	Federation/ Provinces of Austria/ municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
T1	Research and development of "more sustainable" (renewable, recyclable) fibres and more sustainable consumption patterns	√	√	-	-	√	-
T2	Stakeholder dialogue on textiles: Establishing a stakeholder initiative to exchange information and experiences, and to promote the circular economy and sustainable production	√	√	√	√	√	√
T3	Examining the possible organisation of extended producer responsibility, in particular to prevent the destruction of new goods	√	-	-	-	-	-
T4	Considering repair, reuse and recycling designs in fashion design curricula and supporting textile (education) programmes to promote cooperation between universities, schools and companies	√	√	-	-	-	√
T5	Promoting sustainable product designs and the use of sustainable fibres and secondary raw materials, with a focus on the durability, separability, and recyclability of materials and establishing green chemistry in production	-	√	-	-	√	-
T6	Adapting the criteria for public procurement with regard to aligning oneself with sustainable standards for textiles	√	-	-	-	-	-
T7	Measures for distributing and using eco-labels for textiles, shoes, and rented textiles	√	√	-	√	-	-

No	Measure	Federation/ Provinces of Austria/ municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
T8	Educational measures to raise awareness of sustainable purchasing and consumer behaviour: - To promote Slow Fashion; - With regard to textile seals of quality; - For the reuse of textiles and to minimise the release of microplastics (through the use of textiles); - Expanding educational programmes at adult education centres, repair cafés, sewing cafés or similar facilities to enable people to carry out sewing work or repairs to clothing, shoes and accessories themselves	√	√	-	√	-	√
T9	Promoting the concept of "sharing instead of buying" or other alternative business models, in particular through pilot projects	√	√	-	√	-	-
T10	Passing down usable, unsold product stocks or returned goods to welfare institutions or other organisations	-	√	-	√	-	-
T11	Promotion of flea markets, swap meets and second-hand marketing concepts as well as social department stores, especially in rural regions	√	√	√	√	-	-
T12	Further developing streamlined collection and logistics processes for reuse	√	√	-	-	-	-
T13	Expanding the "Clothing and accessories" range in the repair guide	√	√	-	-	-	-

3.5 "Reuse and repair" field of action

3.5.1 Background/problems

The side effects in many affluent societies include a shortened useful life of products and a low value placed on repairs (also for cost reasons). This trend is being increasingly counteracted at European level and in Austria with the principles of waste prevention and the circular economy. Ideally, this enables access to goods that are sustainably designed and can be reused, repaired, and remanufactured.

The promotion of reuse and repair has become an essential part of waste prevention in European waste legislation. The EU Waste Framework Directive stipulates that the design, manufacture and use of products that are resource-efficient, durable, repairable and reusable should be promoted. Appropriate measures must be taken to promote the reuse of products and preparation for reuse. Priority areas for promoting repair and reuse activities include electrical and electronic appliances, textiles, furniture and the construction industry in particular. The measures proposed in the Circular Economy Action Plans aim to close the loop of product life cycles thanks to increased reuse and recycling. The European Commission is proposing a new Ecodesign Regulation for sustainable products as part of a sustainable product policy.

A revision of EU consumer law has been proposed to improve consumer participation in the circular economy and waste prevention. In future, it should be ensured that consumers receive trustworthy and relevant information about products when making a purchase. This includes, for example, the lifespan, availability of repair services, spare parts and repair manuals. The new regulations are also intended to better protect consumers from greenwashing or premature obsolescence.

In Austria, the reuse sector has developed extremely well in recent years with a strong momentum. Collection and sales volumes have been increasing since 2015. The previous year's level was almost reached in 2020 despite pandemic-related challenges. A total of 59,700 tonnes of reusable end-of-life products[41] were collected by 55 Austrian reuse companies in 2020, of which 36,995 tonnes were sold (see Chapter 5.2.2.3). Concepts that promote the longevity and useful life of products in this context basically comprise the following approaches (BMU 2020):

- Product design – designing products better in terms of longevity and reducing their environmental impact, including strategies against obsolescence;
- Repair – repairing instead of throwing away;
- Reuse – extending the useful life by reusing in the form of selling, passing down, donating and exchanging;
- Use instead of own – using products on a needs basis by adapting consumer behaviour, e.g.: tool hire, libraries.

41 This includes: (Used) textiles, (waste) electrical equipment and other goods (e.g.: furniture, household goods, toys).

In future, further efforts will be required to build on what has already been achieved. The following challenges/priorities should be considered:

- In most regions of Austria, there is still potential to further expand reuse and repair activities;
- Increasing separate collection for reuse and collecting in a way that preserves a product's value is a high priority;
- Larger markets must be established for reuse products. Marketing should be professionalised in the process;
- Creating a quality label for used products or the definition of quality standards can be conducive to the further development of demand for reuse products;
- The potential for reuse within the public administration should be realised to an even greater extent. This also applies to the concept of "using instead of owning";
- Informing consumers is a high priority in order to promote the reuse and repair of products. In particular, there is a need for knowledge transfer and training for consumers to carry out minor repairs themselves. In this regard, innovative educational programmes in the field of repair and reuse should be promoted;
- The shared use of products through the concept of "using instead of owning" and the implementation of further innovative reuse business models should be expanded;
- Digitalising product information systems that are relevant for sorting, reuse, repair, recycling, etc. to enable more targeted redistribution and reuse value chains (e.g.: for clothing, furniture, electrical appliances or building components) should be promoted;
- Enabling further tax concessions or financial incentives for repair services is essential for extending the useful life of products;
- An improvement in the data situation for the area of reuse is necessary, especially with regard to the documenting and consolidating the activities of the individual players.

Figure 7: Advertising campaign for the repair bonus

Source: BMK

3.5.2 Goals and expected outcome

The objectives of the "ReUse and repair" field of action were defined as follows:

- Greater consideration to be given to repairability and durability in product design;
- Extending the life and useful life of products;
- Promoting repair options;
- Increasing the rate at which we reuse;
- Increasing the attractiveness of repair services.

This field of action should primarily lead to an increase in the supply of used products for reuse in high quality and to an increase in demand for reuse products among the general population and public institutions. In particular, the useful life of products is to be extended by various concepts and adapted consumer behaviour is to be promoted. Repair services should become more important and increasingly replace new purchases. The aim is to improve the image of reuse and to develop reuse from a niche segment to the mainstream in the long term. This will minimise the extent to which products are overproduced, increase resource efficiency and reduce the amount of waste that is produced and needs to be treated.

3.5.3 Indicators:

The following indicators are used to evaluate the measures:

- Volume of reused products – per product category: Building materials and products, textiles, WEEE, furniture, other [tonnes per annum];
- Municipal waste sent off to be prepared for reuse [tonnes/per annum; alternatively as a percentage of total municipal waste volumes].

3.5.4 Measures

The following catalogue of measures is defined for the “Reuse and repair” field of action and the relevant stakeholders for implementation are shown.

Table 5: Catalogue of measures for the "ReUse and repair" field of action

No.	Measure	Federation/ Provinces of Austria/Municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
R1	Research and development to extend service life and useful life (e.g.: by functional upgrading products, innovative business models, second-life use, such as traction batteries), incl. strategies against obsolescence; basic study on ReUse in the furniture segment	√	√	-	-	√	-
R2	Continuing to manage the reuse and repair platform for exchanging experiences, information, and networking	√	√	-	√	√	-
R3	Supporting repairs with a repair bonus	√	-	-	-	-	-
R4	Implementing measures to increase reuse and repair in public procurement, in particular by introducing reuse-friendly procurement guidelines and instructions or reusing material goods within the public sector and/or handing second-hand products down to reuse companies	√	-	-	-	-	-
R5	Supporting activities at EU level, e.g.: the introduction of a repairability index for selected product groups and examining extended producer responsibility to promote reuse	√	-	-	-	-	-
R6	Promoting professionalisation in the way we market reuse products	√	√	-	√	-	-
R7	Providing the basic building blocks for model GTCs for passing down reusable devices	√	√	-	-	√	-
R8	Implementing educational measures on the reuse, repair and durability of products as well as the publication of best practice examples and the development of educational programmes on repair and reuse	√	√	-	√	√	√
R9	Considering repair and reuse designs in design study plans, e.g.: in the furniture sector	√	-	-	-	-	√
R10	Digitising product information systems that are relevant for reuse and repair (e.g.: for clothing, furniture, electrical equipment or building components)	-	√	-	-	√	-

No.	Measure	Federation/ Provinces of Austria/Municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
R11	Promoting the “Use instead of buy” concept, e.g.: by expanding the “Rental” category at reparaturfuehrer.at and other product services, information available at www.bewusstkaufen.at (further expanding the “long use” section)	√	√	√	√	-	-
R12	Promoting the passing down/donation of usable, unsold product stock or returned goods from online/retail sales, e.g.: to social organisations	-	√	-	√	-	-
R13	Promoting repair options (e.g.: using repair networks, repair guides, repair cafés)	√	√	√	√	-	-
R14	Continuing to expand ReUse networks in the provinces and promoting networking with other players from the private and public sectors (in particular also by further developing labour market policy funding instruments and innovative financing instruments for socio-economic reuse and repair companies to promote long-term and stable partnership projects)	√	√	-	√	-	-
R15	Promoting waste prevention initiatives, such as lending shops/libraries, swap initiatives, etc. and related initiatives in companies, institutions and schools	√	√	√	√	-	-
R16	Expanding the reuse collection service for usable goods in the municipalities	√	-	√	-	-	-
R17	Promoting the concept of second-hand department stores - while also taking online shops into consideration	√	√	-	√	-	-

3.6 “Households” field of action

3.6.1 Background/problems

Private household consumption is a key driver of economic production and can therefore have a significant influence on the way products and services are designed. The personal behaviour of each individual during the use phase can also have a positive or negative influence on waste prevention.

Some current developments in private consumption are creating new challenges. The use of e-commerce is increasing rapidly. Whether clothing, electronic devices or groceries, the product range of online retail is almost unlimited. On the one hand, this results in more packaging material (mostly in the single-use system) and, on the other hand, the handling of (unsaleable) returned goods is increasingly being criticised. The growing trend towards restaurants and food services and delivery services for food and drinks (including “coffee to go”, for example) also seems to be continuing unabated. Much of the packaging used is made of plastic or paper with a plastic coating and is disposed of immediately after a single, very brief use. The range of technical equipment in households is also continuing to grow, while the useful life of appliances is decreasing. In particular, more information should be provided on the ecological benefits of long-term use, existing reuse and repair facilities, and separate collection.

Many developments indicate that there is an increasing willingness for environmentally friendly and consumer behaviour that prevents waste in society. A major challenge for consumers is to obtain independent information on the environmental impact and lifespan of products and services as a basis for their purchasing decisions. The first Circular Economy Action Plan therefore proposed a revision of EU consumer law to ensure that consumers receive trustworthy and relevant information when making a purchase. This includes, for example, the lifespan, availability of repair services, spare parts and repair manuals. Greenwashing and premature obsolescence should also be tackled and minimum requirements for sustainability seals/logos and information tools should be defined.

Attention should also be paid to the waste hierarchy at the household level, and prevention and reuse should be prioritised. That is why it is important to raise awareness of sustainable user behaviour that prevents the generation waste. This can be done “simply” by extending the useful life of products.

In recent years, the increased use of public spaces in conjunction with changes in consumer behaviour has also led to more and more waste being left outside – whether intentionally or unintentionally. Littering, the careless discarding of waste in public spaces, occurs mainly in public squares and meeting places, at traffic hubs, along busy roads, near take-away restaurants, petrol stations, shopping centres and in natural recreation areas that are heavily polluted by leisure activities. It disturbs and reduces the population’s quality of life. Littered waste also contaminates soil, plants and water. Despite numerous cleaning campaigns, most littered materials cannot be returned to the material cycle and are therefore not recycled or reused. Littering also causes disproportionately high

costs due to the collection of the material (mainly due to the labour required and the costs of cleaning machines), which have to be borne by the general public. The ongoing anti-littering measures implemented by various stakeholders/players definitely need continue. These can range from measures aimed at raising awareness, cleaning and education to measures aimed at changing situational conditions and measures relating to sanctions and reward systems.

3.6.2 Goals and expected outcome

The objectives of the "Households" field of action include the following points:

- Minimising the generation of waste from households;
- Raising awareness and providing more information about ways to prevent waste and the negative consequences of using resources/waste in a wasteful manner;
- Reducing the improper disposal of waste and the associated negative environmental impact;
- and adapting behaviour to curb littering.

Accordingly, the measures listed in the "Households" field of action are intended to increase the population's knowledge about the possibilities of consumer behaviour that prevents waste and the environmental impact of using resources wastefully. The aim is to bring about specific changes in behaviour. New lifestyles, such as the consumption of hot drinks on the go or online retail, should become more environmentally friendly. Ultimately, this should result in a reduction in waste from households and a reduction in littering.

3.6.3 Indicators:

The following indicators are used to evaluate the measures:

- Waste prevention awareness in the population[42] [Internet search queries];
- Municipal waste from households and similar settings [kg/person/per annum];
- Number of litter picking campaigns / Number of people participating in litter picking campaigns [#];
- Volume of littered waste collected during litter picking campaigns [tonnes per annum, kg per capita per annum].

42 via surveys, Google search terms.

Figure 8: Littering is not just an aesthetic problem!

Source: stock.adobe.com – Sebestyen

3.6.4 Measures

The following table sets out the measures for the “Households” field of action and shows the relevant stakeholders for implementation.

Table 6: Catalogue of measures for the "Households" field of action

No.	Measure	Federation/ provinces of Austria/ municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
H1	Continuing stakeholder platforms on waste prevention for networking and information exchange	√	√	-	√	√	-
H2	Supporting waste advisory services in providing information on sustainable purchasing and usage behaviour (e.g.: on rechargeable batteries)	√	√	√	-	-	√
H3	Educational measures on ways to prevent waste, including - via the www.bewusstkaufen.at platform; - Continuing to update the guidelines of the Austrian eco-label and corresponding application; - Promoting the European Week for Waste Reduction; - The environmental impact of litter (e.g.: packaging, cigarette butts, dog mess bags); - Integrating the topic of waste prevention/littering in the education and training of teachers; - Providing teaching materials	√	√	√	√	-	√
H4	Greater promotion of the options for preventing the delivery of unaddressed mail and examining the switch from the "no advertising" sticker principle to an "advertising request" sticker for mail items	√	-	√	√	-	-

No.	Measure	Federation/ provinces of Austria/ municipalities	Economy	Consumers	NGOs / Civil society organisations	Research	Training and further education
H5	Expanding the provinces' online tools for organising, recording, managing and evaluating the annual litter picking campaigns and examining the establishment of a nationwide information platform on the topic of "littering"	√	√	√	√	√	√
H6	Improving the data basis with regard to the nationwide collection volume of littered waste and its composition	√	-	-	-	√	-
H7	Expanding on sanctioning measures against littering and increased control of public spaces	√	-	-	-	-	-
H8	Promoting the widespread installation of special litter bin/ashtray combinations or litter bins to improve collection at neuralgic points and advertise pocket ashtrays	√	√	-	-	-	-
H9	Examining the introduction of space sponsorships	√	-	√	-	√	-
H10	Promoting cooperation between municipalities, road authorities and operators of fast food restaurants, petrol stations and shopping centres with regard to anti-littering measures, e.g.: through pilot projects	√	√	-	-	√	-
H11	Involving communication experts and making greater use of social media with regard to the issue of littering	√	-	√	-	√	-
H12	Developing a guideline for a nationwide analysis of littered waste	√	-	-	-	-	-
H13	Promoting and continuing annual litter picking campaigns, e.g.: by means of increased involvement of exemplary organisations, introducing "school campaign days"; and also raising awareness of the effects of single-use plastic items	√	√	-	√	-	-

3.7 "Companies and other organisations" field of action

3.7.1 Background/problems

Companies can contribute to waste prevention in the way that they design the products and services they offer, as well as by reviewing their operational processes and their efficiency. All stakeholders – especially in the economy – are called upon to help shape and support the necessary transformation towards sustainability and future viability.

Domestic resource consumption stabilised at a high level between 2000 and 2018, while the economy grew by around 30 % during this period. Resource productivity has increased and a relative decoupling between economic growth and material consumption has been achieved. However, material consumption will only decrease with absolute decoupling (Eisenmenger, Plank, Milota, Gierlinger 2020).

Numerous political initiatives, strategies and laws have been introduced in recent years to drive forward a reduction in resource consumption. Following the publication of the first action plan for the circular economy, the revised EU Legislative Package on the Circular Economy (cf. Chapter 1.2) has gone a long way towards strengthening the relevance of waste prevention. The European Green Deal also promotes measures that are intended, among other things, to make more efficient use of resources and create a clean and circular economy. This initiative addresses all sectors of the economy, in particular transport, energy, agriculture and building construction and management, as well as the steel, cement, ICT, textile and chemical industries. The Circular Economy Action Plan from 2020 also focuses on sustainable products and waste prevention, with proposed measures for product design and production processes.

The implementation of these various initiatives and targets can lead to new requirements for products and subsequently to considerable challenges for companies. It is often not easy for small and medium-sized enterprises to keep abreast of technological progress and incorporate efficient innovations into their operations. As a result, the waste prevention potential made possible by technological leaps is often only realised with a significant delay. In particular, it is necessary to convince companies of the importance of implementing waste prevention and resource conservation measures and the associated opportunities. Economic benefits can also be generated by saving resources and disposal costs.

To support organisations and companies, especially small and medium-sized enterprises, training and information services are required not only at personnel level, but also at management level. Research and funding programmes, which are a relevant driver for technological developments, can make a significant contribution to resource efficiency and waste prevention.

3.7.2 Goals and expected outcome

The objectives for the "Companies & organisations" field of action were defined as follows:

- Establishing resource-conserving and recyclable production and use concepts;
- Designing products and services that allow and promote resource-conserving and waste-preventing use;
- The Austrian eco-label and environmental management systems are gaining relevance;
- Increased awareness of the possibilities and benefits of waste prevention.

The field of action should make a significant contribution to ensuring that the potential for waste prevention in companies and organisations is better recognised by raising awareness. In the design phase, the aim is to develop products that are as durable, repairable and reusable as possible, while in production the most resource-saving and environmentally friendly technologies possible are used, which also ensure lower levels of pollutants in the products and waste, among other things. The criteria for green events and the use of reusable systems should become the standard in the events industry. Environmental management systems are to be introduced on an increasing scale, especially in the public sector.

3.7.3 Indicators:

The following indicators are used to evaluate the measures:

- Total waste volumes in the manufacturing industry in relation to gross value added in the manufacturing industry [kg/€1,000];
- Number of companies that have introduced environmental management systems [#];
- Number of companies/products with eco-labels [#].

3.7.4 Measures

The following table sets out the measures for the "Companies and other organisations" field of action and shows the relevant stakeholders for implementation.

Table 7: Catalogue of measures in the "Companies and other organisations" field of action

No.	Measure	Federation/ provinces of Austria/ municipalities	Economy	Consumers:	NGOs / Civil society organisations	Research	Training and further education
O1	Promoting research and continuing operational waste prevention funding through regional funding, environmental funding and funding opportunities for collection and recycling systems	√	√	-	-	-	-
O2	Substituting hazardous substances in production or in products by promoting Green Chemistry	√	√	-	-	√	-
O3	Providing industry-specific sample concepts with examples of waste prevention	√	√	-	-	-	-
O4	Preparing best practice factsheets on waste prevention techniques/technologies	√	√	-	-	√	-
O5	Supporting longer minimum warranty periods for electronic devices	√	√	-	√	-	-
O6	Supporting the development of regional/locale waste prevention concepts, e.g.: by providing guidelines	√	-	-	-	-	-
O7	Continuing to support environmental management systems such as EMAS, ISO 14001, Responsible Care or EFB+ as a tool for waste prevention	√	√	-	-	-	-
O8	Increased scrutiny with regard to the inclusion of specific waste prevention measures by the authority	√	√	-	-	-	-
O9	Developing binding prevention tools to prevent the destruction of new goods, including for online retail	√	√	-	-	√	-
O10	Promoting eco-labels (incl. expanding/updating the guidelines), e. g.: in accommodation, gastronomy, at events, in the mobility and education sector, in particular also to reduce the consumption of single-use plastic products	√	√	-	-	-	-

No.	Measure	Federation/ provinces of Austria/ municipalities	Economy	Consumer s:	NGOs / Civil society organisations	Research	Training and further education
O11	Waste prevention at events: - Organising federal and provincial events in accordance with the Green Events criteria, particularly with regard to the use of reusable beverage cups and reusable tableware; - Promoting the organisation of events by companies and associations as “green events” or in accordance with province-specific event quality seals and authorising events in public spaces in conjunction with a reusable requirement (e.g. beverage cups, crockery, cutlery); - Introducing a requirement for the organiser to ensure that the subsequent cleaning of the event site and the surrounding area is their responsibility; - No promotional gifts and advertising material at events (e.g.: flyers, advertising brochures, giveaways, etc.)	√	√	-	-	-	-
O12	Implementing educational measures for decision-makers in companies/companies/organisations on resource-conserving material management and waste prevention	√	√	-	-	-	-
O13	Identifying and realising waste prevention and reuse potential as a mandatory teaching unit in the training of company authorised waste officers	-	√	-	-	-	√
O14	Providing waste prevention documents for technical schools and educational institutions	√	-	-	-	-	√
O15	Continuing to train teachers on the AWK tool for schools and developing guidelines for waste prevention and separation in schools	√	-	-	-	-	√
O16	Announcing a prize for innovative ideas for waste prevention	√	√	-	-	-	-

4 Indicators and monitoring

Measurement is essential for control. Overall, the WPP is intended to help conserve resources, strengthen the circular economy, and encourage more conscious consumption. Selected indicators are used to monitor whether this effect is actually realised.

However, the task of selecting and designating specific quantitative or qualitative indicators poses a particular challenge in view of the complexity and large number of specific waste prevention measures (WPMs), the waste streams concerned and the stakeholder groups involved at various levels. The decline in waste volumes for individual streams cannot be directly attributed to the effect of WPM alone due to structural and economic developments. The volume of waste is simply subject to different influencing factors. Another difficulty is the extent to which the selected indicators can reflect the effects of WPM (UBA DE 2019). When selecting the indicators, it is also important to consider whether data is regularly available and what data collection effort is required.
The RACER methodology is a valuable approach when selecting indicators to assess the suitability of the indicators identified for the WPP objectives. RACER criteria for selecting indicators are therefore (UBA DE 2019):

- (Policy) relevant, i.e.: closely linked to the main objective to be achieved or the operational objectives and therefore suitable and meaningful in terms of progress
- Acceptable to various stakeholders;
- Credible for non-experts and unambiguous, clear and easy to interpret;
- Easy to observe and control, but also to communicate;
- Robust against manipulation and errors and robust in terms of the quality of the database.

The indicators should be determined regularly, if possible annually, whereby the indicators for the WPP were selected in such a way that the data is largely available on the basis of official statistics and data sources. Care is taken to ensure that data is collected continuously if it is not available annually. The indicators include, on the one hand, the volume of important waste streams and material input and, on the other hand, key figures that describe the waste qualities or are more orientated towards the individual measures taken and are aimed at the effect. The following table shows the indicators for the WPP 2023, with links to the individual thematic areas.

Table 8: Indicators for the WPP 2023, broken down by objectives/fields of action

No.	Indicator	Unit	Goal/Field of action
1	Domestic resource productivity	[€ per tonne, Index]	Resource conservation
2	Waste intensity (total waste volumes in relation to gross value added, minus the construction sector)	[kg per 1,000 EUR]	Decoupling waste from economic growth
3	Total volume of municipal waste from households and similar settings in relation to consumer spending	[kg per 1,000 EUR]	Decoupling waste from economic growth
4	Total volume of waste in the construction sector in relation to the gross value added in the construction sector	[kg per 1,000 EUR]	Construction
5	Recycling rate for construction and demolition waste (excl. excavated material)	[%]	Construction
6	Volume of recycled building materials and products	[tonnes per annum]	Construction (reuse and repair)
7	Packaging placed on the market per packaging material	[tonnes per annum], [kg per annum]	Plastics and packaging
8	Recycling rate per packaging material	[%]	Plastics and packaging
9	Reusable quota – packaging (based on packaging units)	[%]	Plastics and packaging
10	Reusable quota – drinks containers (based on filling volumes)	[%]	Plastics and packaging
11	Quantity of beverage cups and food packaging placed on the market that are subject to the Single-Use Plastics Directive	[tonnes per annum]	Plastics and packaging
12	Volume of food waste	[kg per capita per annum]	Food
13	Volume of food waste in agriculture	[tonnes per annum]	Food

No.	Indicator	Unit	Goal/Field of action
14	Volume of food waste from processing and production	[tonnes per annum; alternatively in kg per company per annum]	Food
15	Volume of (avoidable) food waste from retailers	[tonnes/per annum]	Food
16	Volume of food waste from food retailers	[tonnes/per annum]	Food
17	Volume of (avoidable) food waste in restaurants and food services	[tonnes/per annum]	Food
18	Volume of (avoidable) food waste from private households	[tonnes per annum, kg per capita per annum; alternatively in kg per household per annum]	Food
19	Volume of avoidable food waste from the consumer sector (retail, restaurants and food services, households)	[tonnes per annum, kg per capita per annum]	Food
20	Mass of separately collected used textiles	[kg per capita per annum]	Textiles
21	Mass of recycled textiles	[tonnes per annum, kg per capita per annum]	Textiles (reuse and repair)
22	Volume of recycled products – per product category: WEEE, furniture, miscellaneous	[tonnes per annum]	Reuse and repair
23	The volume of municipal waste that is sent away for preparation for reuse	[tonnes per annum]	Reuse and repair
24	Waste prevention awareness among the population (e.g.: via surveys, Google Search Terms)	[Internet search terms]	Households
25	Municipal waste from households and similar settings	[kg per capita per annum]	Households
26	Number of litter picking campaigns / number of people involved in litter picking campaigns	[#]	Households / Littering
27	Volume of littered waste collected during litter picking campaigns	[tonnes per annum, kg per capita per annum]	Households / Littering
28	Total volume of waste in the manufacturing industry in relation to gross value added “manufacturing industry”	[kg per 1,000 EUR]	Companies
29	Number of companies that have introduced environmental management systems	[#]	Companies
30	Number of companies/products with eco-labels	[#]	Companies

5 Evaluating the WPP 2017

The provisions of the Waste Framework Directive stipulate that an WPP is evaluated and assessed, but this is also essential for establishing a proper planning process.

The evaluation primarily offers advantages by:

- Determining the degree to which each measure has been implemented and monitoring progress;
- Gathering important information about which measures were effective and which were not, so that informed decisions can be made about which measures should be continued;
- Gathering information in relation to changing framework conditions (i.e.: regulatory, economic, social);
- Maintaining the network and contact with relevant interest groups, thereby involving them in the (further) development and implementation of waste prevention measures;
- Generating new ideas;
- Enabling the assessment of appropriate qualitative and quantitative targets and indicators;
- Analysing the adequacy of the data collected and identifying new data requirements.

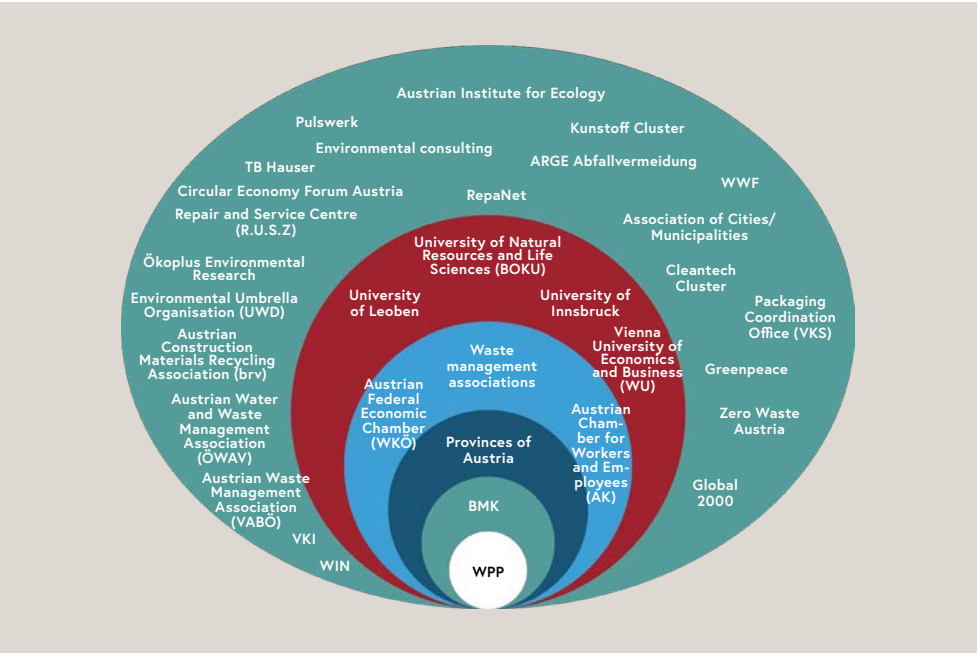
Finally, the results of the evaluation will be used to develop the new WPP.

The current and completed waste prevention measures in Austria (without claiming to be complete) as well as the results achieved by these measures were recorded using an inventory based on a questionnaire survey of relevant stakeholders and supplemented by expert interviews and internet research. The results of the evaluation were then discussed with the relevant stakeholders during workshops.

Figure 9 provides an overview of the actors and interest groups involved in the evaluation or update, whereby a broad cross-section of stakeholders was involved.

Figure 9: Overview of the stakeholders involved in the development of the WPP 2023

Source: Environment Agency Austria



5.1 Implementing the WPP 2017

The WPP 2017 comprises over 90 waste prevention measures, which are assigned to five fields of action and their packages of measures. The implementation status for the measures was first recorded, documented and evaluated for each field of action, and it was determined which measures should continue to be implemented in the WPP 2023. It therefore shows which of the measures in the WPP 2017:

- Have already been implemented;
- Were being implemented at the beginning of 2021;
- Are likely to be tackled;
- Are no longer relevant or should not be pursued due to changed framework conditions or new findings, and
- Those that should continue to be included in the WPP 2023.

Detailed information on the individual measures and the activities implemented are presented in the report "Development of the Waste Prevention Programme 2023", which will be published on the Environment Agency Austria's website once the WPP 2023 has been published.

The basis for assessing the allocation of the individual activities to the measures, whereby the assessment of the implementation status was carried out according to the four assessment categories "implemented", "largely implemented", "partially implemented" and "not implemented". It is not the number of activities per measure that is decisive as a quantitative criterion, but the qualitative criterion that assesses the

content of the respective activity. Table 9 provides an overview of the overall result of the implementation status of the WPP 2017 for each area of action or package of measures.

Table 9: Implementation status of the WPP 2017 (Last updated: the start of 2021)

Field of action	Package of measures	Implementation status
Construction waste	Low-waste construction and extending the useful life of buildings	Largely implemented
	Designing and reusing building parts	Largely implemented
Companies and other organisations	Design	Largely implemented
	Direct measures	Largely implemented
	Waste prevention in the waste management concept	Largely implemented
Households	Waste prevention in households	implemented
Food waste	Food production, processing, and retail	implemented
	Welfare services	Largely implemented
	Restaurants and food services	Largely implemented
	Private households	Largely implemented
	Fundamentals	implemented
Reuse	Reuse	Largely implemented

It is clear that the measures defined in the WPP 2017 have been largely to fully implemented in all fields of action (summarised). None of the individual packages of measures show any specific inactivity. Naturally, there are different levels of implementation at the level of the individual measures.

5.1.1 "Preventing construction waste" field of action

The implementation status of the measures described in the WPP 2017's packages of measures

- "Low-waste construction and extending the use of buildings" and
- "Designing and reusing building components"

is presented in Table 10 and Table 11.

It is clear that universities, universities of applied sciences and technical colleges (HTL) have been providing numerous training courses and further education programmes that focus on sustainability and the circular economy in the construction industry for a number of years. Practical implementation of the measures taken is mainly applied in individual projects. Many architects throughout Austria are already planning and realising sustainable living spaces as part of their services. Particular attention is paid to resource conservation when selecting and using building materials and to their treatment at the end of their useful life in the sense of a circular economy. It is particularly difficult to assess the measures of the "Cooperation with the building guilds, public relations work to persuade master builders, architects and planning offices to apply the techniques

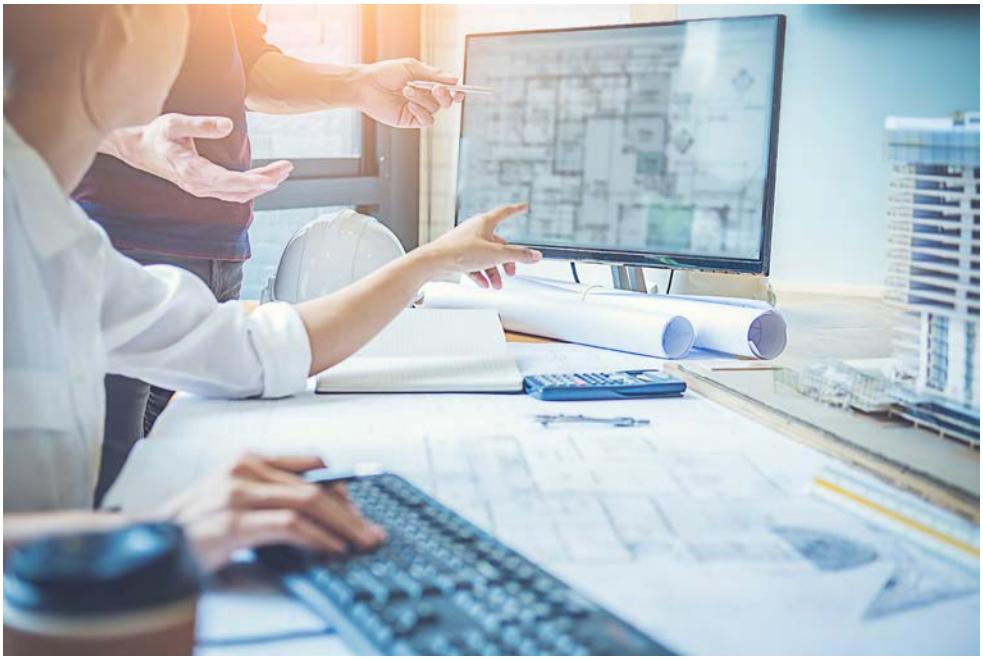


Figure 10: Sustainability starts with planning

Source: stock.adobe.com – MIND AND I

of "low-waste construction" and the "Promotion of the extension of the useful life of public buildings", as there are hardly any publications on the successful implementation of these topics.

The "Designing and reusing building components" package of measures focuses on reusing building components after the end of the first use phase and on information systems relating to the materials used in a building. Measures 7, 14 and 15 (cf. Table 11) are still in the developmental stage. At present, only one province has implemented a housing subsidy scheme in which the proportion of recycled building materials is relevant.

Table 10: Implementing “Low-waste construction and extending the use of buildings” package of measures from the WPP 2017

No.	Measure	Implementation status	Comment	Continuation
1	Pilot projects and other measures to develop innovative low-waste technologies and techniques	largely implemented	This is implemented by means of the “Guide for Circular Economy Planning and Construction”, the “Circular Construction Economy” project, targeted projects and studies on various topics in the construction industry, such as the “Development and production of ecological ceiling panels made of sheep’s wool”, “Waste prevention in constructing pre-fab housing”, and the “City of the Future” funding programme. Pilot projects often result in sustainable and broad implementation due to the information gained, the role model effect and the testing of concepts in practice. This measure should therefore be continued.	yes
2	Creating teaching aids and learning aids on the principles, planning techniques, techniques and technologies of low-waste construction for the recovery and reuse of entire building components from building demolition; for the training of specialists at vocational and secondary school level. These teaching and learning aids are being increasingly incorporated into education and vocational training and training courses for skilled workers. Course content includes: “Low-waste construction”, “Extending the useful life of buildings”, “Selective demolition”, “Using recycled building materials”	implemented	Implemented by the development of the “AbBau” waste prevention in construction training programme, “KATCH_e - Knowledge Alliance on Product-Service Development towards Circular Economy and Sustainability in Higher Education”. Waste prevention in the construction industry will continue to play an important role in the future, which is why teaching materials should be kept up-to-date and updated to reflect changes.	yes

No.	Measure	Implementation status	Comment	Continuation
3	Including the topic of "low-waste construction" in the planning phase, and training and further education in this area	implemented	This is implemented by corresponding construction projects, running courses and seminars at universities and technical colleges and developing and integrating the "AbBau" programme into Austrian higher technical colleges, as well as the creating and publishing guidelines. "Low-waste construction" will become increasingly important in the future, which is why it is particularly important to continue to offer and expand on appropriate training and further education opportunities.	yes
4	Public relations work to persuade master builders, architects and planning offices to apply the techniques of "low-waste building" in cooperation with the building guilds.	partially implemented	Implementation by means of the "Circular Construction Economy" project and regional/ local cooperation/information exchange via platforms (e.g.: town centre revitalisation). The exchange of information and cooperation regarding "low-waste construction" must continue to be promoted and expanded in order to reach as many building planners as possible.	yes
5	Promoting the extension of the use of public buildings	partially implemented	(Indirect) implementation using the "AbBau" programme. There is a lack of experience of implementation in practice. Particular attention should be paid to extending the useful life of public buildings (saving resources).	yes
6	Promoting the exchange of knowledge and experience in the education sector on the topics of extending the useful life of buildings and the recyclability of components and building parts	implemented	Implementation by regularly organising events, interdisciplinary courses and seminars at universities and universities of applied sciences. This measure must be continued as this will continue to be a key issue in the future and innovations must be taken into consideration.	yes

Table 11: Implementing the "Designing and reusing building components" package of measures from the WPP 2017

No.	Measure	Implementation status	Comment	Continuation
7	Promoting flexible buildings ("envelope for eternity, flexible interior")	partially implemented	Implemented by means of small-scale projects (e.g.: Vivihouse). This measure will play an important role for a sustainable construction industry in the future and should therefore be continued.	yes
8	Developing a basis for standardising a building material information system - alternatives to the building pass for recording the main components of a building are to be examined; Subsequently: Defining standards for a building material information system Reviewing the inclusion of this data in the central building and housing register operated by Statistics Austria	implemented	This was implemented as part of the projects "Process design for the BIM-based, material building passport BIMaterial", "Building certificate for municipal buildings for the assessment of ecological quality standards", tool for the ecological optimisation of buildings. New findings regarding building materials and certified building materials are published promptly on the relevant building materials platforms. Data on building stocks and construction measures from the time of authorisation are continuously entered into the Federal Building and Housing Register (GWR) by the municipalities and the relevant district authorities. This measure no longer needs to be continued.	no
9	Developing standards for design that prioritises waste prevention, for the prevention of pollutants and contaminants, for the repairability, separability and reusability of components and building materials	largely implemented	Implemented by the "Kreislauf-BAUwirtschaft (Circular Construction Economy) project, the EI disposal indicator and the guidelines for circular planning and construction. Standards for designing components and building materials in a way that prevents waste will continue to be an important issue in the construction industry in the future, so this measure should be continued.	yes

No.	Measure	Implementation status	Comment	Continuation
10	Including waste prevention and reuse principles in technical and university education	implemented	Implemented by developing teaching programmes, courses, seminars and Bachelor's and Master's degree programmes at FH Campus Wien. This measure should be continued in response to changing circumstances in the construction industry (e.g.: legal regulations, building materials). The aim is to keep the level of knowledge up-to-date and practice-orientated.	yes
11	Stakeholder process for increased implementation of the reuse of components	largely implemented	Implemented by working groups, events, seminars, information platforms, etc. Stakeholder networking is important. This measure should also be continued and promoted in the future.	yes
12	Encouraging the use of recycled building materials, e.g. by including them in specifications, particularly in public procurement,	largely implemented	Implemented by including the use of recycled building materials as tender criteria for public procurement (Action Plan for Sustainable Public Procurement). The use of recycled building materials should also be promoted in the future.	yes
13	Pilot projects for urban mining and reusing building components, promoting research/development and pilot projects for the exploration, documentation, extraction and commercialisation of entire building components from demolished buildings	largely implemented	Implementing numerous large and small-scale projects. This measure is to be continued by promoting urban mining projects, as this makes an important contribution to saving resources.	yes

No.	Measure	Implementation status	Comment	Continuation
14	Examining the possibility of linking the housing subsidy to the proportion of recycled building materials in the building to be constructed or renovated, as as the possibilities of “greening” the subsidy models, especially for building renovation	partially implemented	Implemented in the province of Styria - ecological housing subsidy. Linking housing subsidies with a proportion of recycled building materials to reduce the proportion of “new materials” should be increasingly implemented in the future.	yes
15	Recommendation to enshrine the requirement to draw up a construction site waste management concept in all state building regulations	not implemented	This measure was implemented in the provinces of Vienna and Salzburg. Partly rendered obsolete by the Recycled Building Materials Ordinance, further implementation is therefore no longer a priority.	no

5.1.2 "Waste prevention in the companies and other organisations" field of action

The measures listed in this field of action should promote waste prevention in companies in the entire operational context (in the design, production and distribution phases). The implementation status of the measures listed in the WPP 2017 is presented in Table 12 to Table 14. A distinction is made between the following three packages of measures:

- Design;
- Direct measures and
- Waste prevention in the waste management concept.

In recent years, activities relating to designing in a way that prevents waste have mainly taken place at EU level, including the Ecodesign Directive, which is intended to promote design standards, an extension of the technical service life and the availability of spare parts for some product groups. A ban on the use of microplastics in cosmetic products is also planned. At national level, a guide to quality standards for circular design has been developed, which is aimed at designers, manufacturers and students. This is already being used in teaching. This was a first step towards incorporating waste prevention into design curricula.

The direct measures have been implemented to very different extents. Various (partly institutionalised) funding programmes, environmental management systems, green events and the sustainability agenda of the drinks industry have been continued and a national ban on single-use plastic carrier bags has been implemented. However, some measures relating to the provision of information, awareness-raising and training were only implemented to a limited extent.

In the "Waste prevention in the waste management concept" package of measures, the measure to provide industry-specific sample concepts was partially implemented, while regular training courses were held to promote the AWK tool for schools.

Table 12: Implementing the "Design" package of measures for the WPP 2017

No.	Measure	Implementation status	Comment	Continuation
16	Developing standards for design that prioritises waste prevention, for the prevention of harmful substances, for repairability, separability and reusability of product parts and packaging	largely implemented	The Ecodesign Directive has been revised and includes requirements for durability, repairability, retrofitting, dismantling, reuse and recycling for certain product groups. A guideline on quality standards for circular design has been developed and is used in teaching, among other things. The inclusion of further product groups in the scope of the Ecodesign Directive beyond energy-related products is being discussed at EU level.	yes
17	Considering repair, reuse and recycling design in design study plans	largely implemented	Two projects were implemented to introduce the topic of minimising the use of resources and avoiding waste into curricula in the field of packaging technology and to make it more accessible to a wider audience within FH Campus Wien. The guideline on quality standards for circular design is used in teaching, among other things. Repair, reuse and recycling design should be increasingly included in design curricula and beyond.	yes
18	Examining the effectiveness of voluntary measures to end the use of microplastics in consumer products across Europe and, if necessary, Austria's efforts to ban microplastics in such products	implemented	A ban on the deliberate use of microplastics in consumer products was introduced at European level by the REACH Regulation. Although the ban has not yet been implemented at European level, decisive steps have been taken and a draft is expected to be presented in 2022. No further activities at national level are planned for the time being.	no
19	Austrian delegates will campaign at EU level for measures both to extend the technical service life and repairability of equipment and to build confidence that this equipment will last longer if used appropriately.	largely implemented	Subsidies for the durability and repairability of certain product groups were adopted as part of the Ecodesign Directive. The inclusion of further product groups beyond energy-related products in the scope of the Ecodesign Directive is currently being discussed at EU level.	yes
20	Austrian delegates are also in favour of introducing an obligation to provide information at EU level on the duration of available spare parts and the average service life of products	largely implemented	A minimum period for the availability of spare parts was decided for some product groups as part of the Ecodesign Directive. The inclusion of further product groups beyond energy-related products in the scope of the Ecodesign Directive is currently being discussed at EU level.	yes

Table 13: Implementing the "Direct measures" of the WPP 2017

No.	Measure	Implementation status	Comment	Continuation
21	Further best practice factsheets on techniques/ technologies that prevent waste; accompanied by an intensive information campaign	partially implemented	Only a few best practice factsheets are known (e.g.: waste prevention in non-store retailing). Best practice factsheets can highlight tried and tested potentials for streamlining. Their creation should therefore be further promoted.	yes
22	Providing further training to company waste management officers with regard to identifying and realising waste prevention and reuse potentials	partially implemented	There are several further training opportunities on this topic, e.g.: the City of Vienna's Day of Environmental and Waste Management Officers and the further training courses run by the ÖWAV. Further training opportunities on the topic of waste prevention should be offered more widely in order to increase the potential for waste prevention within companies.	yes
23	Developing waste prevention documents for technical schools and educational institutions on specific topics	implemented	In recent years, documents have been developed on various waste prevention topics (e.g.: on food waste prevention as part of the feld-Schule project in Tyrol) and for different types and levels of school (e.g.: primary schools in Lower Austria, tourism schools, agricultural schools). The documents should be further developed, updated, and disseminated so as to ensure that they are applied broadly in educational institutions.	yes
24	Continuing the regional programmes co-financed by the BMK for operational environmental protection in the provinces for identifying and implementing waste prevention potentials with the support of consultants, including the creation of additional incentives for repeated participation; new focus on material efficiency	implemented	The regional programmes for corporate environmental protection were continued and the topic of material and resource efficiency is included. The regional programmes can provide valuable support for relevant projects and should be continued.	yes
25	Intensifying environmental promotion in Austria in the areas of "preventing hazardous waste" and "resource management"	largely implemented	The number of projects submitted in the area of resource efficiency rose from 42 (2014-2016) to 98 (2017-2019), while the number of projects submitted in the area of hazardous waste fell from 19 to 15. In 2017-2019, 40 projects were approved in the area of resource efficiency (€13.3 million funding cash value) and 10 projects in the area of hazardous waste (€2.5 million funding cash value) (BMK 2020). Raw materials and resource management in companies in Upper Austria will also be subsidised by follow-up funding. Environmental promotion in Austria in these areas should be stepped up further, particularly with regard to hazardous waste.	yes

No.	Measure	Implementation status	Comment	Continuation
26	Continuing to promote waste prevention, collection and recycling systems	implemented	Funding was continued with several calls for proposals each year focussing on different topics. This funding option should continue to be offered and advertised.	yes
27	Continued support for environmental management systems such as EMAS, ISO 14001, Responsible Care or EFB+ as a means of waste prevention, reuse and resource efficiency	implemented	This has been continued. Environmental management systems can also improve operational processes with regard to waste prevention, and support should be continued.	yes
28	Organising events by public institutions, companies and associations as “Green Events” (taking the Austrian eco-label for Green Meetings and Green Events into consideration)	implemented	Increasing organisation of such events among the regional initiatives in the provinces and networking via Green Events Austria. Organising events as green events offers great potential for waste prevention and is generally well received. Even if certification does not always take place, the criteria for a green event are being used increasingly as a guideline. Green events should be further promoted and organised.	yes
29	Raising awareness among decision-makers of the importance of waste prevention and resource conservation measures, environmental cost accounting and sustainable participation in advisory programmes	partially implemented	In addition to the possible advisory services offered by the regional programmes for corporate environmental protection, only a few other initiatives are known (e.g.: multiplier training in Carinthia and the WasteHarmony project in Styria). Initiatives to raise awareness among decision-makers can have a strong multiplier effect and should be stepped up.	yes
30	Disseminating information on options for extending the useful life of tangible assets, e.g.: software upgrades instead of purchasing new devices	partially implemented	The consumer website www.bewusstkaufen.at was expanded to include the “aspect of use” and now also offers information on extending the useful life of products and obsolescence issues; a campaign on “long-life products” was carried out. The range of information on this topic could be strengthened by further measures.	yes

No.	Measure	Implementation status	Comment	Continuation
31	Distributing repair information to repair and reuse companies	partially implemented	The revision of the Ecodesign Directive includes the requirement to provide repair instructions for selected products. The Vienna Repair Network distributes materials and instructions on the subject of repairs. Within the framework of the Ecodesign Directive, further product groups may be included for which the dissemination of repair instructions will be mandatory. Dissemination within Austria should also be ensured.	yes
32	Continuing and further developing the Austrian industry's sustainability agenda 2008-2017 for beverage packaging	implemented	The sustainability agenda 2018-2030 has been continued. The extrapolation to 2030 already goes beyond the reference period of the WPP 2023, so it is not necessary to include this measure in the WPP 2023.	no
33	Acquiring further companies to sign the agreement to reduce single-use carrier bags	implemented	A ban on single-use plastic carrier bags will apply from 2020. The voluntary agreement for companies is therefore partially obsolete, as only very lightweight compostable plastic carrier bags made from renewable raw materials are still permitted. This measure has become obsolete due to the ban on single-use carrier bags.	no
34	Examining whether additional regulations on the relationship between product volume and packaging volume are required ("deceptive packaging")	not implemented	Appropriate activities are underway at EU level. Deceptive packaging continues to be a relevant issue, both from a waste prevention perspective and from a consumer perspective. Actual regulations should therefore be considered; corresponding activities are already underway at EU level, which are supported at delegate level.	no

No.	Measure	Implementation status	Comment	Continuation
35	Introducing criteria for public procurement regarding products that have been created according to the principles of design that minimises waste; products that bear the Austrian eco-label; durability and repairability; considering operating and replacement costs	implemented	The initiative for sustainable procurement was revised (2020). The criteria include extending the service life of products, conserving resources, and preventing waste. As an important end consumer, public procurement should continue to use waste prevention as a criterion.	yes
36	Taking advantage of the possibilities for extending the use of tangible assets in the public sector	partially implemented	The Vienna City Council's environmental management programme (PUMA) includes measures on preventing waste. The extension of use as an effective instrument of waste prevention is to be promoted in the public sector.	yes
37	Increased communication of the criteria for public procurement as an example for private procurement	partially implemented	Information on the topic of sustainable procurement is publicly available on the naBe platform (nabe.gv.at). No other initiatives are known. The experience gained in the public sector on this topic should be made more widely available and communicated in order to promote procurement that prevents waste in the private sector as well.	yes

Table 14: Implementing the WPP 2017's "Waste prevention in the waste management concept" package of measures

No.	Measure	Implementation status	Comment	Continuation
38	Industry-specific sample concepts with good examples of waste prevention	partially implemented	Model concepts are available at some institutions, but the good examples of waste prevention (in the sense of lighthouse projects) are largely missing. Model concepts with good examples of waste prevention should be made more widely available.	yes
39	AWK tool for schools: Training courses for educators	implemented	In various regions (e.g.: Burgenland), the AWK tool is promoted for schools as part of teacher seminars, enrolment, workshops and by providing information. The AWK tools are being well publicised and accepted, and further training courses should ensure their widespread use.	yes

5.1.3 “Waste prevention in households” field of action

The implementation status of the measures listed in the 2017 Waste Prevention Programme is presented in Table 15

The main focus of the measures for households was on disseminating information and raising awareness. Numerous campaigns were launched for this purpose, including on the topics of sustainable consumption and usage behaviour (also involving the migrant sector), repair options and specific product groups (e.g. reusable beverage packaging, single-use carrier bags, blank post). Various stakeholders continued to network and take part in further training courses. The only measure in which few activities have taken place is the response to false reports on waste prevention via social media.

Figure 11: Conserving resources using reusable packaging, even when consuming on the go

Source: stock.adobe.com, Robert Kneschke

Table 15: Implementing the WPP 2017's "Waste prevention in households" package of measures

No.	Measure	Implementation status	Comment	Continuation
40	Update and further development of 'bewusstkaufen.at'	implemented	The website has been expanded to include the "use aspect" (conscious buying & climate-friendly living) and now also provides information on the topic of obsolescence. The website should be continued as a useful source of information on sustainable consumption.	yes
41	Increased information from the waste advisory service to establish sustainable purchasing and usage behaviour	implemented	Numerous information services (e.g.: the "Umweltberatung" website, magazines "Abfallwirtschaft in Tirol", "Umweltsignale", webinar series "Abfallvermeidung"), initiatives (e.g.: WEEE and used batteries school kit, training for multipliers) and campaigns (e.g.: "Is nu guat" and "Augen auf beim Einkauf" in Upper Austria) are offered by the waste advisory service. Information campaigns and awareness-raising are essential for behavioural change and should therefore be continued.	yes
42	Information campaigns on ways to prevent waste, in particular by means of consumer behaviour that considers quality of life.	implemented	A variety of information campaigns and opportunities were offered, such as the "I am precious" guide on the sustainable use of food in the district of Hermagor (Carinthia). Information campaigns and awareness-raising are essential for behavioural change and should therefore be continued.	yes
43	Waste advisory training in the packaging sector delivered by VKS GmbH; promoting the topic of waste prevention.	implemented	Waste counselling courses are held five times a year, and waste prevention is a fixed item on the agenda. Waste counselling training courses will continue to be run for further training.	yes
44	Further development and implementation of increased information and motivation campaigns involving the migrant sector	implemented	Numerous activities were carried out, including the organisation of workshops, the distribution of informative materials in various languages and the production of teaching materials for German language courses. Information campaigns and awareness-raising are essential for behavioural change and should therefore be continued.	yes

No.	Measure	Implementation status	Comment	Continuation
45	Reviewing the use of social media, also with regard to prompt reactions to false reports	partially implemented	Information on waste prevention was distributed in the course of numerous activities and projects, including via social media. The use of social media for awareness-raising should be expanded.	yes
46	Promoting repair options (e.g.: repair networks, repair cafés) including corresponding information activities	implemented	A repair bonus is offered in Lower Austria, Upper Austria, Vienna, Carinthia, Salzburg and Styria (Footnote: a nationwide repair bonus has since been introduced). Repair cafés are also organised in many provinces. An online search engine and repair networks (such as the ReUse Network Burgenland) make it easier to find suitable repair businesses. Two studies were carried out on the subject of the end-of-waste after repair and the effects of a reduced tax rate for repair services. VAT reduction was implemented on selected repairs. The availability of and information on repair options remain important for extending the service life of a product.	yes
47	Raising awareness of the issue of reusable beverage packaging at consumer level, e.g.: by continuing the “Sag’s am Mehrweg” initiative or a reusable initiative by retailers	implemented	The “Sag’s am Mehrweg” initiative was discontinued after 2016. However, numerous other initiatives have been continued or started, e.g.: a reusable packaging ban at major events in certain provinces (e.g.: S, Upper Austria) as part of green events, the establishment of reusable beverage cups, a reusable crockery hire system and a reusable wine bottle (Styria). Campaigns on the topic of reusable packaging include “Pfand drauf!” (Global2000), mehrweg.at (the environmental counselling service) and plastikfit.at (Lower Austrian environmental associations). The promotion of reusable solutions to reduce single-use packaging and the resulting waste remains relevant.	yes

No.	Measure	Implementation status	Comment	Continuation
48	Raising awareness of waste prevention, in particular single-use carrier bags and coffee capsules	implemented	Among other things, the “Pfiat di Sackerl” campaign and information activities in connection with the ban on single-use plastic carrier bags, distribution of cloth carrier bags. Only a few activities are known on the subject of coffee capsules. Raising awareness on the subject of single-use carrier bags has become obsolete due to the ban on single-use plastic carrier bags.	no
49	Awareness campaign that the delivery of blank mail can be avoided by placing appropriate notices on mailboxes	largely implemented	The environmental counselling service, WKO and specialist paper retailers offer stickers for letterboxes (with corresponding information on the Internet). Stickers and advertisements should continue to be offered.	yes
50	Raising awareness regarding the consideration of the eco-label in purchasing and service decisions	implemented	Please see the website (umweltzeichen.at) and the social media platforms or visit events for more information about eco-labels. The website bewusstkaufen.at, some waste management associations, programmes for sustainable procurement and environmental advice also provide information on this topic. It is essential that these activities continue.	yes
51	Expanding and updating the guidelines for the award of the Austrian eco-label	implemented	The guidelines are updated and supplemented on an ongoing basis. The guidelines should continue to be expanded and updated.	yes
52	Sharing information within the framework of stakeholder platforms for waste prevention	implemented	Stakeholder dialogues are organised at least once a year and are further developed by a core team. Some regional exchange opportunities are also organised by provinces or waste management associations. The stakeholder platforms are to be continued as an important opportunity for networking and sharing information.	yes

5.1.4 “Preventing food waste” field of action

The long-term goal of the “Preventing food waste” field of action is to reduce the amount of avoidable food waste in all areas of the value chain, i.e.: from production to consumption. In particular, avoidable food waste in private households and the retail sector is to be halved by 2030 in line with the UN 2030 Agenda for Sustainable Development. The implementation status of the measures listed in the WPP 2017 is presented in Table 16 to Table 20. A distinction is made between the following packages of measures:

- Food production, processing and retail;
- Welfare services;
- Restaurants and food services;
- Private households;
- Fundamentals.

Sustainable management of food waste prevention has been promoted in recent years with regard to the “Food production, processing and retail” package of measures (Table 16). Continuing the cooperation partnership with companies as part of the “Food is precious!” initiative, continuing the “United Against Waste” platform and the activities as part of the “Voluntary agreement 2017-2030 to prevent food waste at food companies” have made a significant contribution to this.

With regard to the “welfare services” package of measures (Table 17), the coordination of supply and demand in food distribution was strongly promoted, among other things by setting up a platform for joint planning by the (social) organisations involved and by supporting the expansion of the storage and cooling infrastructure at these facilities.

In the area of the “Restaurants and food services” package of measures (Table 18), sustainable management of food waste prevention in commercial kitchens and the hospitality industry has been supported in recent years, primarily through the establishment of the cross-sector platform “United Against Waste” and the associated advisory programmes.

The activities implemented in the “Private households” package of measures (Table 19) have had the effect of increasing knowledge about the ecological impact of food consumption and the value of food and avoidable food waste. Awareness has also been raised about food being edible even after the best-before date. The nationwide initiative “Food is precious!” as well as other measures at state and regional level and media coverage have contributed significantly to this. Support was provided to overcome the behavioural barriers to achieving needs-based food consumption, e.g.: in the form of nationwide and regional campaigns, dedicated web portals or by integrating the topic into the training and further education of educators. Integrating the topic of “preventing food waste” in specific training programmes and sector-specific training should be continued and expanded in all areas of the value chain.

In the “Fundamentals” package of measures (Table 20), measures were implemented to standardise the collection methods for waste data and to review and further develop the criteria for the Austrian eco-label and sustainable public procurement. The data situation regarding the available food waste statistics for the various stages of the value chain has also been greatly improved. In future, the existing EU reporting obligation on food waste will mean that data on food waste (avoidable and non-avoidable) will be collected regularly for all sectors (from the reference year 2020). However, it will still be necessary to carry out studies on specific issues in some cases.

Figure 12: Planning shops helps to avoid food waste.

Source: stock.adobe.com – nonnie192

Table 16: Implementing the WPP 2017's "Food production, processing and retail" package of measures

No.	Measure	Implementation status	Comment	Continuation
53	Pilot projects to streamline the implementation of prevention potentials; the concepts and descriptions of measures developed are to be made available to all companies in the sector.	implemented	Implemented with the establishment of the cross-sector platform "United Against Waste" and by implementing various pilot projects (e.g.: STREFOWA, STOP Waste - SAVE Food, REFRESH, LOWINFOOD, MARLENE, etc.) and other initiatives (e.g.: "Karakter Ernte"). Pilot projects often result in a permanent and broad implementation of measures, e.g.: due to the information gained, the role model effect or the testing of concepts on a "small" scale. This measure should therefore be continued.	yes
54	Collecting best-practice examples from selected sectors and publication of the information on the Internet	implemented	Ongoing implementation by publishing the measures of the co-operation partners of the "Food is precious!" initiative on the BMK website or specific web portals such as prevention platforms (e.g.: United Against Waste) and pilot projects (e.g. reducefoodwaste.eu/STREFOWA or BEST Practice in retail and production – waste prevention measures as part of ECR Austria). The publication of pilot projects and best-practice examples contributes significantly to knowledge gain and raising awareness. The publicity should also be extended to other media channels such as Facebook or Twitter.	yes
55	Studies on the potential for avoidable food waste in production and processing companies	implemented	Specific studies on waste prevention in Austrian Food production, on food losses in agriculture, in the event catering sector and on eco-efficiency in food processing have been carried out. Data on food waste (avoidable and non-avoidable) will be collected regularly for this sector in future due to the existing EU reporting obligation on food waste.	yes

No.	Measure	Implementation status	Comment	Continuation
56	Further survey of avoidable food waste in retail and private households	largely implemented	Implemented by notifying food retailers as part of the "Voluntary agreement 2017-2030 to prevent food waste in food businesses" and conducting a study on quantities in food wholesale. A household survey on food waste was carried out as part of the STREFOWA project. Data on food waste (avoidable and non-avoidable) will be collected regularly for these two sectors in future as a result of the existing EU reporting obligation on food waste.	yes
57	Continuing training programmes for employees in production, processing and retail or integrating the topic into sector-specific training courses	largely implemented	Implemented as part of the "Voluntary Agreement 2017-2030 to Prevent Food Waste at Food Businesses" by providing employees with mandatory training. Integration into industry-specific training programmes should continue to be promoted. The integration of the topic of "preventing food waste" in the training programmes for the "production", "processing" and "retail" sectors should be continued and expanded on an ongoing basis, as well as in the area of industry-specific training, as this represents a direct influencing factor on the daily handling of the resource "food" and can therefore significantly reduce the amount of avoidable food.	yes

No.	Measure	Implementation status	Comment	Continuation
58	Continuing the cooperation partnership as part of the “Food is precious!” initiative	implemented	Implemented by signing almost 100 cooperation agreements in a wide range of sectors to date. The cooperation partnership should continue to be promoted, as it fosters specific activities in a wide range of sectors.	yes
59	Continuing with the Viktualia Award to raise awareness and incentivise companies to prevent food waste	implemented	The Viktualia Award was continued (last award in 2019). This measure should be continued in the future to raise awareness.	yes
60	Updating the “Donating food to welfare services” guidelines on the basis of experience gained and to take account of the changed framework conditions	largely implemented	The amended framework conditions, new findings and experiences have already been identified by the project “Simplifying the distribution of food to charitable organisations – expert opinion and evaluation”. Further information and guidelines are published, for example, on the website of the City of Vienna (e.g.: the “Das is(s)t es mir wert.” guide). Framework conditions are also being analysed as part of the “FoodReAT” project. The new edition should still be published.	yes
61	Quality mark for trading companies that donate food	implemented	The BMK awards food retail businesses an (extended) logo that goes beyond the cooperation agreement as part of the “We save food!” initiative. This quality label should be continued in the future in order to raise awareness and increase the visibility of the award.	yes

No.	Measure	Implementation status	Comment	Continuation
62	Developing a quality standard for social organisations that donate food	largely implemented	Previous quality standards can be found in the guidelines for food distribution to welfare services ("Das is(st) es mir wert." guide). An adapted concept for the simplified distribution of food to charitable organisations was developed as part of the project "Simplifying the distribution of food to charitable organisations - expert opinion and evaluation". Wiener Tafel plans to revise its quality standards from 2021.	yes
63	Regular training for welfare service employees in handling food	largely implemented	Regular training courses and workshops are held by the food bank organisations and are increasingly being extended to external target groups such as teaching staff, companies and consumers. Integrating the topic of "Preventing food waste" into specific training programmes should be continued and expanded.	yes
64	Establishing a platform for joint planning by the social organisations involved	implemented	The "Food retailing to promote the work of food banks and prevent food waste' action platform has been set up. The Association of Austrian Food Banks was founded in 2016. Targeted activities such as TafelBox Austria were launched to prevent food waste in restaurants, hotels, catering companies and at buffet events or the project "The European Foodbanks Federation model (FEBA) as a model for foodbanks in Austria" support networking. Team Austria regularly organises activities to set up food banks at the regional level. The measure was implemented.	no
65	Support for the expansion of storage and cooling infrastructure for welfare services	largely implemented	The Grosses TafelHaus in Vienna has been extended. The purchase of refrigerated lorries or fridge-freezers for transporting food donations for more efficient redistribution is being promoted at the regional level. Support for the expansion of storage and refrigeration infrastructure at the premises of welfare services should be expanded or continued, particularly at the regional level.	yes
66	Surveying the volumes of donated food	implemented	Implemented as a result mandatory reporting by partners as part of the "Voluntary Agreement 2017-2030 on the Prevention of Food Waste in Food Businesses". Data on food waste (avoidable and non-avoidable) will be collected regularly for this sector in future as a result of the existing EU reporting obligation on food waste. The report by the food retailer under the voluntary agreement is also used as part of the plausibility check.	yes

Table 18: Implementing the WPP 2017's "Restaurants and food services" package of measures

No.	Measure	Implementation status	Comment	Continuation
67	Pilot projects to streamline the implementation of prevention potentials; the concepts and descriptions of measures developed are to be made available to all companies in the sector.	partially implemented	Implemented by establishing the cross-industry platform "United Against Waste" (UAW) and the pilot projects "Food hub concept – distributing food from restaurants and food services to welfare services" and "Food waste prevention in school catering". Further projects are considered sensible.	yes
68	Collecting and publishing best practice examples	largely implemented	Best practice examples include initiatives such as the "Genuss-Box", launched by the province of Vorarlberg, the TafelBox or the regional food supply network for communal catering in Styria. Other successful projects against food waste include "Too Good To Go – We Save Food" and the United Against Waste partner network. Numerous examples of best practice are published on the BMK website (bmk.gv.at/themen/klima_umwelt/abfall/abfall-vermeidung/lebensmittel). Collecting and publishing further examples of best practice should be further promoted.	yes
69	Training programmes for employees or integrating the topic into industry-specific training courses	largely implemented	Training programmes for catering businesses and commercial kitchens have been established by the "Kitchen Profit" and "Moneytor" advisory programmes and, in addition, by the UAW's Food Waste Coaches programme. The advisory service "Smart Kitchen - restlos kochen!" was also launched for catering businesses in Vienna. Integrating the topic into industry-specific training programmes has already been partially implemented (e.g.: as part of the "Food waste in tourism schools" project or the "Best of the rest" initiative). Integrating the topic of "preventing food waste" into specific training programmes, and sector-specific training should be continued and expanded.	yes

No.	Measure	Implementation status	Comment	Continuation
70	Promoting the Austrian eco-label in the area of communal catering, gastronomy and accommodation	implemented	Implemented by informing public catering establishments about the Austrian eco-label standards that apply throughout Austria by providing accompanying advice and presenting examples of best practice on the umweltzeichen.at website. This measure should be continued in the future to further promote the Austrian eco-label.	yes
71	Integrating the topic into guidelines for managing processes at public institutions (e.g.: canteens, hospitals)	largely implemented	Already partially implemented by UAW as part of the "Moneytor" programme for commercial kitchens and more strongly promoted by the project "Food waste prevention by optimising ordering systems in hospitals and care homes". This measure should be continued, as considerable quantities of food are processed daily in public facilities. A change in process management can have a considerable effect.	yes
72	Measures to prevent food waste in the context of public procurement	Largely implemented	The City of Vienna has implemented the Action Plan for Sustainable Public Procurement (naBe action plan) and the position paper for the sustainable purchase of food and meals. Greater attention should continue to be paid to preventing food waste in the context of public procurement - including as a role model.	yes

No.	Measure	Implementation status	Comment	Continuation
73	Nationwide and regional campaigns with households as the target group: Raising awareness of the topic of "preventing food waste" and highlighting specific behavioural options by integrating them into information materials, events, and focus campaigns	implemented	The "Food is precious!" initiative makes a significant contribution to raising awareness. A large number of campaigns and initiatives are carried out on an ongoing basis by various stakeholders, ranging from online campaigns (e.g.: "Is nu guat") and food sharing (e.g.: Fair-Teiler) to specific environmental education projects (e.g.: feld:schule, APPetit Schulstunde) or direct activities (e.g.: distribution of reusable snack boxes in schools, "Gegen Lebensmittel im Restmüll" campaign, organisation of green events). Information is also provided to consumers via bewusstkaufen.at as well as public relations work in the form of advertising campaigns, PR campaigns, press conferences and a separate topic area at various information events organised by a wide range of institutions (BMK, provinces, universities, waste management associations, etc.) at the national and regional level. The topic is also increasingly being taken up by the media (print media, TV, radio). Raising awareness and communicating food waste prevention to the target group of private consumers offers the greatest possible opportunity for achieving more sustainable, needs-orientated consumption. This measure will be continued in conjunction with new priorities (such as regional products, distributing surplus harvests in the private sector or delivery services).	yes
74	(Further) developing measures to shape framework conditions in such a way that behaviour is steered towards the economical use of food	partially implemented	The implementation to date is primarily aimed at informing consumers about the correct handling of food. Activities in this regard include, for example, the provision of the brochure "Faktencheck Lebensmittelabfälle – Myths and Facts", the web portal for consumers with tips on avoiding food waste by the environmental counselling service or the project "The State of the Art on Food Waste in the Home", which is being carried out at BOKU University. This measure is still relevant.	yes

No.	Measure	Implementation status	Comment	Continuation
75	Information campaigns on best-before and use-by dates and the edibility of certain foods after the best-before date	implemented	Specific campaigns are carried out on an ongoing basis by various stakeholders (online, TV, on-site events): e.g.: umbrella brand LebensmittelPunkt Wien, Wiener Tafel sensory laboratory. The "Is it still good?" instruction manual on the safe use of food and the sensible use of best-before dates was published by Wiener Tafel. Further promotion of information campaigns is necessary to raise awareness among private consumers in this regard.	yes
76	Integrating the topic of preventing food waste into the training and further education of teachers (including kindergartens)	implemented	This is implemented by a wide range of stakeholders such as the BMK, the provinces or the UMWELTBERATUNG environmental consultancy service and as a result of projects such as STREFOWA. Specific seminars for teachers and special offers for direct implementation in practice help with integrating these ideas into lessons (e.g.: "Treasure hunt in the field" guide). The continuation of this measure should be accelerated. A central platform could be set up to collect various teaching materials from different sources for download.	yes

Table 20: implementation of the "Fundamentals" package of measures of the WPP 2017

No.	Measure	Implementation status	Comment	Continuation
77	Standardising data collection methods, e.g.: for sorting analyses	implemented	Implemented by standardising residual waste analyses and creating a guideline for organic waste bin analyses. There is currently no need for further action in this regard.	no
78	Reviewing and further developing the criteria for the Austrian eco-label and public procurement	implemented	The Action Plan for Sustainable Public Procurement (naBe) was revised. The criteria for green events to prevent food waste at events have been further developed. The revision has taken place, but the strengthening of the role model function of public institutions should continue to be promoted by integrating the waste prevention aspect into public procurement.	no

5.1.5 "ReUse" field of action

In recent years, the development of the reuse sector in Austria has developed a strong dynamic. The implementation status of the measures described in the WPP 2017 for the "Reuse" field of action is presented in Table 21. It should be noted that some reuse measures are already integrated into other fields of action.

The reuse networks have been further expanded and consolidated to lesser and greater extents in the provinces. Collecting WEEE for reuse in the municipalities and expanding the scope to include other goods that are still usable has been further promoted in connection with this. A wide range of tools are used to inform the general public about initiatives and activities relating to reuse via various channels: ReUse platforms for the exchange of experience and information have been established, as has the dissemination of information about ReUse and "best practice examples" via newsletters, websites, conferences, publications, regularly maintained online libraries (e.g.: Repathek), workshops and meetings for ReUse businesses and consumers. Further expanding the scope of reuse networks and operational networking with other reuse stakeholders should continue to be promoted and consumer information should continue to be given high priority as a means of promoting the reuse and repair of products.

Although there are already a number of pilot projects and initiatives involved in the implementation of product services and innovative reuse business models, these should be stepped up in the coming years. The increased expansion of "think tanks" requires further support.

The number of reuse businesses, the quantity collected and the volume of reused products sold were surveyed annually by RepaNet (ReUse and Repair Network Austria) for the ReUse Market Report, whereby the data currently collected internally at provincial level should be compiled regularly in future and improve the report's data situation. An overall analysis of textile flows in Austria was also carried out by the EAA. A label for sustainable textile collection and recycling in the narrower sense has not yet been implemented, but the website sachspenden.at has been set up as a guide.

The criteria of the Action Plan for Sustainable Public Procurement were revised by the BMK in 2020 with regard to the implementation of reuse-friendly procurement guidelines and therefore also partially defined reuse criteria for certain product groups, although these are to be continuously expanded in the future. Some activities have already been implemented in the reuse of reusable material goods within the public sector, but there is still a need for action to develop guidelines supported by specific motivation campaigns.

The review of fiscal measures was carried out by the Austrian Institute of Economic Research (WIFO) in a study commissioned by the Ministry of the Environment entitled "The effects of a reduced VAT rate for repair services". The reduced tax rate has already been implemented for so-called "small" repair services (for textiles, leather goods, bicycles). The EU VAT Directive also needs to be further developed to enable further tax benefits for repair services.

Figure 13: Reuse is “in”, disposal is “out”!

Source: stock.adobe.com – ArtSys

Table 21: Implementing the WPP 2017's "ReUse" package of measures

No.	Measure	Implementation status	Comment	Continuation
79	Further expanding and consolidating reuse networks in the provinces, tailored to the possibilities and potential in the individual provinces	largely implemented	This was implemented by establishing reuse networks in all provinces to varying degrees (established nationwide up to the pilot phase). The measure is supported by the almost nationwide expansion of the repair guide and the introduction of funding for repair services and initiatives by individual provinces. Further expanding reuse networks and operational networking with other reuse stakeholders should continue to be promoted.	yes
80	Expanding the reuse collection service for WEEE in the municipalities	largely implemented	Various activities are constantly being organised to expand the scope collection services in the provinces. There are various receiving offices throughout Austria for the return of usable goods, e.g.: at waste collection centres/resource parks or, alongside this, collection with a ReUse-Box/ReUse-Bag or in ReUse-Shops. In addition to electrical equipment, it is primarily furniture, sports and leisure equipment, clothing, toys, decorative items and other household goods that are collected. The reuse collection of usable goods can still be expanded and should also be promoted in the future.	yes
81	Expanding the scope of reuse collection to include other usable goods	largely implemented		yes
82	Informing consumers about reuse, promoting swap corners and similar initiatives	largely implemented	Consumers are informed across the board about initiatives and activities relating to reuse via various channels. This ranges from corresponding PR activities and the provision of information by various institutions to the establishment of different platforms, repair cafés or the establishment of a repair culture in school lessons and the promotion of repair initiatives. In 2018 and 2020, the BMK organised Austrian obsolescence dialogues. A "long-lasting products" campaign was organised on bewusstkaufen.at. The existing programmes are still underused by the general population despite the large number of activities and information campaigns. The further development of specific offers, increased awareness-raising and the collection/publication of best-practice examples should continue to be promoted.	yes

No.	Measure	Implementation status	Comment	Continuation
83	Best practice examples for the reuse-friendly collection and treatment of old equipment and other products	implemented	Best practice examples in the area of reuse-friendly collection and treatment range from creating guidelines for determining the end-of-waste in preparation for reuse to showcase models such as the Upper Austrian ReVital Network, the Styrian Leibnitz Resource Park or the R.U.S.Z repair and service centre to the reuse box/bag or reuse container and platforms for networking reuse businesses and consumers. Information on examples of best practice is distributed in the form of newsletters, conferences, publications, regularly updated online libraries (e.g.: Repathek), workshops and meetings for reuse companies. The information is aimed at employees of all institutions involved in the reuse system, such as waste collection centres and reuse businesses, as well as the general public. The collection/publication of best-practice examples should continue to be promoted.	yes
84	The ReUse platform for sharing experiences and information	largely implemented	Stakeholder dialogues on reuse, waste prevention and the annual Austrian ReUse Conference have a supporting/networking effect at the provincial level. Specialist network meetings/working groups on ReUse have been established in some provinces. Participation in EU Interreg projects contributes to the further interregional exchange of information. RepaNet also connects reuse companies throughout Austria for the purpose of sharing experiences and joint coordination. The ReUse stakeholder dialogue should continue to be held regularly.	yes
85	Survey of the number of reuse companies, the annual collection volume and the annual volume of reused products sold	implemented	The annual RepaNet ReUse market survey commissioned by the BMK has been carried out throughout Austria. Internal data is also collected from the ReUse networks in 6 provinces at different intervals and levels of detail. Data collection from the reuse networks in the provinces should be carried out regularly and according to defined criteria. These should be included in the annual ReUse Market Survey to ensure that data is consolidated at national level.	yes

No.	Measure	Implementation status	Comment	Continuation
86	"Think Tank": Product services and innovative reuse business models	partially implemented	Twice a year, the BMK holds a stakeholder dialogue with the environmental technology cluster, which brings together a wide range of players from the green technology sector. A pilot project on textiles was carried out as part of the innovative and interdisciplinary "Sustainability Challenge" initiative. The "Circular Economy Forum Austria" is an initial platform for a think tank. The province of Styria's participation in the EU Interrreg project SUBSTRACT also aims to develop and establish sustainable and competitive business models for small and medium-sized enterprises operating in the reuse sector. Expanding "think tanks" requires further promotion.	yes
87	Promoting product services, in particular through market launch studies, pilot projects and start-up funding	partially implemented	The BMK worked together with Kommunalkredit Public Consulting GmbH to finance green tech companies to further develop environmental funding in the course of implementing the Master Plan Environmental Technology (MUT). Information on the development of Austrian start-ups is also collected and continuously analysed as part of the "Austrian Start-up Monitor 2020". Innovative product services and reuse business models (e.g.: R.U.S.Z., Revilla, Wiederverkaufen.at, innovate4nature, Skoonu) have already been implemented as part of pilot projects. The development should be further accelerated, in particular by funding and implementing further pilot projects that serve as examples of best practice.	yes
88	Overall analysis of textile flows in Austria	implemented	Implemented by: Master's thesis "Untersuchung der Flüsse und Lager von Textilien in Österreich" (Investigation into textile flows and warehouses in Austria), thesis by Maximilian Wagner, BOKU University (2017); The study on "Aufkommen und Behandlung von Textilabfällen in Österreich" (The volume and treatment of textile waste in Austria); EAA on behalf of the BMK (2020-2021) A detailed overall analysis of the volume flows will be carried out in future by updating the data for corresponding reference years.	no

No.	Measure	Implementation status	Comment	Continuation
89	Reviewing the creation of a label for sustainable textile collection and recycling	partially implemented	In 2020, RepaNet launched the "ReUse - Nachhaltig sozial (sustainably social) - Sachspenden.at" platform as a preliminary stage of a label for sustainable textile collection. For the time being, this measure is not categorised as a priority in terms of waste prevention.	no
90	Reuse-friendly procurement guidelines: Adapting procurement laws and existing relevant guidelines	partially implemented	The criteria of the Action Plan for Sustainable Public Procurement were revised by the BMK in cooperation with various stakeholders (e.g.: federal ministries, BBG, BIG, provinces) in 2020/2021, and the topic of reuse, concerning recycled paper, office materials, electrical appliances, ICT equipment and recycled building materials in building construction/civil engineering was also taken into consideration. The further adaptation of procurement guidelines and instructions for other product groups regarding reuse must be continuously supplemented in the future.	yes
91	Reusing reusable material goods within the public sector: Developing and implementing guidelines for public bodies supported by motivation campaigns	partially implemented	The reuse of material goods is already being implemented in some cases, for example by the City of Vienna in the area of IT equipment. Material goods (federal property) that individual federal agencies no longer need are also included in the Austria-wide transfer of material goods. No guidelines or motivation campaigns are known. There is a need for action to develop guidelines supported by specific motivation campaigns to further accelerate implementation in the public sector in all institutions, from the federal government to the municipalities.	yes
92	Review of tax law measures	largely implemented	Implemented by the WIFO study "The effects of a reduced VAT rate for repair services" commissioned by the Ministry of the Environment (i.e.: services provided by bicycle repair shops, tailors and cobblers - reducing VAT from 20 to 10 %). VAT was ultimately reduced for the legally permissible range under EU law. In future, the focus will be on further developing the EU VAT Directive to enable further tax benefits for repair services.	no

5.1.6 Appendix: Reducing the environmental impact of certain plastic products

Article 4 of the Directive on the reduction of the impact of certain plastic products on the environment[43] stipulates that measures for an ambitious and sustainable reduction in the consumption of certain single-use plastic products must be implemented in each Member State by 2026 (measured quantitatively compared to 2022).
According to Annex - Part A of the Directive, this includes the following items:

- Beverage cups, including their closures and lids;
- Food packaging (/containers) intended for immediate consumption of the food from the packaging either on the spot or as a take-away dish and which can be consumed without further preparation such as cooking, boiling or heating; including;
- Food packaging (/containers) for fast food or other food for immediate consumption.

Excluded from this are drinks containers (drinks bottles and composite drinks cartons), plates and bags (e.g.: plastic bags, paper bags with a transparent window (e.g.: for bread and pastries)) and film packaging (wrappers) with food contents. All single-use beverage cups and to-go food containers placed on the market are subject to the directive, regardless of whether they are filled or unfilled.

Article 4 also stipulates that the Member States must prepare a description of the measures[44] adopted that are necessary to achieve the above-mentioned reduction in consumption by 3 July 2021. This description must be submitted to the European Commission in good time and made publicly available. The Member States must include the measures set out in the description as an integral part of the waste management plans and WPPs (in accordance with Articles 28 and 29 of the Waste Framework Directive).

The relevant report was published on the website of the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology following its submission to the European Commission[45].

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43 2019/904/EU

44 The measures adopted may include national consumption reduction targets or measures to ensure that the end consumer is offered reusable alternatives at the point of sale. The use of economic instruments, such as ensuring that the aforementioned single-use plastic items are not handed out free of charge at the point of sale, represents another example. The measures adopted must be non-discriminatory.

45 (BMK 2021b), bmk.gv.at/themen/klima_umwelt/kunststoffe/publikationen/verringerung-auswirkungen-kunststoff

Numerous activities to reduce single-use plastic products within the meaning of Art. 4 of EU Directive 2019/904 are already taking place at various levels throughout Austria. The Table 22 activities presented here do not claim to be exhaustive and are merely an exemplary list, but provide a representative overview of the wide variety of measures already implemented. (BMK 2021b)

Figure 14: Since 2021, there have been new regulations for certain single-use plastic products to protect the environment.

Source: stock.adobe.com – photka

Table 22: Ongoing activities to reduce the impact of certain plastic products on the environment (based on (BMK 2021b))

Implemented activity		Description
Manufacturer responsibility		Single-use crockery and cutlery have been subject to the provisions of the Packaging Regulation since 1993, which means that producer responsibility has also been implemented for all single-use beverage cups and single-use food packaging. Advance disposal costs and the obligation to take back and recycle have therefore already been realised.
Quantitative reduction target		The current federal programme[46] includes the legal anchoring of the target to reduce all plastic packaging by 20% as well as targeted measures to reduce single-use plastic packaging. The latest amendment to the Waste Management Act 2002, Federal Law Gazette I No. 102/2002, sets a binding reduction target and authorises ordinances for specific measures[47] to achieve a reduction in single-use plastic packaging. Measures to reduce littering and single-use plastic packaging were included as part of the development of the new WPP
Dialogue processes		For years, the BMK has regularly organised stakeholder dialogue rounds on the topics of waste prevention and packaging to help network stakeholders and coordinate activities.
Reusable instead of single-use to-go food	Coffee-to-go in reusable cups	The introduction of a reusable cup for consuming hot drinks to-go has now taken place in several cities in Austria (e.g.: Innsbruck, Kufstein, Graz, Vienna, Linz), whereby in some cases the reusable cups are used as part of a deposit system, sold, or consumers are able to fill cups they have brought with them, meaning that hot drinks can be sold more cheaply. Information campaigns were usually also carried out as a key part of the projects.
	Skoonu – Reusable solutions for take-away crockery	Surveys in the catering industry have shown a strong interest in reusable take-away tableware and a gap in the market with high waste prevention potential. The start-up "Skoonu" was founded as the first cross-catering reusable system in Vienna as part of a project supported by the City of Vienna to promote waste prevention through collection and recycling systems, and began pilot operations in May 2020. As of mid-2021, 24 catering partners are participating in this reusable system and innovative crockery rental system.
	Bring Your Own Box – BYOB initiative	The BYOB initiative to reduce single-use tableware was carried out on the campus of the Vienna University of Economics and Business (WU) from 14 to 31 October 2019 to encourage the use of reusable tableware when collecting food. All caterers on the WU campus took part in the campaign. The initiative was continued due to the positive response. The City of Vienna's reusable cup system was also introduced.
	"Bring's mit today - schmeiss nix mehr away" (Bring it with you today - don't throw anything away) initiative	Many catering establishments throughout Austria are happy to fill food into containers that customers bring themselves on request. Some even point this out themselves, such as the partner businesses in the "Bring's mit today - schmeiß nix mehr away" initiative in Vienna's Neubau district. As part of this initiative, their own information cards, associated campaign posters and a sticker on the entrance door inform customers that they can use the crockery they have brought with them.

46 Austrian Federal Chancellery: "Out of responsibility for Austria. Government Programme 2020–2024", Vienna, 2020 (bundeskanzleramt.gv.at/bundeskanzleramt/die-bundesregierung/regierungsdokumente)

47 For example, to increase the supply of and demand for reusable packaging, ban the free distribution of single-use packaging.

Implemented activity		Description
	Food retail initiatives	Some large food retail chains (such as Spar, Rewe, MPreis, Sutterlüty) give customers the opportunity to take their own fresh food containers with them, which are filled at the deli counter. Some restaurants and cafés in the food retail sector offer discounts to customers purchase hot drinks if they opt to have their own coffee to-go cups filled.
Plastic-free alternatives for to-go consumption	GenussBox made of paper	The GenussBox is a user-friendly, practical and environmentally friendly way to package leftovers from restaurants, canteen kitchens and events, which was introduced as a result of the initiative of the Vorarlberg provincial government and supported by the BMK. This not only avoids food waste, but also saves on single-use plastic containers. In the meantime, the GenussBox has also been introduced in Tyrol, Vienna, and, on a trial basis, in Upper Austria. The GenussBox is also becoming increasingly popular for to-go consumption as a result of the pandemic and the associated restrictions in the catering sector.
	"Wär doch schad drum – Bezirk Mödling" (It would be a shame - District of Mödling)	Compostable and recyclable food boxes have been used in the District of Mödling since 2017 to take away leftover food in the catering trade and, given the positive response, the "It would be a shame" campaign has been extended to include the entire district of Mödling.
	Cake boxes	The Lower Austrian environmental organisations and the Province of Lower Austria have initiated the use of cardboard cake boxes for taking away desserts at the "Clean Festivals". These boxes are available free of charge to the organisers of a "Clean Festival". This idea has now also been realised in Upper Austria in the form of the "Umweltprofi-Kuchenbox".
Campaign plan: "Nachhaltige Beschaffung" (sustainable procurement)		The "Sustainable Procurement" initiative includes the mandatory criteria that cutlery, crockery, tablecloths etc. used for catering in the public sector must be reusable. The use of reusable tableware is also specified as one of the mandatory criteria for organising events, which contributes to reducing the consumption of single-use beverage cups and tableware.
Eco-label - Hotel and catering industry		The UZ 200 Ecolabel Guideline stipulates as a mandatory criterion that the use of single-use tableware must be avoided as a matter of principle. None of the following single-use products may be provided in restaurants and rooms/rented accommodation or at events: Drinks vessels (cups, mugs), plates and cutlery (except in special circumstances such as lack of water, if they are either made of cardboard or renewable raw materials, are biodegradable and can be composted). If single-use products are used for drinks vessels, plates and cutlery in the take-away sector, these must be made of biodegradable materials and be compostable. Customers must also be informed about these features in an appropriate manner (e.g.: in the offer, information on site).
Self-commitment		In fulfilling its role model function, the province of Upper Austria wants to set a positive example by voluntarily committing itself to the procurement of work materials and consumer goods. When procuring work materials and consumer goods in future, materials must be selected that cause the least possible environmental impact when collected and treated as waste. In particular, single-use plastic items as defined by Directive (EU) 2019/904 should be avoided wherever possible. This was implemented with the 2021 amendment to the Provincial Waste Management Act.

Implemented activity	Description
Municipal council resolutions “Plastic-free municipality”	Local authorities in particular have a key role to play in preventing waste. They are in regular, direct contact with citizens and act as a direct role model. Several municipal councils (e.g.: in St. Valentin, Marchtrenk, Mödling, Knittelfeld and Maria Lanzendorf) have already passed resolutions to implement a plastic-free municipality. In this context, the measures include dispensing with single-use plastic cups or using reusable cup hire services at various events and corresponding awareness-raising measures.
Event management	The way in which food and drinks are served at events, whether in the private or business sector or by public organisations, contributes significantly to the amount of waste produced. The use of reusable systems (porcelain crockery, metal cutlery, drinks glasses, reusable plastic cups) can reduce[48] the amount of waste produced at an event by up to 90 %. Gatherings like these also have the potential to raise visitors awareness. That is why various support options have been available for years to promote reusable solutions. For example, the City of Vienna has been promoting the use of reusable cups at events since 2005. Municipalities and event organisers are supported in organising their events in a low-waste way, for example by offering free advice, mobile crockery, reusable tableware and information materials, as part of state initiatives such as “Ghörig feschta” (Vorarlberg), “Gscheit feiern” (Styria), “Sauberhafte Feste” (Lower Austria), “ÖkoEvent” (Vienna) or “a sauberes Festl” (Burgenland). In the cultural sector in Lower Austria, the NÖKU Group (NÖ Kulturwirtschaft GmbH) developed the NÖKU sustainability strategy for more than 30 artistic and scientific institutions, festivals, and the holding sector in 2020. However, consumer awareness of the responsible use of single-use plastic products still needs to be raised.

48 LCA-Cups_Oekobilanz-Getraenkebecher_2009_Mail_word (greenevents-tirol.at)

Implemented activity		Description
	Binding reusability requirement	A reusable packaging requirement for beverage containers and reusable tableware for large events has been specified in three provinces (Salzburg, Vienna and Upper Austria). Section 10d of the Vienna Waste Management Act has stipulated since 1 January 2011 that events with more than 1,000 people or held on properties owned by the City of Vienna must serve drinks in reusable containers (e.g.: kegs, reusable bottles) if these types of drinks can be made available in reusable containers in Vienna and must be served in reusable containers (e.g.: reusable cups, glasses). Reusable crockery and cutlery (e.g.: made of glass, ceramic, metal or plastic) must be used when serving food. According to section 10c of the Vienna Waste Management Act, a waste concept must be drawn up if more than 2,000 people can attend an event in accordance with the Vienna Events Act. The provision on the use of reusable solutions at events was also included in section 32 of the Vienna Events Act in 2020. Section 7 of the Salzburg Waste Management Act stipulates that for events with more than 600 people, at least 80% of the drinks required for the event that are available in reusable containers (e.g.: reusable bottles, kegs) in the province of Salzburg must be supplied in reusable containers and the organiser must serve at least 80% of the drinks in reusable containers (e.g.: reusable plastic cups, glasses). Food must also be served in reusable crockery and with reusable cutlery or in a form that is equivalent in terms of waste management or with crockery or cutlery made only of paper, cardboard or wood. Exceptions apply for events with more than 10,000 people or where it is not possible to fulfil the requirements due to low outdoor temperatures. The amendment to the Upper Austrian Waste Management Act stipulates that at events with more than 300 people, drinks must be served exclusively in reusable containers (bottles, cups, glasses) and food must also be served in reusable crockery and with reusable cutlery (or in crockery substitutes made of paper and cardboard). Drinks containers that are only available in single-use containers must be collected and disposed of separately. Organisers are also offered advice on how to make events more sustainable.
	Promoting reusable beverage cups	“Put the cup on the sidelines” – under this slogan, football clubs in Burgenland were equipped with reusable cups for a reduced fee as part of a promotional project. The majority of Burgenland’s football clubs have taken advantage of this campaign and, given the positive response, the Burgenland provincial government and the Burgenland Waste Association are planning to roll out the campaign at other clubs. Comparable waste management association projects are also underway in other provinces.
	Promoting the purchase or hire of mobile crockery units	Mobile crockery units make a significant contribution to the organisation of low-waste festivals and that is why the rental (e.g.: in Tyrol) or purchase (e.g.: by the province of Lower Austria, collection and recycling systems) has received financial support.
	Reusable cup hire	Reusable cup hire, such as from CUP SOLUTIONS Mehrweg GmbH, offers clubs and institutions, as well as private individuals, the opportunity to hire reusable beverage cups and other tableware when organising parties in order to reduce the plastic waste generated by single-use tableware. In many cases, no costs are charged for rental thanks to corresponding support at the state, regional or municipal level. For example, in the case of the city of Steyr, you only have to pay a deposit to ensure that the cups are returned in undamaged condition, washed and dried.

Implemented activity		Description
	Criteria for Green Events	The use of reusable beverage cups or reusable tableware is a must if Green Events are to be awarded the Austrian eco-label, but also when fulfiling the minimum requirements of the Green Events Austria initiative. The consumption of single-use packaging/tableware can be reduced by increasing the number of events that are organised in accordance with the Green Events criteria.
	"Win sustainably!" competition	The federal-provincial network "Green Events Austria" has launched the "Sustainable Winning!" competition and honours sustainably organised festivals, cultural events and sporting events as well as sustainable sports clubs. The competition has honoured sustainable events with exemplary character and put them in the spotlight since 2011. Among other things, only porcelain cups, glasses or reusable plastic cups are used for serving drinks. Tap water is offered according to availability and communicated accordingly. Only reusable crockery is used for serving food. Reusable beverage cups are successfully used at the refreshment stations, even for running events.
	Informative brochures	As already described in the introduction to this chapter, informative materials on the sustainable or low-waste organisation of events are offered by many stakeholders such as the federal government, provinces, local authorities and waste management associations. The Ministry of the Environment has published guidelines for organising plastic-free events.[49]
Raising awareness and public relations		Educational measures and public relations work are indispensable elements in promoting sustainable consumer behaviour. To this end, the BMK supports public relations work nationwide and endeavours to cooperate with the provinces, municipalities (municipal associations), waste associations and industry. The Federal Coordination Group for Waste Management Public Relations has been exchanging information and networking activities in the provinces for many years.
	European Week for Waste Reduction	The European Week for Waste Reduction is the largest communication campaign in Europe which aims to educate everyone living in Europe on the need to conserve resources. The associated internet platform presents practical help for preventing waste and ways out of a "throwaway society". The campaign week, which takes place every year in November, is promoted by the BMK and the provinces and suitable projects are reported on the associated platform. The Europe-wide clean-up campaign "Let's Clean-Up Europe" also forms part of the European Week for Waste Reduction and contributes in particular to combating the effects of littering. The Austrian Waste Management Association (ARGE Österreichischer Abfallwirtschaftsverbände) acts as the national coordinator.
	Organising relevant teacher training seminars	The BMK regularly organises training seminars for teachers to inform them about the latest developments in the waste sector. Waste prevention is one of the focal points.

49 bmk.gv.at/themen/klima_umwelt/kunststoffe/feste_feiern

Implemented activity		Description
	Campaigns against littering	Campaigns against littering are regularly required, with awareness-raising measures and clean-up campaigns being carried out in equal measure. Activities in this area are organised by the provinces, waste management associations, many municipalities and associations, among others. Numerous litter picking campaigns are carried out throughout Austria and these not only serve to clean up public areas, but also to raise awareness and illustrate the gravity of the problem as well as have an educational effect, especially on younger participants. More than 2,770 clean-up campaigns were organised in 2018, involving around 163,000 people and collecting a total of around 1,000 tonnes of waste. Even the most remote areas are cleaned, for example in the course of the BMK-sponsored clean-up campaign managed by the Alpine Association in the mountains or in the course of "rubbish diving" campaigns in lakes and rivers. Legislative measures are a useful addition to reduce littering – especially in urban areas. Section 79 (4) 5a of the AWG 2002 stipulates that anyone who carelessly throws away or leaves non-hazardous waste that has accumulated in private households [...] in public spaces or in the immediate vicinity of public spaces (littering) commits an administrative offence punishable by a fine of up to 180 euros. In Vienna, the WasteWatchers have been operating as a monitoring organisation since 2008. The authorities are authorised to issue warnings and penalties in the event of soiling in accordance with the Vienna Cleanliness Act. Educational work is also carried out as part of these activities in order to raise additional awareness.
	Advisory services	The waste consultants do an indispensable job in providing information and educating people. They act as multipliers in the local community and often also in kindergartens and schools to raise awareness. They are supported by the BMK's "waste consultants' communication network". The network now includes around 400 waste consultants from all over Austria. The consultants advertise available regional or local services for reducing single-use products.
	Distributing snack boxes and reusable drinks bottles	In many primary schools and kindergartens, snack boxes and reusable drinks bottles have been distributed free of charge by the associations and local authorities for a number of years to make the youngest children aware of the ecological necessity of reducing the consumption of single-use plastic products, but also of the importance of healthy, freshly prepared snacks. Corporate actions like these also exist.[50]
Research projects		Research projects are sometimes carried out during the planning phase or when implementing pilot projects. The research results support the successful realisation of the project and therefore help to minimise consumption. For example, research work was carried out to determine the effects of different beverage cups[51] for the implementation of coffee-to-go in reusable cups[52] or the introduction of reusable cups for the coffee machines at the Vorarlberg University of Applied Sciences with an associated communication concept to raise awareness among students[53]. A survey for the "Besser KaffeetschIn" (better coffee breaks) project was conducted in Innsbruck[54].

50 E.g.: those organised by GOURMET, a community catering company as part of GOURMET Kids.
51 Project at the University of Natural Resources and Life Sciences, Vienna, Vera Liebl, 2010; Austrian Institute of Ecology, 2008.
52 University of Innsbruck, Prof. Anke Bockreis.
53 "1, 2, 3 - Tasse dabei" (Have you brought your cup?) project; Andrea Plischke, Katharina Gartmann, Melanie Isele.
54 A. Matt-Leubner, J. Fuchsig, FFG Student Internship, University of Innsbruck, 2019.

5.2 Evaluating using indicators

Selected indicators will be used to track whether the effects listed for the measures in the AWP 2017 actually materialise. The indicators were divided into

- core indicators, which are determined annually, and
- extended indicators.

One of the core indicators is the volume of important waste streams. Typically, the difference in waste volumes between a base year and a reference year provides information on whether total waste volumes have increased, decreased or remained stable over time, or whether quantitative waste prevention has been achieved. The extended indicators primarily include key figures that can provide information on the implementation status of waste prevention measures and therefore indirectly on the progress made in achieving waste prevention.
The indicators defined in the WPP 2017 are as follows:

Core indicators collected annually:

  - Municipal waste from households and similar settings per capita per annum
  - Mixed municipal waste (residual waste) per capita per annum
  - Separately collected packaging and paper waste per capita per annum
  - Separately collected biogenic waste per capita per annum
  - Separately collected hazardous household waste per capita per annum
  - Waste from commercial and industrial settings (primary waste volumes minus municipal waste, construction waste, and excavation material) per capita per annum
  - Volume of hazardous waste per capita per annum
  - Construction waste (excluding excavated material) per capita per annum
- Extended indicator set with a needs-based survey:
  - For construction waste:
    - ReUse and recycling quota
    - Landfilled volumes
  - For mixed municipal waste:
    - Composition
    - Volume of avoidable food waste and food scraps per capita per annum
  - for reuse:
    - Collected volume of reusable end-of-life products per annum
    - Number of reuse businesses
    - Volume of reusable products sold per annum

The development in recent years is shown below.

5.2.1 Core indicators

The annual values for the volume of waste for the core indicators (based on the data from the BAWP) for the period 2015 to 2020 are shown in the following tables in accordance with the available data.

Table 23: Waste volumes for core indicators, rounded in tonnes, Part 1

Year	Municipal waste from households and similar settings	Mixed municipal waste (bulky waste)	Separately collected packaging waste (glass, plastic and metal)	Separately collected paper waste	Separately collected biogenic waste
2015	4,160,000	1,432,000	402,000	660,000	936,000
2016	4,268,000	1,437,000	405,000	655,000	1,014,000
2017	4,322,000	1,440,000	412,000	657,000	1,002,000
2018	4,408,000	1,459,000	419,000	654,000	1,035,000
2019	4,498,000	1,461,000	444,000	648,000	1,059,000
2020	4,631,000	1,468,000	456,000	624,000	1,137,000

Table 24: Waste volumes for core indicators, rounded in tonnes, Part 2

Year	Separately collected hazardous household waste (incl. batteries)	Waste from commercial and industrial settings (excluding municipal waste, construction waste and excavated material)	Hazardous waste	Construction waste (excluding excavated material)
2015	19,000	12,831,000	1,266,000	9,997,000
2016	19,000	13,253,000	1,315,000	10,428,000
2017	18,000	15,852,000	1,292,000	11,694,000
2018	18,000	16,682,000	1,357,000	11,140,000
2019	19,000	13,237,000	1,257,000	11,507,000
2020	21,000	12,966,000	1,323,000	11,429,000

Table 25: Per capita core indicator volumes, Part 1, in kg/person, data based on BMK (2021a) and BMK (2022)

Year	Municipal waste from households and similar settings	Mixed municipal waste (residual waste)	Separately collected packaging waste (glass, plastic and metal)	Separately collected paper waste	Separately collected biogenic waste
2015	482	166	47	76	108
2016	488	164	46	75	116
2017	491	164	47	75	114
2018	499	165	47	74	117
2019	507	165	50	73	119
2020	519	165	51	70	128

Table 26: Per capita core indicator volumes, Part 2, in kg/person, data based on BMK (2021a) and BMK (2022)

Year	Separately collected hazardous household waste (incl. batteries)	Waste from commercial and industrial settings (excluding municipal waste, construction waste and excavated material)	Hazardous waste	Construction waste (excluding excavated material)
2015	2.2	1,487	147	1,158
2016	2.2	1,516	150	1,193
2017	2.1	1,802	147	1,330
2018	2.1	1,888	154	1,261
2019	2.2	1,491	142	1,296
2020	2.3	1,454	148	1,282

Figure 15 shows the annual volume of municipal waste from households and similar settings in Austria for the period 2015 to 2020 in kilograms per capita, with the average annual growth in per capita volumes amounting to just under 1.5 %. Figure 16 also shows the per capita volume compared with the volume of annual consumer spending, with both figures increasing at a comparable rate.

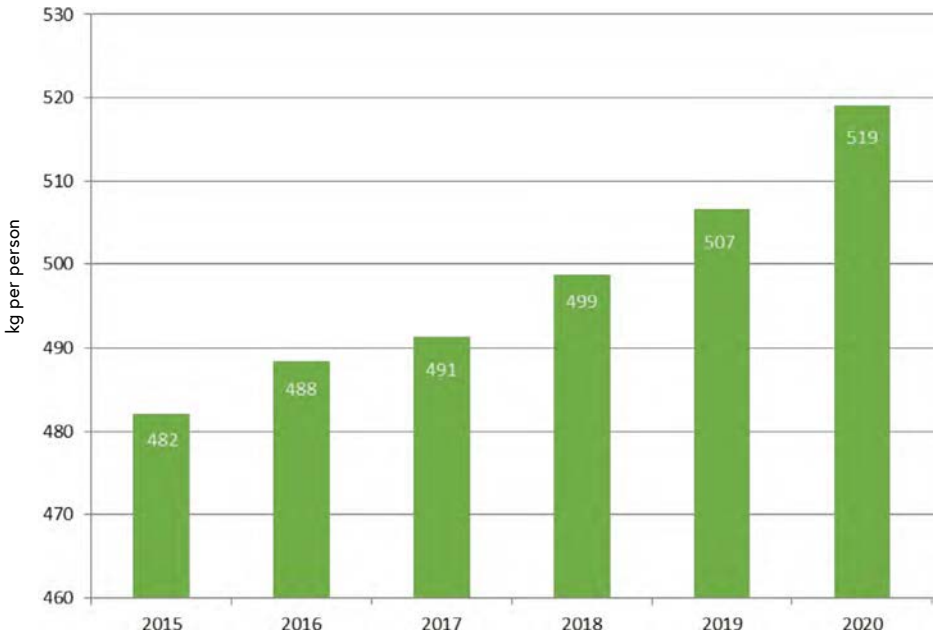


Figure 15: Per capita volume of municipal waste from households and similar settings (reference years 2015-2020, in kg per capita)

Source: based on data from the Federal Waste Management Plan (BAWP) and associated status reports (BMK (2021a); BMK (2022)).

The absolute volume of residual waste in tonnes increased relatively evenly in the period from 2015 to 2020, with an average growth rate of 0.5% per year. However, the per capita volume has fallen by an average of 0.1 % per annum (Figure 16). This is mainly due to the fact that the separate collection of scrap materials has improved.

Per capita growth in separately collected glass, plastic and metal packaging from the household sector remained relatively constant at an average of 0.6% p.a. in the period from 2015 to 2018. There has now been a significant increase since 2019 (Figure 16).

Overall, the trend for separately collected paper waste is relatively even, with a clear downward trend. The per capita volume fell by an average of 1.8% per annum in the period from 2015 to 2020. This is partly due to the population's lower paper consumption.

Figure 16 also shows the volume of separately collected biogenic waste from households and similar settings. There has been a clear upward trend since 2015, with an average per capita growth rate of around 3.3 % per annum between 2015 and 2020. The increase is mainly due to the expansion of separate collection.

The amount of hazardous waste collected separately each year (including batteries) decreased between 2015 and 2018. The decline is mainly due to technical reasons relating to definitions and data. However, an increase has been recorded again since 2019 (Figure 16).

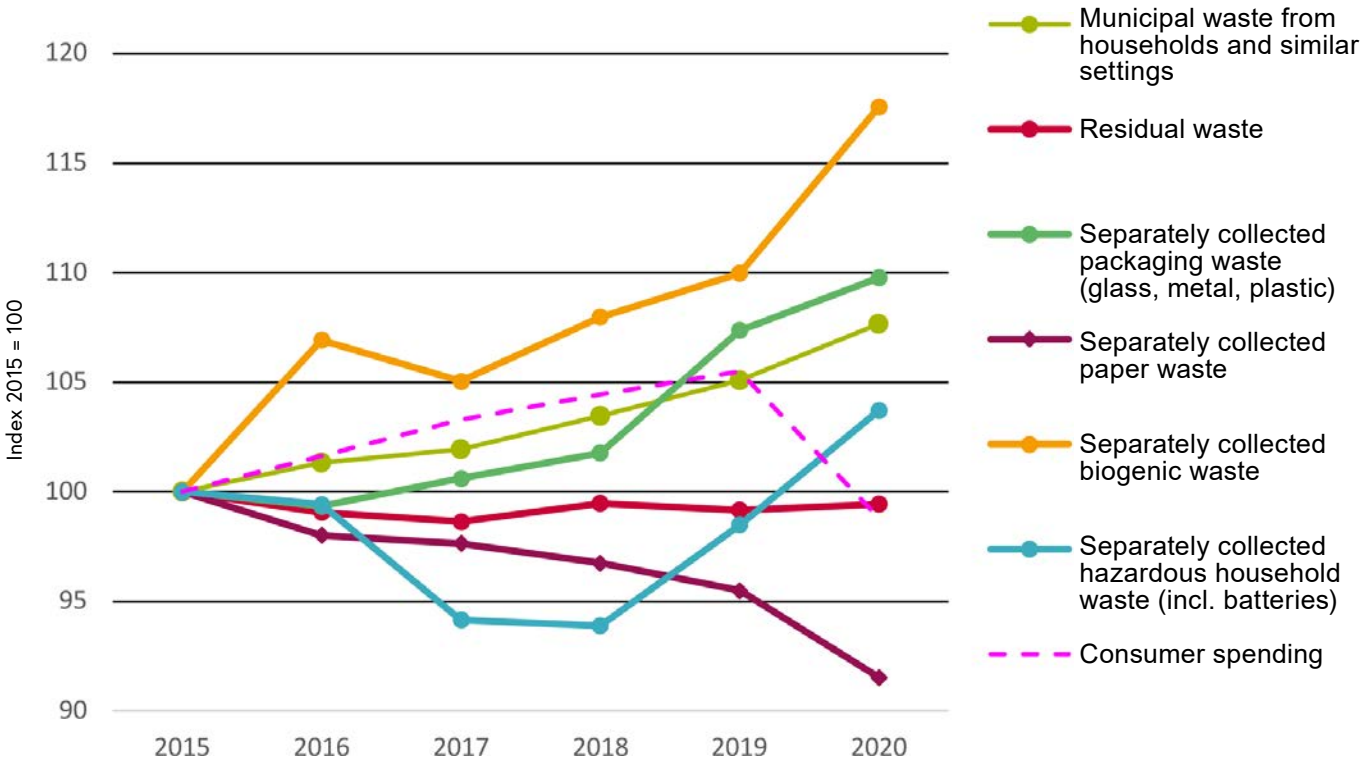


Figure 16: Development of per capita generation of municipal waste in total as well as residual waste, separately collected packaging (glass, metal and plastics), paper waste, biogenic waste from households and similar establishments, separately collected hazardous waste and consumer spending

Source: based on data from the Federal Waste Management Plan (BAWP) and associated status reports (BMK (2021a); BMK (2022)).

A decoupling from consumer spending is can be seen with regard to residual waste and separately collected paper waste.

Figure 17 shows the development of the per capita volume of commercial and industrial waste for the period 2015 to 2020 compared with the development of the real economic volume (real GDP). Per capita waste volumes in the industrial and commercial sector initially rose at the same rate as GDP and, after a significant increase in 2017 and 2018, have returned to the similar level of 2015 since 2019.

The average annual growth in the period from 2015 to 2020 is around 0.9% with regard to the development of per capita volumes of hazardous waste.

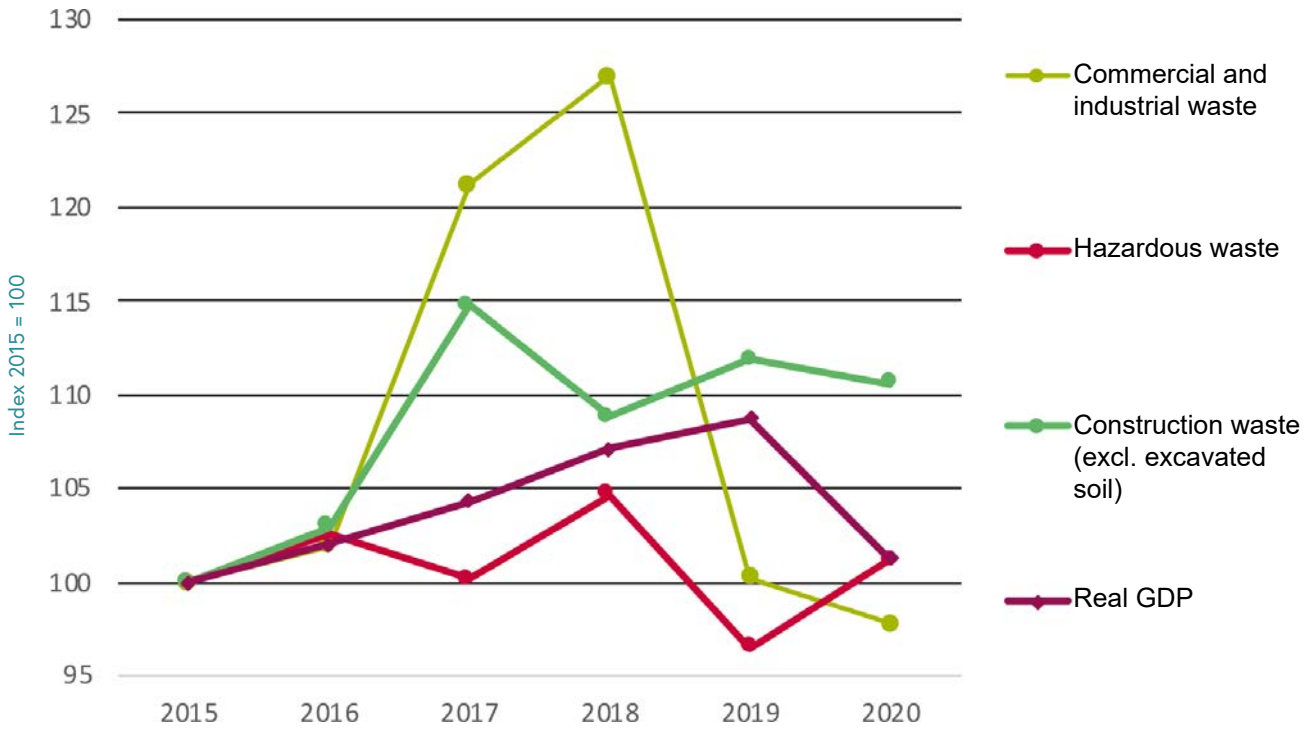


Figure 17: Development of the per capita volume of commercial and industrial waste, hazardous waste and construction waste (excluding excavated soil) compared to the development of the real economic volume (GDP real) for Austria

Source: based on data from the Federal Waste Management Plan (BAWP) and associated status reports (BMK (2022), BMK (2021a)) and the development of the real economic volume (real GDP) (Statistics Austria (2020)).

Figure 17 also shows the development of per capita volumes of construction waste (excluding excavated soil). The per capita volume was subject to slight annual fluctuations in the period from 2015 to 2020, with an average increase of around 2%. On the one hand, this development is dependent on the economic development of building construction and civil engineering in Austria; on the other hand, improved reporting activity by waste collectors also plays a role to some extent.

The following developments can be identified, which could also be attributed to the waste prevention measures taken with regard to the effectiveness of the WPP 2017's waste prevention measures:

- A decline can be observed for certain fractions in the municipal waste sector, such as a slight reduction in the per capita volume of residual waste (mixed municipal waste);
- The volume of waste from retail and industry is also declining and, in 2020, will be roughly at the same level as in 2015;
- In 2020, the per capita volume of hazardous waste reached roughly the same level as in 2015.

The effect of the implemented measures relating to waste in the construction industry will only materialise in later years as a result of longer-term time horizons, and will therefore only become apparent in the development of the volumes with a time lag.

5.2.2 Extended indicators

5.2.2.1 Construction waste

Table 27 shows the volume of construction waste (excluding excavated soil), the proportion recycled and the proportion of landfilled construction waste from the reference year 2015. As the volume of construction waste increases, so does the amount recycled. The increase in landfilled construction waste from 2016 is attributed primarily to improved reporting activities.

Table 27: Construction waste volumes and their treatment, data based on BMK (2021a; 2020)

	2015	2016	2017	2018	2019	2020
Volume in tonnes	9,997,000	10,428,000	11,694,000	11,140,000	11,507,000	11,429,000
Recovery in tonnes	8,287,000	8,704,000	10,036,600*	8,995,000*	9,367,000*	9,496,000**
Recovery rate in %	82.9	83.5	85.8	80.7	81.4	83.1
Landfilled mass in tonnes	640,000	1,225,000	1,180,000	1,081,000	1,317,000	935,000
Proportion of landfilled waste in %	6.4	11.7	10.1	9.7	11.4	8.2

*Update – 1st treatment step (= input to treatment plants);
**Update – 1st treatment step (= input in treatment plants) and mineral construction and demolition waste that is utilised in cement plants or in concrete and asphalt mixing plants

No direct conclusions can be drawn from this with regard to the waste prevention measures implemented to date in the construction industry, as these measures are primarily aimed at long-term developments in this industry.

5.2.2.2 Mixed municipal waste

The composition of mixed municipal waste[55] depends on various factors. These include, for example, the existing waste collection system, the socio-economic structure of the population or the location of households in urban or rural areas. The main components of mixed municipal waste are plastics and composites, organic waste, paper and cardboard. Previously, the composition of residual waste was analysed at different intervals and using different methods in the different provinces. In 2018/2019, residual waste analyses were carried out according to standardised specifications for the first time, which ensures the comparability of the provincial results. Ta 28 shows the average values for Austria.

Figure 18: Austria has a dense waste collection system, including for disposal in public spaces

Source: stock.adobe.com – mapoli-photo

55 "Mixed municipal waste" is waste that originates primarily from private households or that is similar to waste from private households due to its nature or composition. They are sometimes referred to as "household waste" or "residual waste" in provincial waste management laws. Mixed municipal waste does not include separately collected scrap material, biogenic municipal waste, bulky municipal waste, WEEE, used batteries, hazardous household waste or street sweepings.

Table 28: Composition of mixed municipal waste (municipal sector) – average values (data based on nationwide residual waste analyses 2018/2019 – fraction shares (net quantities excl. adhesions))

Fraction	Mass -%	Per capita volumes [kg/person]	Total volume [tonnes]
Paper packaging	3.1	5.0	44,555
Paper non-packaging	3.8	6.4	56,144
Plastic packaging	6.2	10.2	90,168
Other lightweight packaging	2.2	3.7	32,298
Glass packaging	3.9	6.5	57,490
Metal packaging	1.5	2.6	22,523
Organic	17.7	29.2	258,284
Organic food	15.7	25.9	228,937
Waste electronic equipment	0.8	1.3	11,685
Batteries	0.1	0.1	852
Hazardous household waste	0.5	0.8	7.386
Metal non-packaging	1.3	2.2	19.488
Glass non-packaging	0.7	1.2	10,327
Textiles	3.8	6.3	55,805
Shoes	1.2	1.9	17,000
Toiletries	15.1	25.0	220,694
Plastic non-packaging	3.9	6.4	56,397
Wood non-packaging	0.9	1.5	13,178
Inert materials	8.4	13.9	122,419
Other waste	5.2	8.6	76,304
Sorting residue and adhesions	3.9	6.4	56,856
Total	**100**	**165**	**1,458,790**

The WPP 2017 has so far focussed primarily on preventing food waste, public relations work and waste consultancy (also with regard to improving separate collection) and repair and reuse to prevent mixed municipal waste.

In the 2018/2019 nationwide residual waste analyses[56], a distinction was made between the two fractions "Organics (incl. unavoidable food waste)" and "Avoidable food waste" in the main group "Biogenic waste" in accordance with the sorting catalogue defined in the guidelines for carrying out residual waste sorting analyses. Accordingly, the unavoidable proportion cannot be taken directly from the analyses, but was determined using a calculation method instead. Overall, the average proportion of food waste in residual waste (municipal sector) across Austria is 26%. The proportion of avoidable food waste averages 15.7%, with a total volume of around 228,000 tonnes or 25.9 kg per capita per annum (see also Table 28).

5.2.2.3 Reuse

RepaNet [57] conducts an annual market survey among its members which serves to determine current reuse rates for various goods and employment potential in the Austrian reuse sector. Priority is given to:

- The number of reuse businesses;
- The annual collection volumes and
- The annual quantities of reuse products sold.

Employment figures, collection and sales volumes, location data and other information are also recorded for the respective reference year. The 2019 ReUse Market Survey supplemented the annual report on the ReUse services of RepaNet members with an estimate of the entire Austrian ReUse sector for the first time. Data is also provided on the business and voluntary repair sector in Austria (RepaNet 2020).

In 2020, 55 Austrian reuse companies (RepaNet members and non-members) collected a total of 59,700 tonnes of reusable used products[58], of which 36,995 tonnes were sold (including used textiles sent abroad for reuse), thereby preserving their use or product value. This meant that the entire Austrian reuse sector was able to save around 272,000 tonnes of CO_2 equivalents in 2020, which corresponds to the emissions of around 30,500 Austrians or over 80,100 Austrian cars (RepaNet 2021).

56 BMLFUW 2017
57 repanet.at
58 This includes: (Waste) textiles, (waste) electronic equipment and other goods (e.g.: furniture, personal chattels, toys)

Table 29: ReUse in Austria, RepaNet reuse market surveys from 2015-2020

	2015 RepaNet members	2016 RepaNet members	2017 RepaNet members	2018 RepaNet members	2019 RepaNet members	2020 RepaNet members	2020 Austria
Number of (active) member organisations	26	26	26	32	33	30	-
Collection volumes for reusable end-of-life products in tonnes	21,342	23,697	24,400	26,500	28,400	27,500	59,700
Number of ReUse companies	-	-	-	-	-	-	55
Number of ReUse shops	93	100	106	103	128	158	-
Volume of reuse products sold annually in tonnes	9,264	9,745	10,700	12,632	18,000	16,241	36,995
CO_2 equivalent savings in tonnes	-	68,000	75,000	77,400	112,486	119,000	272,000

Source: repanet.at/re-use-toolbox/re-use-repathek/

The collection volumes of reusable goods, the quantities sold and the number of reuse shops have been increasing since 2015. The previous year's level was almost reached in 2020 despite pandemic-related restrictions. Austria's reuse sector has developed exceptionally well over the years, but further efforts are needed to build on this initial success. It should also be noted that, in the construction sector, the work carried out as part of the BauKarussell (recovery-oriented demolition) has so far resulted in the following overall balance [59] (as of the end of 2020):

- More than 21,000 hours of socio-economic work were performed;
- More than 100 target group persons from the Public Employment Service Austria were employed;
- More than 1,100 tonnes of materials/items were processed;
- More than 550 tonnes of the 1,100 tonnes of materials/items were reused;
- And a total of more than 12,500 reuse units (in units, kg, m^2 or linear metres) were procured.

59 Personal information Markus Meissner, 03/03/2021.

6 Evaluating the proposed measures according to AWG 2002

According to section 9a AWG 2002 and Article 29 of the EU Waste Framework Directive, the suitability of the exemplary measures listed in Annex 1 of the AWG 2002 and Annex IV of the Waste Framework Directive must be evaluated when preparing the WPP.

The following tables contain the assessment for including the measures listed in the WPP 2023.

Table 30: Measures that can affect the framework conditions related to the generation of waste

The use of planning measures, or other economic instruments promoting the efficient use of resources
Assessing the suitability of incorporating the concept into the WPP 2023
There is a wide range of planning measures and economic instruments from various areas of environmental and resource policy.
Examples of existing measures in Austria
SDG Action Plan 2019+ (Agenda 2030), Action Plan for Sustainable Public Procurement (naBe), Action Plan for Corporate Social Responsibility, Environmental Technology Master Plan, Green Jobs Master Plan, Sustainable Business Impulse Programme, Public Procurement Promoting Innovation (PPPI), raw materials strategy, VAT reduction for selected repairs, quantity-based waste charges, contribution to the remediation of contaminated sites.
Measures (examples) for the WPP 2023
Development of a strategy and an action plan against food waste; establishment of a national coordination centre against food waste, introduction of a nationwide repair bonus for electrical and electronic appliances. The development of a microplastics initiative, the development of a textile strategy, the programme to reduce certain single-use plastic products, the inclusion of the topic of “low-waste construction” and “dismantling with a view to recycle” in the planning phase, the creation of teaching aids and learning materials to train specialists in planning techniques, techniques and technologies for low-waste construction and the extension of the useful life of buildings, as well as the reuse of building components.

The promotion of research and development into the area of achieving cleaner and less wasteful products and technologies and the dissemination and use of the results of such research and development

Assessing the suitability of incorporating the concept into the WPP 2023

Research funding is essential for innovations/new developments. Austria has a system in place to promote research and development of eco-efficient, energy-efficient and climate-friendly products and environmental technologies.
The distribution and use of low-waste products and technologies is also promoted as part of research and development programmes, cleaner production initiatives and public procurement guidelines.

Examples of existing measures in Austria

Sustainable management as part of open4innovation (communication and information transfer via the online platform "Sustainable management" in connection with research and technology programmes in the field of energy and environmental technologies). The RTI Circular Economy Initiative pursues the goals of intensifying product use, streamlining the use of resources and closing material cycles.
Other examples: Environmental promotion in Austria; regional programmes for corporate environmental protection in the provinces (with support from the federal government) for the identification and implementation of waste prevention potential in companies with the support of consultants; waste prevention funding from the collection and recovery systems (handled by the VKS, among others); awards such as the State Prize for Environmental and Energy Technology, Energy Globe Austria, Phönix or Viktualia Award; events such as Envie-tech, Re-source.

Measures (examples) for the WPP 2023

Continuing existing funding programmes and communicating funding opportunities;
Creating teaching aids and learning materials on the principles, planning techniques, techniques and technologies of "low-waste construction" as well as on the recovery and reuse of entire components from the demolition of buildings; research and development of new solutions, including for weight reduction in the packaging sector

The development of effective and meaningful indicators of the environmental pressures associated with the generation of waste aimed at contributing to the prevention of waste generation at all levels, from product comparisons at Community level through action by local authorities to national measures

Assessing of the suitability of incorporating the concept into the WPP 2023

The portfolio of measures in the WPP must specify the benchmarks against which success is to be measured. If possible, these benchmarks should be based on indicators that are already regularly recorded.

Examples of existing measures in Austria

The following benchmarks are used: Waste volumes, the residual waste analyses of the provinces, various studies such as the volume of avoidable food waste, used textiles, construction and demolition waste, material flow indicators.

Measures (examples) for the WPP 2023

The following supplementary indicators are used in addition to already established indicators:
Reusing components and recycling building materials to be used and
surveys on the potential of avoidable food waste in agriculture.

Table 31: Measures that can affect the design and production and distribution phase

The promotion of eco-design (the systematic integration of environmental aspects into product design with the aim to improve the environmental performance of the product throughout its whole life cycle)
Assessing the suitability of incorporating the concept into the WPP 2023
The product design specifies reusability and repairability. This is why there are already numerous initiatives in place. Such initiatives are therefore extremely important.
Examples ofexisting measures in Austria
The Austrian eco-label; Supplementary agreement to the Austrian economy's 2008-2017 sustainability agenda for beverage packaging; measures to raise awareness, e.g.: the "Say it on reusable packaging" initiative; the promotion of reusable solutions for beverage cups and food packaging for take-away consumption; the "Smart Packaging" state prize (special prize for resource conservation and waste prevention).
Measures (examples) for the WPP 2023
Developing standards for design that prioritises waste prevention, for avoiding harmful substances, and for the repairability, separability and reusability of product parts; Support for measures at EU level to extend manufacturer responsibility with regard to spare parts, repair service and longer product service life as well as examination of the possibility of introducing a repairability index for selected product groups; Repair, reuse and recycling designs should be increasingly incorporated into design curricula; Mandatory reusable quotas for beverage packaging (AWG amendment); measures to increase the proportion of reusable beverage cups and food packaging for take-away consumption (Single-Use Plastics Directive).
The provision of information on waste prevention techniques with a view to facilitating the implementation of best available techniques by industry
Assessing the suitability of incorporating the concept into the WPP 2023
The provision of information is essential to achieve imitation. Existing initiatives are to be supplemented by targeted measures in the WPP.
Examples of existing measures in Austria
Green Tech Cluster, Cleantech Cluster, COIN funding programme, ECR Austria (Efficient Consumer Response Austria), best practice examples from EMAS companies.
Measures (examples) for the WPP 2023
Publishing best practices on waste-preventing techniques/technologies accompanied by corresponding public relations work.

Organise training of competent authorities as regards the insertion of waste prevention requirements in permits under this Directive and Directive 96/61/EC

Assessing the suitability of incorporating the concept into the WPP 2023

In Austria, waste prevention measures are initially proposed by the plant planners as part of waste management concepts in the course of plant authorisations before being reviewed by the authorities.
Waste prevention potential and measures must be identified by the company itself or by the planners commissioned by it. That is why businesses and planners must first and foremost be supported in identifying waste prevention potential and techniques.

Examples of existing measures in Austria

A waste management concept must be drawn up for plants with more than 20 employees or for plant licences in accordance with the Waste Management Act 2002 (AWG) and the Industrial Code (GewO). It must describe the waste-relevant processes, material and waste flows and describe existing and planned waste prevention measures.
A guideline for the creating a proper waste management concept is available.
Relevant training events are regularly offered by various organisations.

Measures (examples) for the WPP 2023

Supplementing the industry-specific model concepts with good examples of waste prevention; pushing ahead with the review of the inclusion of specific waste prevention measures in the waste management concept.

The inclusion of measures to prevent waste production at installations not falling under Directive 96/61/EC. Where appropriate, such measures could include waste prevention assessments or plans

The use of awareness campaigns or the provision of financial, decision making or other support to businesses. Such measures are likely to be particularly effective where they are aimed at, and adapted to, small and medium sized enterprises and work through established business networks

Assessing the suitability of incorporating the concept into the WPP 2023

Small and medium-sized enterprises in particular need support in identifying and realising their waste prevention potential. Existing measures should therefore be supplemented by further measures in the WPP.
See above.

Examples ofexisting measures in Austria

Waste management concept,
regional programmes for corporate environmental protection,
Environmental promotion in Austria in accordance with the Environmental Promotion Act,
Support for environmental management systems such as EMAS training programmes,
Informative brochures, e.g.: on EMAS.
A Waste Management Officer must be appointed at companies with more than 100 employees. See above.

Measures (examples) for the WPP 2023

Creating best practice factsheets on waste-preventing techniques/technologies accompanied by an intensive information campaign; continuing the regional programmes for operational environmental protection in the provinces (with support from the federal government) for the identification and implementation of waste prevention potential in companies with the support of consultants;
Increased awareness-raising among decision-makers in companies/businesses/organisations.

The use of voluntary agreements, consumer/producer panels or sectoral negotiations in order that the relevant businesses or industrial sectors set their own waste prevention plans or objectives or correct wasteful products or packaging

Assessing the suitability of incorporating the concept into the WPP 2023

In principle, voluntary agreements are seen as a valuable complementary instrument for promoting waste prevention. Successes are particularly noticeable in the area of food distribution.

Examples of existing measures in Austria

Sustainability agenda 2008-2017 of the Austrian economy for beverage packaging; agreement 2016 to 2025 to reduce single-use carrier bags (replaced by the ban on single-use plastic carrier bags in force since 2020);
Cooperation partnership as part of “Food is precious!” initiative;
Agreement 2017-2030 on the prevention of food waste in food businesses.

Measures (examples) for the WPP 2023

Preventing food waste along the value chain; further consolidating reuse networks; establishing a stakeholder dialogue on textiles; stakeholder dialogue on packaging.

The promotion of creditable environmental management systems, including EMAS and ISO 14001.

Assessing the suitability of incorporating the concept into the WPP 2023

Environmental management systems and waste prevention can support one other. Opportunities to integrate both approaches should therefore be taken advantage of.

Examples of existing measures in Austria

Promoting regional programmes for operational environmental protection in the provinces (with support from the federal government);
Implementation of environment management systems;
EMAS-certified companies benefit from simplified procedures for the certification of products for the Austrian eco-label and extra points in public tenders in accordance with the Sustainable Public Procurement Action Plan.

Measures (examples) for the WPP 2023

Further support for environment management systems.

Table 32: Measures that can affect the consumption and use phase

Economic instruments such as incentives for clean purchases or the institution of an obligatory payment by consumers for a given article or element of packaging that would otherwise be provided free of charge
Assessing the suitability of incorporating the concept into the WPP 2023
In general, there is a need to change consumer behaviour towards immaterial consumption and waste-preventing behaviour using awareness-raising and other measures.
Examples of existing measures in Austria
In accordance with the Packaging Ordinance, the collection and recycling of packaging waste is financed by licence fees. Single-use crockery and cutlery are also subject to this regulation. The licence fee is calculated on a material-specific and weight-related basis according to the quantity of packaging placed on the market. These costs are added to the product price for the consumer. Paid distribution of carrier bags to end consumers; reducing VAT on small repair services from 20% to 10%. This affects the services of bicycle repair shops, tailors and cobblers.
Measures (examples) for the WPP 2023
Promotions and competitions forming part of the “Conscious buying” or “Say it on reusable packaging” initiative; discounted food products donated shortly before their best-before date. Support for repairs in the form of a repair bonus for electrical and electronic devices Promoting the donation of usable unsold product stocks or returned goods from online/retail to social organisations, for example
The use of awareness campaigns and information provision directed at the general public or a specific set of consumers
Assessing the suitability of incorporating the concept into the WPP 2023
This is an important and central measure to promote waste prevention on the consumption side. Raising awareness involves becoming aware of one’s own consumer behaviour, the values that are lost through inefficient consumption and the barriers that prevent more efficient behaviour.
Examples ofexisting measures in Austria
Initiatives from the Ministry of the Environment: “Conscious buying”, “Food is precious!”, “Nothing left for waste” (canteen kitchens), “Say it on the reusable packaging”, “Pfiat di Sackerl”; the prevention activities of the provinces and municipalities; public relations work VKS; Forum Environmental Education (www.umweltbildung.at); Education 2030 - Platform for Global Learning and Education for Sustainable Development; promotion of the European Week for Waste Reduction and numerous nationwide litter picking initiatives in the spirit of “Let’s Clean-Up Europe”.

Measures (examples) for the WPP 2023
Continuing information campaigns on ways to avoid waste in households and similar settings; waste prevention through quality-of-life-oriented consumer behaviour; continuing campaigns with households as the target group: Raising awareness of the topic of “preventing food waste” and highlighting specific behavioural options; integrating the topic of “preventing food waste” into the education and training of teachers; educational measures on slow fashion; information campaigns on reuse, repair, and the longevity of products; Educational programmes for repair and reuse; Public relations and raising awareness of littering.
The promotion of creditable eco-labels
Assessing the suitability of incorporating the concept into the WPP 2023
Eco-labelling offers a positive incentive for both production and consumption. There are already important initiatives to promote eco-labelling.
Examples of existing measures in Austria
Austrian eco-label; sustainability seal for durable, easy-to-repair electrical appliances; Sustainable and social clothing collection - sachspenden.at.
Measures (examples) for the WPP 2023
Updating the guidelines for awarding the Austrian Ecolabel on an ongoing basis, extending new products/services, and continuing the associated public relations work.
Agreements with industry, such as the use of product panels such as those being carried out within the framework of Integrated Product Policies or with retailers on the availability of waste prevention information and products with a lower environmental impact
Assessing the suitability of incorporating the concept into the WPP 2023
Dialogues and round tables on specific topics are held regularly (food, packaging). The “Conscious Buying” initiative already provides a platform for providing information on waste prevention and eco-friendly products.
Examples of existing measures in Austria
“Conscious Buying” initiative, The “Food is precious!” and “Say it on the reusable packaging” initiatives, Zero Loss Pact with the Professional Association for the Chemical Industry (to reduce plastic waste).
Measures (examples) for the WPP 2023
Continuing stakeholder dialogue on packaging; Continuing the “Food is precious!” initiative; Further recruiting cooperation partners; Supporting the activities of the European Plastic Pact.

In the context of public and corporate procurement, the integration of environmental and waste prevention criteria into calls for tenders and contracts, in line with the Handbook on environmental public procurement published by the Commission on 29 October 2004

Assessing the suitability of incorporating the concept into the WPP 2023

In Austria, the public sector plays an important and pioneering role in the development of a sustainable economy and waste prevention.
Existing measures are to be supplemented by additional ones.

Examples of existing measures in Austria

Federal Procurement Act;
New Austrian Action Plan for Sustainable Public Procurement (naBe) has been published and declared binding for federal agencies by resolution of the Council of Ministers.
"Ecological guidelines" of the federal government;
ÖkoKauf Wien criteria;
"Green Events Austria" Initiative.

Measures (examples) for the WPP 2023

Promoting the extension of the use of public buildings and material goods;
Promoting the use of recycled building materials in public procurement;
Updating the procurement criteria for products that have been created on an ongoing basis and in accordance with the principles of waste-reducing design, high recycling content and (social) sustainability; with regard to durability and repairability;
Further developing and updating the criteria for public procurement to prevent food waste; reusing reusable material goods within the public sector; applying the "use instead of buy" principle in public procurement; increasingly communicating the criteria for public procurement.

The promotion of the reuse and/or repair of appropriate discarded products or of their components, notably through the use of educational, economic, logistic or other measures such as support to or establishment of accredited repair and reuse-centres and networks especially in densely populated regions

Assessing the suitability of incorporating the concept into the WPP 2023

Reuse can extend the service life or delay the purchase of a new product. Priority areas for the promotion of repair and reuse activities include electrical and electronic equipment, textiles and furniture, packaging and building materials, and products in particular.

Examples of existing measures in Austria

Expanding the collection of electrical equipment for reuse in the municipalities to include other usable goods; expanding the scope of the ReUse Box;
Various initiatives in the provinces promote the development of repair networks; Reparaturführer.at; promoting repair in the provinces/with the repair bonus; establishing repair cafés; Let'sFIXit - repair culture in school lessons; ReUse platforms for the exchange of experiences and information; swap meets, ReUse markets at the municipal level.

Measures (examples) for the WPP 2023
Continuing the expansion of the reuse networks in the provinces and promoting the networking of other players from the private and public sectors; Information campaigns on reuse, repair and the longevity of products as well as the publication of best practice examples; developing strategies against obsolescence and for extending the life and useful life of products; educational opportunities for repair and reuse; professionalisation in the area of marketing reuse products; continuing to promote repair options; digitalising product information systems that are relevant for reuse and repair; promoting the "use instead of buy" concept; promoting flea markets, swap meets, pawn shops and second-hand marketing concepts as well as social department stores, especially in rural regions.

The contribution of the instruments and measures listed in Annex 1b AWG 2002 and Annex IVa of the EU Waste Framework Directive to waste prevention must also be described in the course of preparing the WPP. This description is presented in the following table.

Table 33: Contributing and describing the waste prevention measures listed in Annex 1b AWG 2002

Charges and restrictions for the landfilling and incineration of waste which incentivise waste prevention and recycling, while keeping landfilling the least preferred waste management option
Contribution to waste prevention
Regulations regarding landfilling or incinerating waste are governed by the Landfill Ordinance 2008 (amendment to the Landfill Ordinance Federal Law Gazette II No. 291/2016) and the Waste Incineration Ordinance (Federal Law Gazette II No. 389/2002 in the current version Federal Law Gazette II No. 135/2013). Contributions to the remediation of contaminated sites, which are based on landfilling or the thermal treatment/the production of fuel products/the introduction of waste into a blast furnace, are regulated in the Contaminated Sites Remediation Act (declaration made upon ratification: Federal Law Gazette No. 299/1989). These instruments make a significant contribution as an incentive, as regulations involving fees usually have an immediate effect.
Examples of existing measures in Austria
Ban on landfilling organic waste (waste containing more than five per cent by mass of organic carbon (TOC) in solids). Contaminated site contributions (ALSAG) for the disposal of waste (9.2 euros/tonne of excavated soil, inert waste and construction waste landfill; 20.60 euros/tonne on residual waste landfills and 29.80 euros/tonne on bulk waste landfills). The contribution for the incineration of waste, the production of fuel products from waste and the introduction of waste into a blast furnace is 8 euros per tonne. The following mineral building materials may no longer be landfilled from 1 January 2024: Bricks from production, road demolition, technical fill material, demolished concrete, track ballast, asphalt, chippings and recycled building materials of quality class U-A.

'Pay-as-you-throw' schemes that charge waste producers on the basis of the actual amount of waste generated and provide incentives for separation at source of recyclable waste and for reduction of mixed waste

Contribution to waste prevention

"Pay-as-you-throw" is a very effective approach to reducing mixed municipal waste (residual waste) using monetary incentives. Recyclable waste is separated at the point of generation, thereby reducing the volume of mixed municipal waste.

Examples of existing measures in Austria

The polluter-pays system is used for mixed municipal waste and biogenic waste in Austria. With PAYT (pay-as-you-throw), the cost model depends on the amount of waste generated in the household (volume) or the number and size of the waste collection containers provided. The institutional levels responsible for the introduction of PAYT systems are as follows: Municipalities, waste management associations, waste management operators.

Fiscal incentives for donation of products, in particular food

Contribution to waste prevention

Tax incentives are a key element in preventing waste and should be used accordingly.

Examples of existing measures in Austria

In Austria, food donations are tax-exempt. The increasing volume of food donated by food retailers over the years is clear evidence of the usefulness of this measure. Product donations are also increasingly being made beyond the food sector.

Extended producer responsibility schemes for various types of waste and measures to increase their effectiveness, cost efficiency and governance

Contribution to waste prevention

Currently, EPR fees primarily cover the downstream costs of waste management.
EPR is an important instrument that must focus more on upstream processes such as reuse, design for recycling or repairability in the future.

Examples of existing measures in Austria

Manufacturers pay a fee based on the quantities of packaging, electrical and electronic equipment and batteries placed on the market to a collection and recycling system authorised in Austria, which is responsible for complying with acceptance and recycling obligations.

Deposit-refund schemes and other measures to encourage efficient collection of used products and materials
Contribution to waste prevention
As examples throughout Europe show, a deposit system, e.g.: on single-use drinks packaging, is an effective measure for promoting the return of single-use drinks packaging. Consumers must be able to easily make a clear distinction between single-use and reusable bottles. This instrument is also an effective way of curbing littering caused by carelessly discarded packaging.
Examples of existing measures in Austria
In Austria, there are deposit systems for returnable drinks bottles, e.g.: for mineral water, beer, soft drinks and milk. A supplier of mineral water is currently offering a one-way deposit for PET bottles. A deposit scheme for single-use plastic drinks bottles and metal drinks cans is in the works. The switch to deposit solutions is to be accelerated as part of pilot projects.
Sound planning of investments in waste management infrastructure, including through Union funds
Contribution to waste prevention
Due to high investment costs for infrastructure facilities in the area of waste management, data on waste type, quantity, origin, collection and treatment represent a valuable basis for research, development, planning and investment. From a planning perspective, knowledge of the use of raw materials and resources in various sectors of the economy is also necessary for developing the infrastructure for collection and recycling.
Examples of existing measures in Austria
Austria has standardised nationwide data regarding the type of waste, its quantity, origin and whereabouts thanks to recording and reporting obligations, which are recorded by the electronic data management system (EDM). Waste-related data is published regularly via the Federal Waste Management Plans (BAWP) or status reports on waste management.
Sustainable public procurement to encourage better waste management and the use of recycled products and materials
Contribution to waste prevention
Public procurement is a significant economic factor in Austria (share of approx. 14% of GDP) and has a relevant role model effect. It is an effective tool for promoting sustainable waste management and the use of recycled products and materials.

Examples of existing measures in Austria
The public administration is helping to promote environmental, social and economic sustainability using the Action Plan for Sustainable Public Procurement (naBe action plan). The Council of Ministers decision dated June 2021 makes the new naBe action plan mandatory for federal agencies.
Phasing out of subsidies which are not consistent with the waste hierarchy
Contribution to waste prevention
Subsidies can have a valuable steering effect towards the circular economy and implementing the waste hierarchy.
Examples of existing measures in Austria
In the area of housing subsidies in particular, the reuse and increased use of recycled building materials could be more firmly anchored in all provinces. Pioneers lead the way (Province of Styria).
Use of fiscal measures or other means to promote the uptake of products and materials that are prepared for re-use or recycled
Contribution to waste prevention
The aim of the circular economy is to keep materials and resources in the economic cycle for as long as possible. The use of fiscal measures or other means creates an incentive for this and therefore makes a targeted contribution to preventing waste. The reuse and repair sector is an important element in this respect. For example, fiscal measures or expenditure-based instruments aimed at consumers (who utilise repair services) or repair businesses can be used to promote the repair sector.
Examples of existing measures in Austria
VAT reductions on selected repairs (in accordance with the possibilities under the EU VAT Directive) have been implemented; The repair bonus has covered 50% (max. 200 euros) of the repair costs for electrical and electronic equipment nationwide since April 2022. Repair initiatives are supported as part of social projects and labour market policy funding.
Support to research and innovation in advanced recycling technologies and remanufacturing;
Contribution to waste prevention
Funding for research and development is a very important instrument for enabling the transition to a circular economy.
Examples of existing measures in Austria
The new RTI initiative Circular Economy promotes innovative research and development projects to better record and process waste streams and make use of them for material and energy recovery. This includes the collection, sorting and high-quality recycling as well as the availability of secondary raw materials.

Use of best available techniques for waste treatment

Contribution to waste prevention

Reference documents listing the best available techniques are adopted within the framework of Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control).
These provide the competent authority for plant authorisation with the framework for requirements for emission limit values and other environmental issues.
It is an important tool for keeping waste treatment plants up to date with the latest technology and therefore reducing negative environmental impacts.

Examples of existing measures in Austria

The European Commission organises an exchange of information with the Member States, industry associations and environmental protection organisations as part of the Industrial Emissions Directive (IE-R), resulting in comprehensive BAT (best available techniques) leaflets.
Information sheets on waste treatment and waste incineration have also been produced.
The new BAT conclusions on waste treatment were published as an implementing decision in the Official Journal of the EU dated 17 August 2018.
Less relevant for waste prevention in the narrower sense.

Economic incentives for regional and local authorities, in particular to promote waste prevention and intensify separate collection schemes, while avoiding support to landfilling and incineration

Contribution to waste prevention

Waste fee systems should be designed in such a way that they are as cost-causative as possible and incentivise waste prevention and separation.
The amount of waste disposed of in the residual waste bin will be reduced and the amount of separately collected waste materials will increase, thereby promoting recycling.
Waste consultancy activities and targeted waste prevention campaigns are intended to reduce the amount of waste, especially if the waste fees are structured in such a way that a reduction in the amount of waste also results in visibly lower costs.
The contaminated site remediation contribution is an economic tool for promoting the prevention of landfilling or incineration of waste.

Examples of existing measures in Austria

Quantity-based waste charges have been introduced nationwide (only in apartment blocks is there usually no direct retroactive effect on the individual waste producer with regard to residual waste).

Public awareness campaigns, in particular on separate collection, waste prevention and litter reduction, and mainstreaming these issues in education and training

Contribution to waste prevention

It is necessary to continuously raise public awareness to promote the sustainable use of resources and waste-preventing consumer behaviour. A wide range of measures is necessary to bring about a change in behaviour on account of diverse target groups.

Examples of existing measures in Austria

Countless initiatives to raise awareness are being carried out at the federal, provincial and regional level by numerous stakeholders, in some cases with the support of companies.
In accordance with AWG 2002, authorised collection and recycling systems are obliged to implement measures to promote waste prevention to a specified extent (0.5% of licence revenue). The VKS is responsible for organisation and implementation.

Systems for coordination, including by digital means, between all competent public authorities involved in waste management

Contribution to waste prevention

It is necessary to coordinate closely and exchange information between the authorities to ensure standardised provisions and regulations nationwide, particularly in terms of enforcement.

Examples of existing measures in Austria

Representatives of the authorities have the opportunity to carry out analyses and queries of waste-related data using the Electronic Data Management (EDM). The EDM is a networked system of Internet applications and databases to support environmental protection-related documentation, notification and reporting obligations. The comprehensible and transparent presentation of the results enables authorities at all administrative levels to implement individual legal provisions efficiently and comprehensive analyses create the basis for steering measures in politics and administration.

Promoting continuous dialogue and cooperation between all stakeholders in waste management and encouraging voluntary agreements and company reporting on waste

Contribution to waste prevention

This is a very important instrument for giving stakeholders the opportunity to present their views and positioning. The dialogue leads to an exchange of information and the development of common waste management goals.

Examples of existing measures in Austria

In Austria, the relevant stakeholders are invited to contribute their experience, information and knowledge in the form of workshops, questionnaires and interviews when developing strategies and creating fundamental studies, waste management programmes and the like. Ongoing stakeholder dialogues are organised, particularly in the area of waste prevention (established dialogue forums, e.g.: for waste prevention, food waste prevention, reuse, packaging). Waste data is available in Austria based on reporting obligations, which take place via the EDM.

7
The WPP's contribution to AWG goals

According to section 9a AWG 2002, the WPP must include a description of the measures as well as an allocation to the objectives according to section 9 AWG 2002.

The following list describes the respective target contributions of the WPP measures (identifiers corresponding to Table 1 to Table 7 of Chapter 3).

WPP measures to:

1. Reduce the quantities and pollutant content of waste and contribute to sustainability:
   B1, B2, B3, B4, B5, B6, B7, B8, B9, K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11, H12, H13, O1, O2, O3, O4, O5, O6, O7, O8, O9, O10, O11, O12, O13, O14, O15, O16, measures in Chapter 8.6

2. Promote and support sustainable production and consumption models:
   B1, B2, B3, B4, B5, B6, B7, B8, B9, K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11, H12, H13, O1, O2, O3, O4, O5, O6, O7, O8, O9, O10, O11, O12, O13, O14, O15, O16, measures in Chapter 8.6

3. Promote the design, manufacture, processing, other shaping and use of products that are resource-efficient, durable (including in terms of their lifespan and the exclusion of planned obsolescence), repairable, reusable or upgradable and that the waste remaining after its intended use can, if necessary, be dismantled or certain components separated, and that the components or materials recovered from the waste can be largely reused:
   B1, B2, B3, B4, B5, B6, B7, B8, B9, K1, K5, K7, K8, K9, K11, K14, T1, T2, T3, T4, T5, T6, T7, T8, T12, R1, R2, R3, R4, R5, R6, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, O1, O5, O9

4. Design products in such a way that during their manufacture, use and consumption and after their intended use, taking into consideration the relevant environmental aspects, no adverse effects on public interests (section 1 (3)) are caused, in particular that as little waste as possible and as little pollutant as possible is left behind:
   B1, B2, B3, B4, B6, B7, B9, K1, K3, K5, K7, K9, K10, K11, K14, T1, T5, T6, T7, R1, R10, O1, O2

5. Use products in such a way that the environmental impact, in particular the generation of waste, is minimised:
   B4, B5, B7, K8, K10, K11, K13, T3, T4, T8, T9, T10, T11, T12, T13, R2, R3, R4, R5, R6, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, H2, H3, H4, H10, O5, O9, O11

6. Specifically identify products containing critical raw materials in order to prevent these materials from becoming waste:
   R1, R2, R3, R4, R5, R6, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, O1, O5

7. Encourage the reuse of products and the creation of systems to promote repair and reuse activities, in particular for electrical and electronic equipment, textiles and furniture, packaging and construction materials and products:
   B1, B2, B3, B4, B5, B7, B8, B9, K1, K3, K11, K13, T4, T8, T9, T10, T11, T12, T13, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, H2, H3, H10, O5

8. Promote, in an appropriate manner and without prejudice to intellectual property rights, the availability of spare parts, instruction manuals, technical information or other means and equipment, and software that allow products to be repaired and reused without compromising their quality and safety:
   B7, R2, R5, R6, R10, O5

9. Reduce waste volumes in processes related to industrial production, extraction of minerals, manufacturing, construction and demolition activities, taking into account the best available techniques:
   B1, B2, B3, B4, B5, B6, B7, B8, B9, K1, K7, T1, T5, T7, R1, O1, O2, O3, O4, O8

10. Reduce food waste in primary production, processing and manufacturing, in retail and other forms of food distribution, in restaurants and catering services, and in private households to contribute to the United Nations Sustainable Development Goal of halving global per capita food waste at the retail and consumer levels by 2030 and reducing food losses along the production and supply chain:
    L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, measures in Chapter 8.6

11. Promote food donation and other forms of redistribution of food for human consumption to prioritise human use over use as animal feed and processing into non-food products:
    L1, L2, L3, L7, L8, L10, L11, measures in Chapter 8.6

12. Reduce the generation of waste, in particular waste that is not suitable for preparation for reuse or recycling, e.g. using forms of distribution, take-back or collection and recovery systems or by collecting deposits:
B1, B2, B4, B5, K7, K8, K10, K11, K13, T3, T4, T5, T8, T9, T10, T11, T12, T13, O1, O2, O3, O4

13. Minimise the generation of waste by the end consumer, e.g.: using forms of distribution, take-back or collection and recovery systems or by collecting deposits:
K2, K6, K11, K13, L5, R3, R4, R5, R6, R8, R13, R15, R16, R17, H2, H3, H4

14. Identify the products that are the main sources of litter, in particular to nature and the marine environment, and take appropriate measures to prevent and reduce the amount of litter generated by these products:
K2, K3, K9, K10, K11, K13, H3, H5, H6, H7, H8, H9, H10, H11, H12, H13, O10, O11

15. End the generation of marine litter, as a contribution to the United Nations Sustainable Development Goal to prevent and significantly reduce all forms of marine pollution:
K1, K2, K3, K5, K6, K9, K10, K11, K13, H3, H7, H8, H9, H10, H11, H13, O10, O11

16. Develop and support information campaigns to raise awareness of waste prevention and littering,
K6, L5, L10, T8, R8, R11, R15, H1, H2, H3, H4, H11, H13, O12, O14, O15, O16

17. Significally and permanently reduce the consumption of single-use plastic products
    a) Beverage cups, including their caps and lids, and
    b) Food packaging, i.e. containers such as boxes (with or without lids) for food that
        I) Are intended to be eaten directly on the spot or as a take-away meal,
        II) Are usually consumed out of the packaging and
        III) Can be consumed without further preparation such as cooking, boiling or heating,
        including packaging for fast food or other food for immediate consumption, excluding drinks containers, plates and sachets and wrappers containing food,

    to bring about a significant trend reversal in the increasing consumption of these single-use plastic products. These measures aim to bring about a measurable quantitative reduction in the consumption of these products by 2026 compared to 2022. A description of waste prevention measures that have been aligned with

this goal must be made available to the public by the time they are first published in the WPP in accordance with section 9a:
K3, K6, K11, K13, H10, H12, H13, O10, O11

18. Achieve a 20% reduction in single-use plastic packaging placed on the market by 2025 compared to 2018; to promote the expansion of reusable packaging systems, especially for beverage packaging:
K1, K2, K3, K6, K11, K13, H10, H12, O10, O11

19. Promote the expansion of reusable packaging systems, especially for beverage packaging:
K1, K2, K3, K6, K11, K13, H2, H10, O9, O10, O11

8
The “Food is precious!” initiative

The “Food is precious!” initiative is a guide to greater appreciation and less food waste.

8.1 Background

Resources and energy are required to produce, process, store and transport foodstuffs. At the same time, food supply – depending on the form of individual consumption – is associated more or less with environmental pollution, such as soil erosion, over-fertilisation of soil and water, greenhouse gas emissions and loss of biodiversity (e.g.: through the use of pesticides).

Our nutritional habits can have a considerable impact on nature and the environment. Alongside the areas of “housing” and “mobility”, the food sector is responsible for most of the environmental impact of private consumption.

Worldwide, around a third or 1.3 billion tonnes of food is lost on its way to the plate every year. Around 1,000 tonnes of food are wasted every minute. Global food waste and loss is the third largest contributor to greenhouse gases after the USA and China and the largest consumer of irrigation water.

In Austria, too, food is wasted or thrown away every day. Food waste is recorded at all stages of the value chain – after harvesting, during transport, during storage, during further processing and during consumption. In 2020, around 640,000 tonnes of avoidable food waste was generated throughout Austria in the retail and consumption sectors. A total of 70,000 companies in the food industry, food commerce, accommodation and catering businesses and more than 3.9 million households generate this food waste in Austria. As in other industrialised countries, the majority of avoidable food waste is attributable to the consumption phase. Around 229,000 tonnes of avoidable food waste is disposed of in residual waste alone each year.

These figures demonstrate that there are various players who need to make changes to their behaviour.

8.2 General conditions

The aim of the national strategy to prevent food waste in Austria is to handle food more appreciatively and efficiently in the future and therefore produce significantly less food waste.

This “Food is precious!” initiative serves to implement the national strategy and as a guide for all players in the food value chain to actively contribute to achieving the goal with the measures identified in it.

Reducing food waste is an urgent, multi-layered, global problem and has therefore been recognised by the United Nations as one of the most central tasks of our time. SDG Goal 12.3 of the Global Agenda for Sustainable Development, which must also be implemented by Austria, stipulates halving per capita food waste in retail, restaurants and food services and private households as well as reducing food losses in agriculture and during processing. European targets such as the EU's Waste Framework Directive, which stipulates a 30% reduction in food waste by 2025 compared to the base year 2020, are also working towards a more sustainable approach to food. These EU targets were enshrined at the national level with AWG amendment to the Circular Economy Package.

Achieving these ambitious goals requires the active participation and increased cooperation of all stakeholders across sector and system boundaries. The responsibility lies with the stakeholders in agriculture, business, science, administration, politics and civil society. The initiative is a call for joint commitment against waste and greater appreciation of food under the umbrella brand "Food is precious!".

8.3 Definitions

According to Article 2 Regulation (EG) No. 178/2002[60], "food" means any substance or product which is intended to be or can reasonably be expected to be consumed by humans in a processed, partially processed or unprocessed state. Food also includes drinks, chewing gum and all substances – including water – that have been intentionally added to food during its production, processing or treatment. Plants are declared as food after harvesting and animals after slaughtering.

According to section 2 (4) of the Waste Management Act,[61] food waste is food if it has been deliberately disposed of, if you want to dispose of it or if you have to dispose of it. This does not include food that is used as animal feed. Food waste occurs at all stages of the value chain, after harvesting, during transport, processing, storage, preparation, sale or consumption. It is divided into avoidable and unavoidable food waste.

60 Regulation (EG) No. 178/2002 (eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2002R0178:20060428:DE:PDF) laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.

61 Federal law on sustainable waste management (Waste Management Act 2002 – AWG 2002: ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20002086) as amended.

The term avoidable food waste includes food waste that is still fully edible at the time of disposal or that would have been edible if used in time.[62] These include, for example, leftovers, opened food, as well as originally packaged and partially packaged, unspoilt and spoilt food. Unavoidable food waste refers to plant and animal waste that is produced when food is prepared, it is not edible or is generally not eaten, such as banana peels, apple cores, egg shells, coffee brew, fish bones or bones.

This initiative for the prevention of food waste focuses on avoidable food waste.

8.4 General information on the "Food is precious!" action programme

The publication of the Strategy to Prevent Food Waste – Working Together towards a Common Goal[63] fulfils the requirements of the Austrian Federal Government. This forms the political framework for producing, processing and consuming food more sustainably by 2030 and generating less food waste overall. It was drawn up by the interministerial coordination centre created in 2021 (with representatives from the BML, BMSGPK, BMAW, BMBWF and under the leadership of the BMK) to prevent food waste. This committee will oversee the initiative's implementation and organise working groups on specific issues and topics. The BMK will also continue to hold national stakeholder dialogues for networking and exchange between the players.
The initiative was developed on the basis of the four-part vision of the food waste prevention strategy, which specifies the following:

- Healthy food for all;
- Sustainable production in line with demand;
- Appreciation of food instead of disposal;
- Adequate data security.

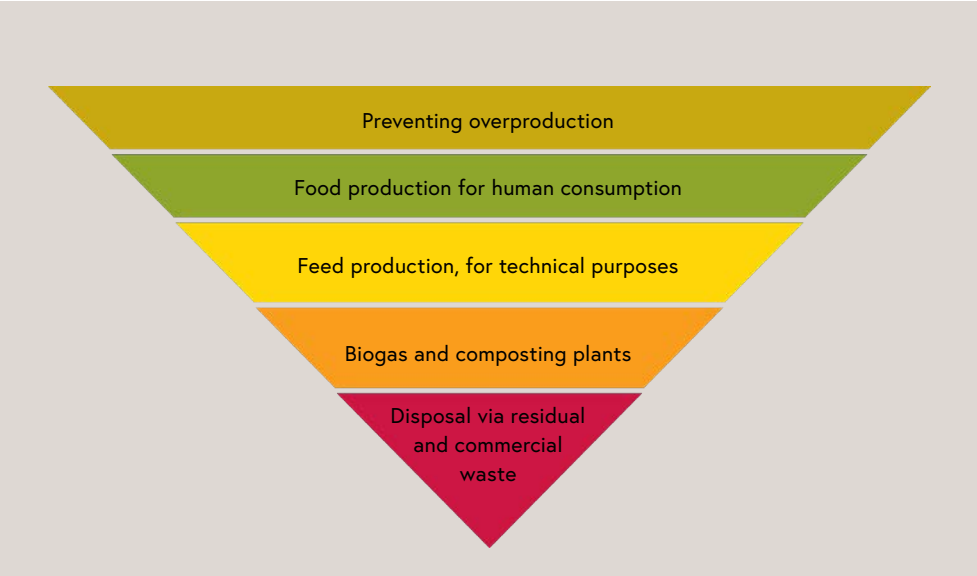
The initiative describes activities and measures with particularly high potential for preventing food waste. They are assigned to the respective stage of the food value chain in accordance with the EU requirements for monitoring[64] and are given an implementation date. Specific responsibilities are also identified for the respective measures.

62 Data situation on food waste volumes in Austria – Summary of studies by the Institute of Waste Management (ABF-BOKU); Scherhaufer, Hrad, Obersteiner; Vienna, 2016
63 bmk.gv.at/themen/klima_umwelt/abfall/abfallvermeidung/lebensmittel/publikationen/
64 Commission Delegated Decision (EU) 2019/1597 (eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX%3A32019D1597), see Chapter "Evaluating and Monitoring".

The aim is to take measures to prevent food waste or loss that are as high as possible in the hierarchy shown in Figure 19 and that maintain Austria's high quality standards for food. When defining measures, however, it is necessary to deviate from this if human and animal health or legal requirements, particularly with regard to food hygiene, so require, or if this is justified by an overall consideration of the effects due to the ecological, economic and social aspects.

Figure 19: Hierarchy for using food or food waste

Source: BMK



The proportion of avoidable food waste should be reduced as far as possible and the proportion of unavoidable food waste should be utilised in the best possible way from an environmental point of view.

8.5 Initiative objectives

This initiative is being implemented with the goal of achieving the following objectives for the individual stages of the food supply chain. The objectives correspond to or are derived from the requirements of the EU Waste Framework Directive and SDG 12.3 of the Global Agenda for Sustainable Development.

8.5.1 Primary production

The greatest challenge lies in realising demand-oriented production, which is by no means trivial in the production of food and the enormous dependencies on external influences (such as weather conditions). An improvement in the data situation is required to map the annual fluctuations. It is also essential that the topic is anchored in the training

provided by relevant educational institutions. The role of unfair commercial practices must be highlighted. The waste data for primary production was collected in accordance with Delegated Decision (EU) 2019/1597 for the reference year 2020. A total of around 13,900 tonnes of (avoidable and unavoidable) food waste was generated in primary production in 2020. The aim is to reduce food waste in this area by at least 10% by 2025 and by at least 20% by 2030.

8.5.2 Processing and production

A major focus should be placed on increased inter-company networking. More demand-orientated production and the further processing and return of residual materials, products and surpluses to the production cycle (e.g.: sorted out flawless goods) should be increased through inter-company cooperation. Voluntary agreements are to be established as is already the case in other sectors. Waste data was collected in accordance with Delegated Decision (EU) 2019/1597 for the reference year 2020. Around 173,700 tonnes of (avoidable and unavoidable) food waste was recorded during processing and manufacturing. The aim is to reduce food waste during processing and manufacturing by at least 10% by 2025 and by at least 20% by 2030.

8.5.3 Retail

Surpluses are to be reduced by an in-depth operational analysis of the causes of the systematic oversupply and streamlining processes in terms of ordering and logistics. Reduced-price distribution to consumers at closing time or free distribution to social institutions are further effective measures to fulfil the target of preventing at least 30% of food waste by 2025 and at least 50% by 2030 (based on the reference year 2020). In 2020, a total of around 84,300 tonnes of food waste was disposed of by retailers, of which around 70,800 tonnes was avoidable food waste. Around 20,000 tonnes of edible food was distributed to welfare services and a further 10,000 tonnes were distributed as animal feed or for animal feed production.

8.5.4 Restaurants and food services or restaurants and catering services

Subsidised business consultations and special software tools offer practical support for handling food in a resource conserving manner. Sustainable food management aims to reduce at least 30% of food waste in restaurants and food services by 2025 and at least 50% by 2030 (based on the reference year 2020). Public institutions in particular should act as role models and multipliers. Around 202,000 tonnes of food waste was generated in 2020. Around 151,500 tonnes of this was avoidable food waste.

8.5.5 Private households

Conscious and sustainable consumption should reduce the environmental impact of food. Personal waste disposal behaviour varies greatly, but the magnitude of food waste is usually underestimated. Increased awareness of the ecological and financial impact of food waste and teaching relevant skills in particular should reduce the amount of waste generated in households. At least 30% of food waste in the household sector is to be prevented by 2025 and at least 50% by 2030 (based on the reference year 2020). In 2020, around 737,600 tonnes of food waste was disposed of in the household sector, of which around 415,600 tonnes could have been prevented.

8.5.6 At all stages

Along the entire value chain, knowledge about the sustainable and safe handling of food, the magnitude of food waste and ways to prevent avoid food waste is being increased and communicated to the general public. Research activities and compliance with future EU monitoring obligations[65] will improve the data situation at all stages of the value chain.

8.6 Initiative measures

The following list shows the institutions/stakeholders responsible for realising these measures:

- Federation, specifically
  - BMBWF (Federal Ministry for Education, Science and Research)
  - BMAW (Federal Ministry for Employment and Economy)
  - BMF (Federal Finance Ministry)
  - BMJ (Federal Ministry of Justice)
  - BMK (Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology)
  - BML (Federal Ministry of Agriculture, Forestry, Regions and Water Management)
  - BMLV (Federal Ministry of Defence)
  - BMSGPK (Federal Ministry for Social Affairs, Health, Care and Consumer Protection)
- Provinces of Austria
- Municipalities
- Science
- Economy (companies)
- Representations of interests
  - Collection and waste recovery systems

65 Further details are described in the chapter entitled “Evaluation and monitoring”.

  - Austrian Federal Economic Chamber (WKO)
  - Austrian Hotelier Association
  - Association for Consumer Information (VKI)
  - Austrian Chamber for Agriculture (LKO)
- Civil societies, associations and other actors
  - NGOs
  - Codex Commission
  - Welfare services
  - Media
  - Consumers

Table 34: Measures in the area of primary production

Measures	Economy	Municipalities/ Provinces	Federation	Representations of interests	Civil society/ associations	Science	Time horizon
Studies on the potential of food waste and food losses in agriculture (e.g.: harvest and post-harvest losses, goods of inferior quality, intervention grains) and their reduction			BML, BMK			Universities, higher education colleges	2023
Strengthening alternative, regional sales opportunities for agricultural products (e.g.: direct marketing, processing by farmers and/or processing as part of inter-company co-operations; especially for goods of inferior quality)	Companies	Municipalities/ Provinces	BML	LKO			ongoing
Promoting post-harvest on agricultural land, including the use of technological innovations			BML	LKO		Universities, higher education colleges	2024
Promoting the distribution of agricultural harvest surpluses to households, welfare services and charitable organisations	Companies	Municipalities/ Provinces			Civil society, associations		ongoing
Training programmes for employees in agricultural businesses or integrating the topic as part of industry-specific training courses, especially in agricultural schools	Companies		BMBWF, BML	LKO			ongoing
Supporting research activities and pilot projects on food waste-reducing production methods and analysing the role of quality labels			BML, BMAW			Universities, higher education colleges	ongoing

Table 35: Measures in the area of processing and production

Measures	Economy	Municipalities/ Provinces	Federation	Representations of interests	Civil society/associations/NGOs	Science	Time horizon
Promoting needs-based production and processing and returning raw materials, products and surpluses to the production cycle (e.g.: sorted faultless goods), in particular through inter-company co-operation	Companies						ongoing
Support for EU activities, e.g.: in the area of best-before date regulation			BMSGPK, BMK, BMAW				2022
Examining the possibilities for distributing overproduced, edible goods from processing (e.g.: in the case of faulty packaging)	Companies		BMSGPK	WKO			2023
Broad information about the legal framework conditions for distributing food (e.g.: information sheets)	Companies		BMSGPK (BMK, BML) Codex Commission	WKO			2023
Expanding the scope of the voluntary agreement on food waste prevention to include food production and processing companies	Companies		BMK, BMAW	WKO (Professional Association)			2023

Measures	Economy	Municipalities/ Provinces	Federation	Representations of interests	Civil society/associations/NGOs	Science	Time horizon
Realising pilot projects and publishing best-practice examples; announcing the VIKTUALIA Award	Companies		BMK		NGOs	Universities, higher education colleges	2024
Studies to analyse causes and develop alternatives						Universities, higher education colleges	ongoing
Examining economic instruments for selling and promoting the distribution (incl. tax aspects)			BMK, BMF				2023
Logistics support for transporting foodstuffs	Companies	Municipalities, Provinces	BMK, BMAW		NGOs		ongoing
Training programmes for employees and integrating the topic as part of industry-specific training courses	Companies		BMBWF				ongoing

Table 36: Retail measures

Measures	Economy	Municipalities/ Provinces	Federation	Representations of interests	Civil society/associations/NGOs	Science	Time horizon
Research to analyse causes and develop alternatives	Companies	Provinces of Austria	BMK, BML			Universities, higher education colleges	2023
Implementing the Impact support programme to prevent food waste			BMAW				2022
Review and possible adaptation of the legal and fiscal framework conditions to ensure the legally compliant distribution of edible foods by food businesses			BMK, BMSGPK, BMJ, BMF				2024
Continuation of the voluntary agreement to prevent food waste at food companies[66] and increased implementation of alternative measures	Companies		BMK				ongoing
Defining responsibilities and communication in companies	Companies						ongoing
Adapting the concept of returned goods (unsold commission goods returned to the supplier, especially bread and pastries)	Companies						2023
Promoting the production of needs-based packaging sizes and minimising the supply of XXL and multi-packs in the fresh food sector	Companies			VKI			ongoing
Alternative marketing methods which make use of digital possibilities	Companies						2024
Regular staff training on handling, storing and distributing food	Companies			WKO			ongoing

66 The voluntary agreement provides for the implementation of mandatory measures (cooperation with a welfare service or other forms of distribution, regular staff training and data transfer for larger companies) and at least five alternative measures (e.g. offering grade II fruit/vegetables, offering bread from the previous day at a reduced price, reduced offer towards closing time).

Measures	Economy	Municipalities/ Provinces	Federation	Representati-ons of interests	Civil society/as-sociations/NGOs	Science	Time horizon
Introducing core ranges towards the end of opening hours and accompanying awareness raising	Companies				NGOs		2022
Expanding food distribution, including to welfare services, and examining tax approaches to increase distribution	Companies	Provinces of Austria			Welfare services		ongoing
New edition of the guidelines on food distribution			BMK, BMSGPK				2023
Supporting the expansion of storage and cooling infrastructure on the premises of welfare services	Companies	Provinces					ongoing
Integrating the topic into industry-specific training and further education programmes			BMBWF	WKO			2023
Announcing the VIKTUALIA Award			BMK				2024

Table 37: Measures in the area of restaurants and food services or restaurants and catering services

Measures	Economy	Municipalities/ Provinces	Federation	Representations of interests	Civil society/ associations/NGOs/ consumers	Science	Time horizon
Research analysing the causes and developing alternatives	Companies	Provinces of Austria	BMK, BML			Universities, higher education colleges	2024
Pilot projects and publishing best practices	Companies	Provinces	BMK	WKO, Austrian Hotelier Association		Universities, higher education colleges	2024
Promoting the distribution of processed food (e.g.: buffets and catering)	Companies			WKO, Austrian Hotelier Association	Associations, welfare services		ongoing
Expanding the distribution of food to welfare services	Companies				Welfare services		ongoing
New edition of the guidelines for food distribution			BMSGPK, BMK				2023
Increasing the range of variable portion sizes and selection options, e.g.: side dishes in restaurant and food service catering	Companies	Municipalities, Provinces	Federation				ongoing
Using digital tools for more needs-based management	Companies		BMAW	WKO		Universities, higher education colleges	ongoing
Announcing the VIKTUALIA Award			BMK				2024
The exemplary effect of public facilities - commercial kitchens		Municipalities, Provinces	Federation				ongoing
Promoting food waste-avoiding kitchen concepts such as “nose to tail” or “root to leaf”	Companies			WKO, Austrian Hotelier Association			ongoing
Staff training on how to handle and store food	Companies			WKO			ongoing

Measures	Economy	Municipalities/ Provinces	Federation	Representations of interests	Civil society/ associations/NGOs/ consumers	Science	Time horizon
Increasing the promotion and supply of take-away boxes	Companies			WKO	NGOs		ongoing
Promoting the Austrian eco-label in the area of communal catering, gastronomy and accommodation	Companies	Municipalities, Provinces	Federation	WKO, Austrian Hotelier Association			ongoing
In the context of public procurement or green event or eco-label certifications, increased consideration of food waste prevention		Municipalities, Provinces	Federation				2024
In the context of public procurement, promoting the purchase of goods of inferior quality (especially goods for processing)		Municipalities, Provinces	Federation				2024
Integrating of the topic into guidelines for managing processes at public institutions (e.g.: canteens, hospitals)		Municipalities, Provinces	Federation (BMLV among others)				ongoing
Promoting the “Nothing left for waste” campaign week for other participating stakeholders		Provinces of Austria	BMK		NGOs		ongoing
Teaching apprentices to appreciate food handling processes	Companies		BMAW				ongoing
Development of training programmes such as coaching and peer-to-peer workshops for kitchen businesses as part of the United Against Waste initiative[67]	Companies		BMK				2023

67 United Against Waste (united-against-waste.at) is an initiative to prevent food waste in the catering, hotel and communal catering sectors and is supported by a broad network of partners from business, the federal government, federal states, NGOs and science. The initiative also offers counselling modules, survey modules, training courses and workshops.

Table 38: Measures for private households

Measures	Economy	Municipalities/ Provinces	Federation	Representations of interests	Civil society/ associations/NGOs/ consumers	Science	Time horizon
Educational measures for consumers (grocery shop planning, storage, making a distinction between best-before and use-by dates, taking leftovers with you when visiting restaurants, multilingual information, etc.)		Municipalities, Provinces	BMBWF, BMK	Representations of interests	NGOs, media	Universities, higher education colleges	2023
Promoting the distribution of surplus harvests from private gardens		Municipalities			Consumers, associations		ongoing
Organising cooking workshops with a focus on ways to prevent food waste	Companies	Municipalities			Welfare services, NGOs		ongoing
Integrating the topic into training and further education settings as well as in school and youth projects			BMBWF				ongoing
Announcing the VIKTUALIA Award			BMK				2024
Activities to prevent food waste in public institutions in the sense of setting an example (e.g.: in kindergartens, schools, at events)		Municipalities, Provinces	Federation				ongoing
Support for waste counselling in providing information on sustainable consumption	Companies	Municipalities, Provinces	BMK	Collection and recovery systems	NGOs		ongoing

8.7 Working groups

As part of the implementation of the "Strategy to Prevent Food Waste – Working Together towards a Common Goal", working groups will be set up at the request of the interministerial coordination centre to address special-purpose topics that require a broader approach or need to be discussed on an ad hoc basis, such as education, or that require a different approach. In 2022, the first working groups will start work to identify the need for action and solutions for the following key topics:

- Working group: Liability when distributing food, food law responsibility;
- Working group: Education and awareness-raising.

Depending on the topic, the working groups will be made up of representatives from science, business, the social partnership, the provinces, the Association of Towns and Municipalities, federal ministries, NGOs, associations, clubs or social and non-profit organisations. The heads of the working groups and deputies are appointed by the national coordination centre. Further working groups will be set up as required or on an ad hoc basis.

8.8 Evaluation and monitoring

The initiative will be evaluated and the measures will be implemented for the first time in 2024 and as part of the WPP evaluation in 2026. The initiative and the catalogue of measures for the period up to 2030 needs to be updated or supplemented.

Waste volumes will be monitored and food waste measured at each stage of the food supply chain in accordance with the requirements of the European Commission's delegated act establishing a common methodology for measuring food waste (EU(2019)1597). The methods used to measure food waste range from directly measuring waste, using mass balances, analysing the composition, conducting questionnaires to keeping records of one's own food waste, depending on each stage of the food chain. The aim is to ensure that food waste is consistently monitored throughout the EU on this basis. The following stages of the value chain must be mapped:

- Primary production;
- Processing and production;
- Trade;
- Restaurants and food services;
- Private households.

The reference year for the reduction targets is 2020. The data from 2020 was reported to the European Commission in mid-2022. Subsequently, food waste will be surveyed annually.

Please refer to the WPP, Chapter 4 “Indicators and monitoring” for more information about the indicators.

Figure 20: Logo of the “Food is precious!” initiative

Source: BMK

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