



## WASTE PREVENTION PROGRAMME 2017

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## PREFACE

The protection of natural resources and the sustainable management of renewable and, in particular, non-renewable raw materials are global challenges of our time. Efficient and environmentally friendly material use is a basic prerequisite for mastering them.

In Austria, most waste materials are already used as secondary raw materials - the change from a waste industry that is solely oriented towards removal has already been made.

Measures to support circular economy go beyond classic waste management. Innovative resource management must start at the design and production stage (“design for recycling” – reduction of material variety and pollutants and “design for reuse” are essential) and is part of a general raw materials policy (guarantee of the security of supply). Complementarily, the awareness for sustainable consumption, i.e. the efficient use of goods and food, must be raised.

Waste prevention is on top of the waste hierarchy but its implementation has been insufficient so far. It is the responsibility of society as a whole and can only partly be managed by the actors of the waste sector. Providing feedback and standards for producers can contribute substantially to qualitative waste avoidance or the reduction of the share of hazardous waste in total waste generation. The situation is different when it comes to quantitative waste avoidance. Once produced, goods can no longer be avoided. From the waste management point of view, extending their useful life or re-using them after their dedicated use are decisive.

The present Waste Prevention Programme contains many different initiatives and relies on an analysis of the basic conditions, the results of the evaluation of the previous waste prevention programme of 2011 as well as on the requirements of the EU Waste Framework Directive and the Austrian Federal Waste Management Act 2002. Various stakeholders and experts have been involved in the elaboration process for the programme and contributed their perceptions and ideas. At this point, I would like to thank them warmly for their cooperation. Given the wide knowledge and experience on which this programme is based, I am optimistic that the implementation of the diverse measures and actions will favourably influence production methods and consumer behaviour for the purposes of waste avoidance.

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## INDEX

1.	WASTE PREVENTION PROGRAMME 2017 .....	7
1.1.	Introduction .....	7
1.2.	Framework Conditions .....	10
1.3.	Vision .....	11
1.4.	Objectives and Action Areas .....	12
1.5.	Measures under the Waste Prevention Programme 2017 .....	13
1.5.1.	Action Area „Prevention of Construction and Demolition Waste“ .....	13
1.5.2.	Action Area „Waste Prevention in Enterprises and other Organisations“ .....	16
1.5.3.	Action Area „Waste Prevention in Households“ .....	20
1.5.4.	Action Area „Prevention of Food Waste“ .....	22
1.5.5.	Action Area „Reuse“ .....	25
1.6.	Assesment of the Packages of Measures – Indicators and Benchmarks, Monitoring .....	26
1.7.	Work on the Waste Prevention Programme 2017.....	27
1.7.1.	Evaluation of the Waste Prevention Programme 2011 .....	27
1.7.1.1.	Action Area „Prevention of Construction and Demolition Waste“ .....	27
1.7.1.2.	Action Area „Waste Prevention in Enterprises“ .....	29
1.7.1.3.	Action Area „Waste Prevention in Households“ .....	30
1.7.1.4.	Area of Activity „Prevention of Food Waste“ .....	31
1.7.1.5.	Action Area „Reuse“ .....	32
1.7.2.	Evaluation of the Waste Prevention Programme 2011 using Indicators .....	35
1.7.2.1.	Selected other Initiatives in Austria which contribute to Waste Prevention.....	36
1.7.3.	Assessing Proposals for Measures under Annex 1 to Federal WasteManagement Act 2002 and Annex 4 to the EU Waste Framework Directive .....	36
1.7.3.1.	Measures possibly impacting the Framework Conditions in Connection with Waste Generation .....	36
1.7.3.2.	Measures possibly impacting the Conceptual Design, Production and Distribution Phase .....	38
1.7.3.3.	Measures possibly impacting the Consumption and Utilisation Phase .....	40



# 1. WASTE PREVENTION PROGRAMME 2017

## 1.1. INTRODUCCION

The availability of raw materials is limited. The exploitation of natural resources and the negative impact on the environment associated with this should not, or must not, exceed the capacity of the environment to renew itself. The EU's aim is to realise a sustainable and competitive economy based on a resource- and energy-efficient economic system. The economy is to grow while the consumption of resources and damage to the environment are to fall as far as possible.

European Commission initiatives in this regard range from the Thematic Strategy for Waste Prevention and Recycling from 2005 to the EU Action Plan for the Circular Economy.

The waste management policy contributes to the environmental and resource targets by preventing waste, by reducing the use of harmful substances, by establishing an efficiently functioning circular economy which utilises waste as resources and, if necessary, conveys harmful substances to a safe pollutant sink.

According to the EU Waste Framework Directive and the Federal Waste Management Act 2002, waste prevention is therefore understood to mean all measures that are taken before a product becomes waste and which reduce the following:

- the quantity of waste, including through the reuse of products or the extension of their service lives;
- the adverse effects of the waste on the environment and on human health or
- the pollutant content in products.

The EU Waste Framework Directive obliges Member States to draw up a waste prevention programme. By means of a waste prevention programme, the waste prevention measures in Austria are to be given an environmental policy framework and a common goal. The waste prevention programme shall be updated no later than every six years. The objectives and measures to be included in this programme shall aim to break the link between economic growth and the various environmental effects linked to waste generation.

Annex IV to the EU Waste Framework Directive and Annex 1 to the Federal Waste Management Act 2002 contain examples of measures, the expediency of which shall be assessed within the framework of the waste prevention programme.

The principles behind waste prevention in Austria were laid down in the White Paper on Waste Prevention and Recovery from 2007. By

- reducing the use of materials and avoiding polluting substances,
- supporting technologies and techniques that consume fewer natural resources,
- switching to more sustainable production and consumption patterns,
- stimulating the market demand for „sustainable services“ or through appropriate procurement in the public sector (public procurement),
- minimising the risks to human health and the ecological hazards,
- „reusing“ items (this means using an item again for its intended purpose (e.g. reusable bottle)),
- „continuing to use“ items (the authorised use of an item but not for its intended purpose) and
- closing materials cycles,

all in all,

- an optimisation of resource efficiency as a contribution to the conservation of resources,
- a minimisation of the pollutant content in the flows of materials and goods,
- a minimisation of emissions and
- a minimisation of dissipation (fine distribution) of harmful substances into the air, into water and into the soil throughout the entire life cycle of the products (including upstream and downstream material and goods flows)

is to be achieved.



Figure 1: Waste prevention is on top of the agenda

The development, selection and implementation of waste prevention measures is characterised by the following aspects:

- the life cycle aspect, which can be used to identify those starting points at which policy measures can have the greatest effect;
- the material aspect, by means of which waste prevention targets, policy instruments and assessment criteria can be defined for various material flows (e.g. for foodstuffs);
- the integration of social and economic issues;
- interdisciplinary cooperation between the parties affected to achieve a maximum synergy effect for waste prevention with other economic, social and environmental protection targets.

The following must also be observed:

- the precautionary principle;
- the principle of sustainability;
- the principle of efficiency (that procedure which has the greatest environmental benefit given the costs outlaid must be promoted);
- the principle of eco-efficiency and eco-sufficiency (minimum resource consumption and minimum environmental effects to achieve a high quality of life at a sustainable level);
- the holistic whole life cycle approach (consideration of the entire ecological rucksack);
- the principle of cost transparency;
- producer responsibility and the „polluter pays“ principle;
- the principle of preventing adverse environmental effects with a focus on their origin;
- implementation of the waste hierarchy (in principle, the potential for waste prevention should be exhausted ahead of the potential for preparation for reuse and the recycling of materials and this potential, in turn, should be exhausted ahead of the potential for energy production and, ultimately, the potential for waste disposal). However, all options must be considered at the same time and the mix of measures chosen which, in the long term, has the smallest impact on the environment;
- a reduction in pollutants
  - must generally be expedited in the flows of materials and goods;
  - can be achieved through the eco-design of products;
  - must also be considered in relation to recycled products.
- a waste prevention programme can be applied at any point in the value-added chain, from the extraction of raw materials, through production and distribution, to end consumption. Those measures which reduce the environmental effects in the most sustainable manner and demonstrate the best cost-to-effectiveness ratio must be taken first.

A waste prevention programme is not only a plan that defines measures, but also a process during which the effectiveness of the plan is constantly evaluated and the plan adapted to changing requirements at regular intervals. In keeping with this principle, the Waste Prevention Programme 2017 is conceived as an enhancement of the Waste Prevention Programme 2011.

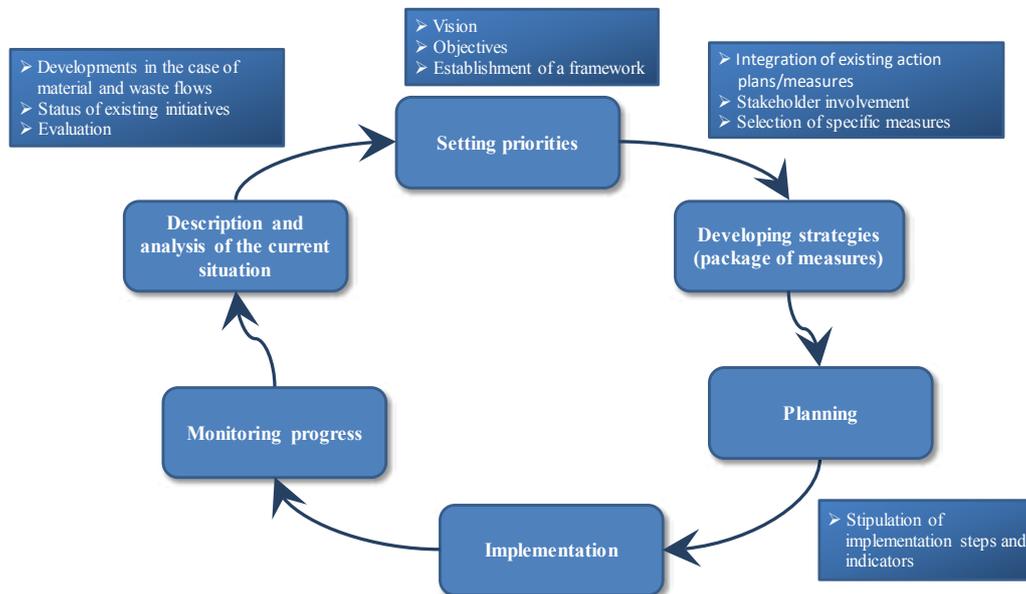


Figure 2: Development of a national waste prevention programme

The measures in the 2017 programme are based on an analysis of the framework conditions (see Chapter 1.2. „Framework conditions“) and the results of the evaluation of the Waste Prevention Programme 2011 as well as the requirements laid down in the Waste Framework Directive and the Federal Waste Management Act 2002 (see also in this regard Chapter 1.7.3. „Assessing proposals for measures under Annex 1 to the Federal Waste Management Act 2002 and Annex 4 to the EU Waste Framework Directive“). The measures were discussed in several workshops with stakeholders and the public was given an opportunity to comment on the programme.

The Waste Prevention Programme 2017 is a mixture of measures that have already been started, measures that have been adapted, and new measures. It can be assumed that not all of the programme’s measures will be completed by 2023, when a new programme is scheduled to start.

Although the waste prevention programme originates from public administration, it is conceived as a programme for the whole of Austria and invites all stakeholders to cooperate in the implementation of Austria’s waste prevention potential at a local, regional and provincial level. At the same time, the only very limited impact of regulations solely concerned with waste management on the production and consumer sectors must also be taken into consideration.

The Federal Environment Agency (UBA) was commissioned with the evaluation and update of the 2011 Waste Prevention Programme. The project report will be made available on the website of the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

## 1.2. FRAMEWORK CONDITIONS

In implementation of the Waste Prevention Programme 2011, progress was especially achieved in the area of prevention of food waste and in the area of reuse. Nevertheless, further measures are required in all action areas under the waste prevention programme, in which connection the following framework conditions are to be emphasised.

- Raw material prices have declined somewhat; the unpredictability of future prices and price volatility has continued to increase.
- There continues to be a lack of information on the substances used.
- In the construction sector, untapped potential remains regarding extending the service life of buildings and regarding urban mining.
- The use of composite materials in the construction sector is increasing.
- Small- and medium-sized enterprises in particular frequently do not have sufficient capacity to worry about improving business operations and processes beyond the core business and to keep pace with technological developments.
- There remains significant potential for developing more durable, repairable and easily reusable „green“ products with a low pollutant content, including from the point of view of safeguarding critical metals and the optimal, environmentally friendly handling of materials of the future.
- The spotlight is increasingly on hazardous waste.
- Knowledge of sustainable behaviour frequently (still) fails to bring about actual changes in behaviour.
- Awareness of high paper consumption, which is associated with mailshots, has risen again.
- Despite the progress achieved, on account of the significant impact on the environment, which is associated with the wasting of food, there is a continuing need to be concerned about preventing food-stuff waste; the need to involve newly consulted consumers is an important issue in this regard.
- In the majority of Austria's regions, there is the potential to develop reuse activities further.
- It continues to be difficult to quantify in concrete terms the effect of individual waste prevention measures.

The Waste Prevention Programme 2017 is primarily a plan of active measures which aim to support waste prevention. The development of measures is based on a vision of how the Austrian waste management industry should function in future and derives measures from these aims and action areas (= focus areas) (see Figure 3).



Figure 3: Waste Prevention Programme 2017 – from vision to action

### 1.3. VISION

The vision of the Waste Prevention Programme 2017 for Austria's material and waste management system may be described as follows:

- The objectives of the Federal Waste Management Act 2002 will be achieved in Austria with a high level of effectiveness and efficiency. Resource conservation and environmental compatibility are guaranteed in the long term, especially as a result of implementing a circular economy.
- Knowledge of material and waste flows has improved significantly. Relevant information on material and waste flows is collected, presented and communicated as a matter of routine.
- The stakeholders are very knowledgeable about measures in all areas of waste prevention (e.g. concerning foodstuffs, buildings and construction and demolition waste, reuse, repair).
- The pollutant content in key products has been reduced. The dissipation of pollutants during product creation and use and the recovery or disposal of waste has been significantly reduced. Waste management is increasingly making a contribution to the separation of pollutants from the materials' flow management and to the neutralisation of pollutants.
- Only products and materials whose continued use and further treatment has a minor impact on the environment enter or leave the country.
- We have succeeded in reducing the use of raw materials, especially in the case of materials with limited availability, and in expanding recirculation further. This has allowed the environmental effects associated with imports to be limited in the country of origin.
- An important step has been taken from a throwaway society to a sustainable society.
- Cost transparency, extensive responsibility on the part of producers and product distributors, and thereby a sustainable utilisation of resources, have prevailed.



Figure 4: The vision is the driving force behind further development.

#### 1.4. OBJECTIVES AND ACTION AREAS

The objectives defined in the previous programme will also continue to be followed by the Waste Prevention Programme 2017:

- to break the link between economic growth and the life cycle environmental effects of Austrian waste (including all upstream chains)
- to reduce emissions
- to minimise the dissipation of pollutants
- to reduce pollutants
- to conserve resources (with a focus on the conservation of raw materials).

In order to effectively and efficiently implement these objectives, focus areas must be defined in the form of action areas. An evaluation of the Waste Prevention Programme 2011 and the proposals under Annex 1 to the Federal Waste Management Act 2002, as well as an analysis of the challenges which are anticipated for the coming years, revealed that the action areas of the Waste Prevention Programme 2011 are to continue to be adapted. Consequently, the action areas under the Waste Prevention Programme 2011 are continued as action areas under the Waste Prevention Programme 2017:

- Prevention of construction and demolition waste
- Waste prevention in enterprises and organisations
- Waste prevention in households
- Prevention of food waste
- Reuse.



Figure 5: Halving food waste by 2030 – our objective

Waste prevention is a concept that is designed to impact basically on planning, production and demand fulfilment processes. It constitutes an integral approach to use synergies in the course of the entire circular economy. This broad approach pursues basic strategic goals. Narrowing down the objectives to narrowly defined fields of application would disrupt the integral approach and exclude important fields of application.

## 1.5. MEASURES UNDER THE WASTE PREVENTION PROGRAMME 2017

Defining fields of action serves the purpose of pooling the planned measures in such a way so as to reach a synergy effect. The field of action of construction and demolition waste is necessary in order to translate into practice the waste prevention potential for one of the waste streams harbouring the biggest quantities by way of respective measures. The fields of action of “Waste Prevention in Enterprises and other Organisations” and “Waste Prevention in Households” result from the provisions of Annex 1 to the Federal Waste Management Act 2002 requiring waste prevention measures for the conceptual design, production and distribution phase as well as for the consumption and utilisation phase. Moreover, these two action areas sport a pronounced need for action as well as a considerable potential that is expressed by the terms of sustainable production and sustainable consumption.

Also for the action areas of “Prevention of Food Waste” and “Reuse”, there is pronounced need for action and huge development potential. The production of food and the manufacturing of basically reusable products are, in multiple ways, linked to a huge environmental impact and to the use of natural resources. Also the EU, OECD and UNEP strategy documents point to the importance of these two action areas.

The action areas include, on the one hand, measures under the previous waste prevention programme which are to continue or start afresh and, on the other, new measures. For the action areas, those measures are chosen which appear particularly suited to contributing to the aforementioned objectives of the waste prevention programme over the coming years. The measures are consolidated in part into packages of measures.

The following subchapters show, in a first step, a list of planned measures for each action area, and, after that, explanatory notes on the choice of measures, and, in a final step, a list of expected effects. Overall, the 2017 Waste Prevention Programme is to serve as an impetus towards a sustainable and environmentally-sound Austrian national economy. Whereas changes of a rather limited extent are expected from the individual measures, the programme’s overall potential should be to contribute to the development of Austria towards the sparing use of resources, the reduction of the environmental impact and sustainable consumption.

### 1.5.1. ACTION AREA „PREVENTION OF CONSTRUCTION AND DEMOLITION WASTE“

#### Package of measures „Low-waste construction and extending the useful life of buildings“

- Pilot projects and other measures for developing innovative low-waste technologies and techniques
- Preparation of teaching materials and learning aids on the principles, planning techniques, techniques and technologies for low-waste construction
  - concerning the extraction and reuse of entire building components arising from the demolition of buildings
  - for the training of specialists in vocational schools and schools of higher education. These teaching materials and learning aids are increasingly involved in the school and vocational further education and training of specialists. The teaching content comprises the following: „low-waste construction“, „extending the useful life of buildings“, „selective demolition“, „use of recycled building materials“.
- Inclusion of the topic „low-waste construction“ in the planning phase and further education and training relating to this area.
- PR work in cooperation with the building guilds to win over master-builders, architects and planning offices to apply “low-waste construction” techniques
- Promoting extension of the useful life of public buildings
- Promoting the exchange of know-how and experiences in the area of education on the topics of extension of the useful life of buildings as well as the recyclability of components and building parts.

## Package of measures „Design and reuse of parts of buildings“

- Promoting flexible buildings („eternal envelope, flexible interior“)
- Developing basic principles for standardising a building material information system – alternatives to the building pass for including the main components of a building are to be reviewed
  - 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
- Developing standards concerning a waste prevention design, the avoidance of harmful substances and impurities and the reparability, separability and reusability of building components and materials
- Including principles of waste prevention and reuse in professional and university education
- A stakeholder process concerned with increased reuse of building components
- Promoting the use of recycled building materials, e.g. through inclusion in specifications of works, especially in public procurement
- Pilot projects concerned with urban mining and the reuse of building components
  - Funding research/development and pilot projects concerned with surveying, documenting, extraction and commercial exploitation of entire building components arising from the demolition of buildings
- Verifying the possibility of tying housing subsidies to the share of recycled construction products used in the building that is to be rehabilitated as well as verifying possibilities to green the funding models, and in particular those relating to building rehabilitation
- Recommendation to implement the obligation for developing a waste management concept for the construction site in the provincial building regulations

**DESCRIPTION OF THE ACTION AREA “PREVENTION OF CONSTRUCTION AND DEMOLITION WASTE”**

The need to „prevent construction and demolition waste“ arises, first and foremost:

- from the significant environmental effects, high material consumption and comparatively high quantity of waste generated in the construction sector;
- from a lack of awareness that closure of the cycle must already be borne in mind at the planning stage of a building;
- from a lack of information regarding the structure of the existing buildings;
- from the reuse of building components which is rendered more complicated if they are made up of bonded materials.

The aim of the action area „Prevention of Construction and Demolition Waste“ is to promote techniques and technologies aimed at extending the service life and useful life of buildings, avoiding the use of hazardous substances and facilitating the separation of hazardous from non-hazardous substances in order to achieve a breakthrough, ultimately reducing the amount of waste from construction, as well as the proportion of construction and demolition waste containing hazardous substances.

Regarding the prevention of construction and demolition waste, significant efforts are already underway concerning how, by means of suitable planning techniques and the use of corresponding technologies and techniques, to reduce the use of materials and avoid those which have a significant impact on the environment, to adapt building services to changing requirements, to extend the service life of a building through suitable maintenance measures, to facilitate the reuse of materials by ascertaining separability and identifiability and to reduce waste accumulation during construction, renewal and dismantling. Some approaches, however, require further refinement and practical testing. One particular challenge in this regard is the construction of buildings that remain resource and energy efficient and climate friendly throughout their entire life cycle. Furthermore, initiatives that have proven effective must be made widely known and included in training. As regards implementation, however, it is also necessary to create a market for the building components and materials recovered. The public sector can play an important leading role in this regard.

In developing innovative technologies and techniques, the aim, on the one hand, is to conserve resources and achieve a high level of material efficiency and a low level of waste generated and, on the other, to achieve high energy efficiency.

In developing innovative low-waste technologies and techniques, consideration is given to the aspect of affordable housing.

The teaching materials and learning aids on „low-waste construction“ (including the prevention of building materials containing harmful substances) and on the reuse of building components are increasingly involved in the educational and vocational further education and training of specialists and in the advanced training of public purchasers (specialists within the offices and procurement agencies which issue the invitations to tender). Building-related training includes the topic of the reuse of building components. One example of the exchange of know-how and experiences in the area of education on the topics of extending the useful life of buildings as well as of recyclability is the Erasmus+ project “KATCH\_e Knowledge Alliance on Product-Service Development towards Circular Economy and Sustainability in Higher Education”.

The fact that buildings are vacant is frequently the precursor to their demolition. New utilisation models for buildings may at best prolong the useful life of the existing structures.

The inventory of buildings used currently includes important anthropogenic stores of materials, the availability or accessibility of which may become limited in the future at primary storage facilities. In any case, these materials are to be regarded as valuable resources which are to be made available for secondary use in an efficient manner, in the form of selective demolition, following the end of initial use. Pollutants must thereby be discarded and conveyed to a safe pollutant sink.

Work on the waste prevention programme has shown that a detailed building pass is too expensive with respect to the topicality of the information. Now, other possibilities are to be reviewed. Hence, a building construction and underground construction land register (including infrastructure networks) has been drawn up for parts of Graz. It is therefore examined in the first instance whether further building construction and underground construction land registers can be drawn up in an efficient manner according to the Graz model. In the course of this, possibilities are included of linking material data to information on the useful life of buildings.

It is also examined whether information from the existing energy performance certificates and building evaluations can be used.

The waste prevention and reuse potential in the construction sector is essentially determined at the design stage. Therefore, the „design“ sector constitutes an additional focal point in the waste prevention programme. In this regard, consideration should also be given to the aspect of affordable housing.

### **ANTICIPATED EFFECT OF THE ACTION AREA “PREVENTION OF CONSTRUCTION AND DEMOLITION WASTE”**

#### **Package of measures „Low-waste construction and extending the useful life of buildings“**

In the mid-term, the package of measures is to foster the application of low-waste-construction principles and thus lead to a higher materials efficiency of buildings and to a reduction of the materials used. A reduction of the generated quantities and an improvement of the quality of construction and demolition waste can be expected in the long term. Standards regarding the extension of the useful life of public buildings may also serve as role models for other buildings.

#### **Package of measures „Design and reuse of parts of buildings“**

The measures contained in the package constitute first steps for planning building structures in such a way so as to be able to reuse their building components after the first utilisation phase has expired. In the mid-term, this is to contribute to boosting the reuse potential of building structures used in industrial as well as in housing construction.

Using a building material information system, it should be possible to predict the amount of materials built in, and the reuse and recycling potentials available. This way, it is possible to estimate where potentials and need for action for measures for extending the useful life lie. Furthermore, the information serves the preservation of a good quality of demolition materials and a good potential for reusing the building components. The system also provides basic information regarding approval authorities, funding and political emphasis.

1.5.2. ACTION AREA „WASTE PREVENTION IN ENTERPRISES AND OTHER ORGANISATIONS“

Package of measures „Design“

- Developing standards concerning a waste prevention design, the avoidance of harmful substances and the reparability, separability and reusability of product parts and packagings
- Giving consideration to repair, reuse and recycling designs in design curricula
- Verifying the efficiency of voluntary measures for the Europe-wide abandoning of microplastics in consumer products and, if required, efforts on the part of Austria to ban microplastics in such products.
- Austrian delegates will champion at EU level measures concerned with both extending the technical service life and reparability of appliances and also in terms of engendering trust that these appliances also last longer when used appropriately
- Austrian delegates are also championing the introduction of an information obligation at EU level regarding
  - the period of availability of replacement parts;
  - the average service life of the products

Package of measures „Direct measures“

- Other best practice fact sheets on techniques and technologies that prevent waste, accompanied by an intensive information campaign
- Further training of company waste officers in terms of identifying and realising waste prevention and reuse potential
- The development of waste prevention documentation for technical schools and educational institutions on specific issues
- Continuation of the regional programmes co-financed by the Federal Ministry of Agriculture and Forestry, Environment and Water Management concerning corporate environmental protection in the federal provinces regarding the advice-supported identification and realisation of waste prevention potential, including the establishment of further incentives for repeated participation; new emphasis on material efficiency
- Intensification of environmental support in Austria in the areas of „Prevention of hazardous waste“ and „Resource management“
- Continuation of the promotion of the collection and recovery schemes from the point of view of waste prevention
- Continuation of the support of environmental management systems such as EMAS, ISO 14001, Responsible Care or EFB+ as a means of waste prevention, reuse and resource efficiency
- The organisation of events held by public institutions, enterprises and associations as „green events“ (considering the Austrian Eco-Label for Green Meetings and Green Events)
- Raising awareness on the part of persons involved in the decision-making process regarding the importance of waste prevention and resource conservation measures, along with measures concerned with Environmental Management Accounting and sustainable participation in consultancy programmes
- The dissemination of information regarding possibilities for extending the useful life of material goods, e.g. software upgrades instead of purchasing a new appliance
- The disclosure of information relating to repairs to repair and reuse companies
- The continuation and further development of the Sustainability Agenda 2008-2017 of the Austrian beverage packaging industry
- Canvassing further undertakings to sign the agreement on reducing the numbers of disposable carrier bags
- An examination of whether additional provisions are required concerning the relationship between product volume and the volume of packaging („deceptive packaging“)
- The introduction of public procurement criteria concerning

- products which have been created in accordance with the principles of waste-reducing design;
- products which have been awarded the Austrian Eco-Label
- durability and reparability;
- consideration of operating and reacquisition costs
- Full exploitation of the opportunities for extending the useful life of material goods in the public sector
- Increased communication of the public procurement criteria as an example of private procurement

Package of measures „Waste prevention in the waste management concept“

- Sector-related blueprints with good examples of waste prevention
- Waste management concept tool for schools: Teacher training

**DESCRIPTION OF THE ACTION AREA „WASTE PREVENTION IN ENTERPRISES AND OTHER ORGANISATIONS“**

With the help of cooperation across Europe and as a result of corresponding Austrian representation in the bodies of the European Union, standards are to be introduced at EU level for waste prevention design and information obligations regarding product service life. Furthermore, in future, the information regarding how a product can be repaired is to accompany the product in connection with the life-cycle phases.

The aim of the package of measures entitled „Direct measures“ is to support Austrian enterprises and organisations, including the public administration, in identifying their waste prevention potential in this regard and to then realise this. All in all, intensive support for enterprises to raise resource efficiency is taking place. The focus on waste prevention was hitherto selective.



*Figure 6: Implementation of prevention potentials in companies boosts economic activity*

Small and medium-sized enterprises in particular frequently do not have the human resources to learn the waste prevention techniques that are fundamentally available, to catch up on efficient technologies and to optimise the operational processes in terms of minimal material consumption. External support from cleaner production specialists often appears unaffordable at first. The aim therefore is easy access to information, the financing of external consulting and the start-up financing in terms of material efficiency.

The following must be added to the regional programmes for corporate environmental protection in the federal provinces: These programmes provide kick-off funding for external consulting for the improvement of operational processes and for investment for boosting material efficiency. In most cases, these programmes have a special focus on small-and-medium-sized enterprises. Also in areas and industries where the regional programmes have already been very successful hitherto, a great number of enterprises have still not been reached. An investigation is ongoing as to

which industries/enterprises have still not been reached thus far and the reasons why these enterprises have not yet participated. Proposals designed to overcome the barriers are being worked out and implemented. Previous experience shows that enterprises are frequently only able to develop particularly effective waste prevention measures which go beyond standard measures following a period of extended participation in the regional programmes. Repeated participation in the programmes is therefore to be expedited.

The willingness to debate the issues is to be increased through the drive to increase awareness on the part of decision-makers in enterprises. Among other things, increasing reference is made to the fact that during the assessment of waste prevention measures, consideration must be given not just to the waste costs that are saved but also to the material and labour costs saved.

In the field of environmental management systems, since 2017, the Eco-Management and Audit Scheme [EMAS] has integrated the new ISO 14001: 2015 and therefore combines the life cycle-oriented perspective in the environmental management system with the additional requirements in the context of EMAS environmental management, including, in particular, legal compliance, mandatory environmental reporting and continuous improvement of the environmental performance. In the field of environmental management systems implemented by waste disposal companies, EFB+ brings the information of the public close to the provisions relating to the EMAS environmental declarations.

By also applying a systematic approach, as provided for by an environmental management system, it is anticipated that the waste prevention potential of an enterprise or another organisation can be identified by corresponding material flow analyses. For example, measures on waste prevention, reuse and resource efficiency must be implemented in accordance with the stipulations of the EU-EMAS Regulation (1221/2009/EC) in order to achieve a continual improvement in environmental performance. The Federal Ministry of Agriculture and Forestry, Environment and Water Management therefore supports waste prevention measures that are implemented through the introduction and continuation of environmental management systems.

Tight budget requirements shall mean that products involving low investment costs are purchased and developed. This is often to the detriment of the service life of the products or to operating costs. The need exists to develop competitive, reusable products low in harmful substances with a long service life and which are easy to repair, and which do not cost much to operate.

Additionally, in the events sector, a significant, and partially still untapped, waste prevention potential exists. Events are to be increasingly organised as green events. This means, inter alia, in the case of events arranged by public institutions, enterprises and associations, reusable packaging or reusable cutlery, as well as mobile drinking-water wells, are increasingly used, while „give-aways“ are dispensed with. For the purpose of guidance, the provisions of the Austrian Eco-Label (confer Chapter 6.7.8. of the Federal Waste Management Plan 2017) can be used.

The Sustainability Agenda 2008-2017 for Beverage Packagings as well as the additional agreement “Voluntary commitment for reusable packaging 2011” devised by the Austrian beverage industry is being developed further on the basis of an evaluation made by the social partners. This is, in particular, designed to improve the CO<sub>2</sub> balance of the agenda’s signatories and to promote the use of reusable beverage packagings. In this context, the following measures are to be examined:

- funding of the development of reusable packaging or reusable packaging schemes, so as to be able to better fulfil the demands of the final consumers (e.g. lightweight packaging)
- offering more 0.33-litre reusable bottles for beer
- agreements in the areas of production and trade regarding
  - an expansion of the beverages offered in reusable packaging as well as equivalent positioning on the shelves with beverages in single-use packaging
  - the layout of special sales areas for beverages in reusable packaging
  - the optimum design of the take-back areas for reusable packaging (ease of accessibility/attainability)
  - price campaigns are conducted to the same extent for beverages in reusable and single-use packaging
  - discount campaigns/competitions for beverages in reusable packaging, e.g. through reverse vending machines
- the design of labels (recognisability of reusable packaging)
- the processing and distribution of information to consumers regarding the environmental and economic advantages of reusable drinks packaging.

The mandatory creation of waste management concepts offers an instrument that should encourage enterprises to identify waste prevention potential and to initiate waste prevention measures. The advantages of this instrument must increasingly be highlighted. As regards model waste management concepts and the corresponding training documents, in particular, a prioritisation regarding additional waste prevention measures is to be presented with the first update to the waste management concept.

The Federal Ministry of Agriculture and Forestry, Environment and Water Management has developed a new waste management concept tool for schools. This tool demonstrates, from an ecological and commercial point of view, that handling various natural resources in a responsible manner makes an important contribution to protecting our environment and reduces the quantities of waste. Teachers are to be trained subsequently.



Figure 7: For schools, a waste management concept tool is available on the website of the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

### ANTICIPATED EFFECT OF THE ACTION AREA “WASTE PREVENTION IN ENTERPRISES AND OTHER ORGANISATIONS”

#### Package of measures „Design“

With this set of measures, steps are being made to develop, place on the market and find a market for durable, repairable, environmentally-sound and reusable products. Among other things, this counteracts an actual or perceived deterioration of product qualities (obsolescence).

#### Package of measures „Direct measures“

The set of measures contributes to the enhanced identification of existing waste prevention and reuse potentials in enterprises and other organisations as well as to their further development and implementation via waste-preventing techniques. The optimisation of operational processes is to lead to reduced waste quantities and to a lower content of harmful substances in products and waste and makes a key contribution to the sparing use of resources.

In the mid-term, it is to be expected that the topic of waste prevention will become an integral part of event planning for almost all public events.

#### Package of measures „Waste prevention in the waste management concept“

The measures contained in this package are to encourage enterprises and schools to deal more in-depth with the identification and implementation of their waste prevention potentials.

## 1.5.3. ACTION AREA „WASTE PREVENTION IN HOUSEHOLDS“

## Package of measures „Waste prevention in households“

- Updating and further development of „www.bewusstkaufen.at“
- An increase in the amount of information provided through waste disposal consultancy for establishing sustainable purchasing and usage behaviour
- Information campaigns on waste prevention opportunities, in particular through consumer behaviour which is geared to quality of life
- Waste disposal consultancy training in the packaging sector through the packaging coordination centre; promoting the issue of waste prevention
- The further development and implementation of enhanced information and motivational campaigns, including for migrants
- A review of the use of social media, including with respect to timely responses in the case of false reports
- The promotion of repair options (e.g. repair networks, repair cafés), including corresponding information provision
- Raising awareness on the issue of reusable drinks packaging at consumer level, e.g. through continuation of the initiative „Sag’s am Mehrweg“ [Use reusables] or through a reuse initiative on the part of trade
- Raising awareness of waste prevention, in particular regarding disposable carrier bags and coffee capsules
- An awareness campaign concerning the fact that the delivery of unaddressed post can be avoided by affixing corresponding tips to the postbox
- Raising awareness concerning giving consideration to eco-labelling when making purchasing or service-related decisions
- Extension or updating of the guidelines concerning the awarding of the Austrian Ecolabel
- Exchanging information in the context of stakeholder platforms concerning waste prevention

**DESCRIPTION OF THE ACTION AREA „WASTE PREVENTION IN HOUSEHOLDS“**

Consumers shall determine which needs have to be satisfied and to what extent. They choose the products and decide which products shall succeed on the market. As a result, households have an important influence on the environmental effects of the entire life cycle as well as on the efficiency and sufficiency of the Austrian national economy. Awareness of this must be reinforced.

The population is to be informed continuously of the waste prevention opportunities. Furthermore, it is necessary to promote awareness about sustainable consumer behaviour and waste management concerns. In order to coordinate the measures that are designed to yield a pertinent impact, it is planned to set up a stakeholder platform convening once a year.

Via a webpage, with the aid of social media and traditional information media, the “www.bewusstkaufen.at” initiative promotes sustainable consumption. One emphasis in this context is on raising awareness for the availability of durable products and their advantages for the consumer and the environment. The “www.bewusstkaufen.at” initiative shows good practice examples, publishes a consumers’ guide, and organises a contest of ideas including online voting and discussions with experts.

A core measure of the waste prevention programme is the public relations work undertaken by the Federal Government, provinces, municipalities (municipal associations) and waste management associations, as well as by the economy. A key element of this measure is the activity organised across Austria by the municipal environmental and waste consultants who, furthermore, will also exert their influence in public bodies such as schools and kindergartens as well as in small and medium-sized enterprises.

A significant waste prevention potential exists, first and foremost, in the case of food waste (for the avoidance thereof, a separate action area was defined, see Chapter 1.5.4. „Action area „Prevention of Food Waste““).

The following must be added as background to the information and motivational campaigns: A study in Germany has shown that the main reason for a reduction in the useful life of certain electrical appliances over the past decade

was not the worsening quality of the appliances. The useful life has primarily declined on account of the expectation that the service life of the appliances has fallen. Therefore, an increased amount of information on the actual potential useful life of the appliances is required.

In principle, many consumers are interested in sustainable consumer behaviour. A greater incentive is required to actually implement sustainable, needs-oriented consumption, inter alia, through direct contact with the waste consultants. Information and motivational campaigns must be tailored to the different target groups.

An important topic is constituted by the reduction of beverage packaging. In a first step, this topic includes fundamental approaches, such as the enhanced use of tap water, and, in a second step, also measures for raising awareness for the advantages of reusable packaging to promote the enhanced use of reusable packaging. One example of this is the “Steiermarkflasche (Styria bottle)” that is being used by 58 wineries and distributed via more than 112 retail markets. When returning the used bottle, consumers have the value of the bottle refunded. In 2016, 3.5 million reusable bottles were saved with this scheme. (also see the Sustainability Agenda in the action area “Waste prevention in Enterprises and other Organisations”).

#### **ANTICIPATED EFFECT OF THE ACTION AREA “WASTE PREVENTION IN HOUSEHOLDS”**

These measures are designed to disseminate knowledge to households concerning opportunities for waste prevention, repair and reuse and to strengthen the motivation to utilise existing waste prevention potentials and to cover their needs through more resource-conserving consumption.

In the medium term, the quantity of waste generated by households, in particular the volume of paper and packaging waste, should rise at a slower rate than population and disposable income.



Figure 8: “Pfiat di Sackerl” (Good-bye, bag) initiative for the prevention of disposable carrier bags

1.5.4. ACTION AREA „PREVENTION OF FOOD WASTE“

Package of measures „Food production, processing and trade“

- Pilot projects for optimising implementation of the mitigation potential; the concepts and descriptions of the measures developed must be made available to all undertakings in the sector
- Collection of examples of best practice from selected sectors and publication of the information via the Internet
- Studies on the potential of preventable food waste during production and in processing companies
- Further ascertainment of the avoidable food waste in trade and in private households
- Continuation of the training programmes for employees in production, processing and trade and integration of the topic in sector-specific training
- Continuation of the cooperation partnership within the framework of the initiative „Food items are precious!“
- Resumption of the Viktualia award for raising awareness and as an incentive for enterprises to prevent food waste
- Updating of the handbook „Passing on foodstuffs to welfare organisations“ on the basis of experience acquired and in consideration of the modified framework conditions
- Certification marks for commercial enterprises which pass on foodstuffs

Package of measures „Welfare organisations“

- Preparation of a quality standard for welfare organisations which pass on foodstuffs
- Regular training courses on handling foodstuffs for employees of welfare organisations
- Establishment of a joint planning platform for the participating welfare organisations
- Support with expansion of the storage and cooling infrastructure on the part of the welfare organisations
- Ascertainment of the quantity of foodstuffs passed on

Package of measures „Consumption away from home“

- Pilot projects for optimising implementation of the mitigation potential; the concepts and descriptions of the measures developed should then be made available to all undertakings in the sector
- Collection and publication of examples of best practice
- Training programmes for employees and integration of the topic in sector-specific training
- Promoting the Austrian Ecolabel in the area of group catering, the catering trade and accommodation services
- Integration of the topic in the guidelines of the workflow organisation of public bodies (e.g. canteens, hospitals)
- Measures designed to prevent food waste in the context of public procurement

Package of measures „Private households“

- Nationwide and regional campaigns targeting households: Creating awareness on the topic of „Prevention of food waste“ and showing how people can do things differently by integrating the subject matter into informational material, events and focus activities
- (Further) development of measures to create framework conditions that allow for the steering of people's behaviour towards a more mindful approach to food
- Information campaigns concerning the best-before-date and use-by-date and the ability to enjoy certain foods following expiry of the best-before date
- Integration of the topic of food waste prevention in continuing education and training programmes for teachers (including kindergarten teachers)

## Package of measures „Basics“

- Standardising compilation methods, e.g. in the case of sorting analyses
- Review and further development of the criteria concerning the Austrian Ecolabel and public procurement

**DESCRIPTION OF THE ACTION AREA „PREVENTION OF FOOD WASTE“**

The long-term objective of the action area „Prevention of Food Waste“ is the reduction in the volume of avoidable food waste in Austria across all areas of the value-added chain, i.e. from production through to consumption. In particular, in accordance with the UN's 2030 Agenda for Sustainable Development (see Chapter 6.3.8. „United Nations Environment Programme (UNEP)“ of the Federal Waste Management Plan 2017), avoidable food waste in private households and in the area of trade is to be halved by 2030.

In particular:

- a sustainable management of foodstuffs in the areas of agriculture, production and trade is to be encouraged
- the coordination of supply and demand in connection with the transfer of foodstuffs is to be promoted and the infrastructure for buffering between supply and demand extended
- sustainable management of foodstuffs in commercial kitchens and in the hospitality industry is to be encouraged
- the awareness of the environmental impacts associated with food consumption and of the value of the foodstuffs or the avoidable food waste is to be raised
- the awareness that foodstuffs may be enjoyed even after the best before date is to be disseminated
- the data uncertainties associated with the avoidable food waste are to be reduced.

The subject of the action area is avoidable foodstuffs. These are those foodstuffs which, at the time of their disposal, are still fit for human consumption or which would have been enjoyed if used in good time.

The “Food items are precious” initiative comprises a comprehensive action programme on the prevention of food waste. On the website of the Federal Ministry of Agriculture, Forestry, Environment and Water Management which deals with this initiative, there is a more detailed description of the measures of the action programme, such as “United Against Waste”, “smart kitchen”, or “Ist das noch gut” (Is this still edible).



Figure 9: Logo of the initiative for the prevention of food waste

Regarding the cooperation partnership „Food items are precious!“, it must be noted that undertakings in the discounted foodstuffs trade are also invited to participate in this cooperation partnership.

As regards the best before date, reference is also made to the fact that it is examined at EU level which foodstuffs do not require a best before date.

The aim is to reduce food waste across all life-cycle phases of the foodstuffs. In the case of private households or consumption away from home, however, the effect achieved in terms of avoiding environmental effects is the greatest since the whole supply chain is to be included in the environmental impacts and this is influenced by the behaviour of consumers.

## ANTICIPATED EFFECT OF THE ACTION AREA „PREVENTION OF FOOD WASTE“

### Package of measures „Food production, processing and trade“

This package of measures is designed to facilitate more efficient production, processing and distribution of foodstuffs and to realise the food waste prevention potential in enterprises and during distribution. Foodstuffs which cannot be sold are increasingly handed out in special social (discount) markets. By 2030, food waste in the retail trade is to be reduced by 50%.

### Package of measures „Welfare organisations“

This package of measures shall contribute to ensuring that foodstuffs which cannot be sold are increasingly handed out on social markets and at food banks. This will lead to an improvement in food provisioning while at the same time reducing resource consumption and waste treatment costs. By buffering supply and demand, the potential is extended further and increasingly realised.

### Package of measures „Consumption away from home“

The level of information regarding the options for preventing food waste in commercial kitchens, in the hospitality industry and in accommodation establishments is increasing; as a result, resource consumption and waste treatment costs are to be reduced considerably.

### Package of measures „Private households“

This package of measures shall result in an increase in the level of information regarding the options for preventing food waste in households and more motivation to utilise these options. As a result, the quantity of avoidable food waste generated in the household sector should diminish. By 2030, there should be a 50% reduction in food waste.

### Package of measures „Principles“

Analyses in different federal provinces are comparable and the total volume can be determined more easily. The principles regarding the quantity of food waste generated and the estimate of waste prevention potential are improving.



Figure 10: Sustainable consumption reduces food waste

1.5.5. ACTION AREA „REUSE“

Package of measures „Reuse“

- Further expansion and consolidation of the reuse networks in the federal provinces, tailored to the opportunities and potential available there
- Expansion of the reuse collection of waste electrical equipment in the municipalities
- Extension of the reuse collection to other usable goods
- Providing information for consumers on reuse, promoting exchange areas and similar initiatives
- Examples of best practice regarding collection and treatment of waste equipment and other products so as to be fit for reuse
- Reuse platform for exchanging experience and information
- Survey of the number of reuse companies, the quantity collected annually and the quantity of reuse products sold annually
- „Think tank“: Product services and innovative reuse models and innovative reuse business models
- Promotion of product services, particularly by conducting market entry research, pilot projects and subsidising start-ups
- Overall analysis of the textile material flows in Austria
- Review of the creation of a label for sustainable textile collection and recovery
- Procurement guidelines that facilitate reuse: Adaptation of procurement law and the relevant existing directions for action
- Continued use of reusable material assets within the public sector: Development and implementation of guidelines for public bodies, supported by motivational campaigns
- Verification of tax-law measures for the areas of reuse and repair in the framework of a green tax reform

**DESCRIPTION OF THE ACTION AREA „REUSE“**

Over recent years, development of the reuse networks has acquired significant momentum. This momentum should be used to establish reuse as extensively as possible in Austria. To this end

- other markets for reuse products are to be established
- the supply of waste equipment which can be reused is to be guaranteed by supporting the increased delivery of appliances which are no longer used
- the potential for reuse within public bodies is to be implemented
- new reuse products and support services (such as home deliveries, for instance) are to be developed.

In the campaigns, the reuse of (waste) electrical equipment, waste textiles, furniture, bicycles and other used products is advertised. The sale, in a reusable state, of appliances which are no longer used or needed is also advertised, however.

**ANTICIPATED EFFECT OF THE ACTION AREA „REUSE“**

This package of measures shall result in an increase in the supply of high-quality used products for reuse and in an increase in demand for products for reuse among the broader population and public bodies.

## 1.6. ASSESMENT OF THE PACKAGES OF MEASURES – INDICATORS AND BENCHMARKS, MONITORING

As to whether the effects specified in Chapters 1.5.1. to 1.5.5. are also actually realised should be determined by means of well-chosen indicators. To hold the effort to a certain extent, the indicators are divided in:

- core indicators, which are determined yearly
- indicators of the extended indicator sets.

The amount of important waste streams counts to the core indicators. To the extended indicators belong above all identification numbers which describe the waste qualities or are stronger oriented in the single taken measures.

### Core indicators (collected annually)

Annual quantities of the following Austrian waste streams:

- municipal waste from households and similar facilities per capita per year
- mixed municipal waste (residual waste) per capita per year
- quantity of packaging and paper waste collected separately per capita per year
- quantity of biogenic waste collected separately per capita per year
- quantity of problematic substances collected separately per capita per year
- mass of waste from trade and industry (volume of primary waste minus municipal waste, construction and demolition waste and excavated materials) per capita per year
- quantities of hazardous waste generated per capita per year
- construction and demolition waste (excluding excavated soil materials) per capita per year

### Extended indicator set

For construction and demolition waste:

- reuse and recycling rate
- quantity sent to landfill

For mixed municipal waste:

- composition
- quantity of avoidable foodstuffs and leftovers per capita per year

For reuse:

- quantity of reusable used products collected per year
- number of reuse enterprises
- quantity of reuse products sold annually per year

For future evaluations, the degree of implementation of the planned measures should also be used as a benchmark of the progress made.

## 1.7. WORK ON THE WASTE PREVENTION PROGRAMME 2017

### 1.7.1. EVALUATION OF THE WASTE PREVENTION PROGRAMME 2011

The action areas of the Waste Prevention Programme 2011 were derived from the experiences of the Waste Prevention and Recovery Strategy 2006, the proposals under Annex IV to the EU Waste Framework Directive and from current material-related problems in the Austrian economy. The action areas of the Waste Prevention Programme 2011 are as follows:

- Prevention of construction and demolition waste
- Waste prevention in enterprises
- Waste prevention in households
- Prevention of food waste
- Reuse.

For each action area, several measures (highlighted in grey in Chapters 1.7.1.1. to 1.7.1.5.) were specified to be implemented in the longer term.

#### 1.7.1.1. ACTION AREA „PREVENTION OF CONSTRUCTION AND DEMOLITION WASTE“

##### Development of basis for standardising building passes as a building material information system

This measure was implemented. A detailed building pass would be too expensive; as a result, other possibilities for including the main components of a building are to be reviewed.

##### Definition of standards for building passes as a building material information system

Inclusion of building pass data in the central Building and Housing Register operated by the Federal Institute „Statistics Austria“

These measures should not be implemented until the building information model instrument has established itself in Austria.

##### Pilot projects for developing innovative low-waste technologies and techniques

These measures were implemented in part in the context of the Federal Ministry of Transport, Innovation and Technology Programme entitled „House of the future“. Examples of this include a low-waste thermal insulation system and also modular designs.

The aim in future is also to achieve high levels of material efficiency and low levels of waste produced in connection with the development of energy-efficient technologies. In any event, corresponding pilot projects are advisable in future too.

##### Preparation of teaching materials and learning aids on the principles, planning techniques, techniques and technologies for „low-waste construction“ for training experts at vocational and higher institutions

The learning content on „low-waste construction“, „extending the useful life of buildings“, „selective demolition“, „use of recycled building materials“ and the „creation and use of the building pass“ will increasingly be incorporated into the educational and vocational training of specialists.

The „RAABA“ project deals with the adaptation of existing curricula with respect to the reuse of whole building components.

Further steps were initiated with the „SInnDesign“ project. Continuation of the measures is sensible and necessary.

The standards developed for „low-waste construction“, „extending the useful life of buildings“, „selective demolition“, „use of recycled building materials“ and the „creation and use of the building pass“ are to be implemented within the framework of public procurement.

Implementation of this measure is still outstanding.

Realisation of the standard concerning „selective demolition“ follows from application of the Recycled Building Materials Ordinance (Federal Law Gazette II No 181/2015, as amended).

Pilot projects on selective dismantling, urban mining and the reuse of construction materials – for example, on the creation of a resource register as a basis for dismantling plans

The ongoing pilot projects create valuable insights but also pose new research questions. Further pilot projects are therefore necessary.

The RAABA project provided an initial overview for Austria regarding the reuse of whole building components.

The recommendation to make the application of ÖNORM B 2251 and ONR 192139 compulsory under the provincial building ordinances

Transposed by means of the Recycled Building Materials Ordinance.

The introduction of a regime by which the following becomes compulsory: the drawing up of a building site waste management plan, the drafting of a dismantling plan, pollutant surveys in buildings before dismantling and the installation of sorting points on construction sites

The obligation to draft a dismantling plan and to carry out pollutant and impurities surveys on larger buildings or line structures prior to dismantling is implemented nationwide by means of the Recycled Building Materials Ordinance. Furthermore, building developers are obligated, as a result of this ordinance, to ensure provision of the areas and facilities required for separation.

The obligation to draw up a building site waste management concept is realised in the provincial regulations of Vienna and Salzburg.



Figure 11: Reuse of building components

1.7.1.2. ACTION AREA „WASTE PREVENTION IN ENTERPRISES“

Internet-based best practice fact sheets on techniques and technologies that prevent waste, accompanied by an intensive information campaign

Interesting sources are available with the descriptions of the measures promoted under the regional programmes concerning corporate environmental protection, e.g. the EcoBusiness plan, Vienna, and examples of best practice of EMAS enterprises. The dissemination of examples of best practice should be intensified.

Launch of programmes for the advice-supported identification and realisation of waste prevention potential in enterprises

A high level of support programmes for the conservation of resources was achieved which can contribute to waste prevention. Not all enterprises have been reached as yet.

Continuing education for in-house waste officers for the identification and utilisation of the waste prevention and reuse potential

A high level has been achieved. The further development of the economy and waste prevention techniques requires a continuation of this measure.

Continuation and intensification of the regional programmes concerning corporate environmental protection under the auspices of the federal provinces and co-financed by the Federal Ministry of Agriculture, Forestry, Environment and Water Management Expansion of the scope of business subsidies for waste prevention to include prevention of non-hazardous waste (alongside the recommended continuation of the „Support initiative for waste prevention“, co-organised by the Altstoff Recycling Austria AG, the city of Vienna, the province of Lower Austria and the Austrian Chamber of Commerce)

As regards the regional programmes, a high level was achieved in several federal provinces.

In the case of environmental support in Austria, resources can be used to prevent the occurrence of hazardous waste. In terms of content, however, the prevention of non-hazardous waste can be supported in the context of resource management. The number of projects funded in these areas is small, however. It is unclear whether the small number of funded projects was a consequence of the funding guidelines or a lack of interest. In any event, a substantial increase in the projects funded by the UFI with a focus on waste prevention and resource management is sensible.

Environmental management system support, including EMAS, ISO 14001 or Responsible Care, as a means of waste prevention, reuse and resource efficiency

A current study proves the environmental effectiveness of EMAS also with regard to the reduction in the quantity of waste generated and improved waste management: 283 organisations covering 1,086 locations were EMAS certified (as at: December 2015). This measure should therefore be continued.

An evaluation of the waste management concept

The evaluation took place.

For many enterprises, the creation of waste management concepts is the inducement to concern themselves with waste prevention. The waste management concept should therefore be continued as an instrument of waste prevention and aids provided to identify waste prevention potential and corresponding waste prevention techniques.

Further training courses for the competent authorities on the inclusion of waste prevention/reuse requirements within the framework of the waste management concepts to be presented in connection with licence applications in accordance with the Industrial Code and the Federal Waste Management Act 2002;

Further training for planners on the creation of waste management concepts and the increased focus on waste prevention and reuse

Realisation of the waste management concept was evaluated as part of a study. This revealed that the waste prevention measures which are feasible for an enterprise can be better identified internally. The experts in the local authorities and the planners can only provide impetus in discrete instances. In the future therefore, the focus will be on the training of staff within the enterprise.

### 1.7.1.3. ACTION AREA „WASTE PREVENTION IN HOUSEHOLDS“

Internet-based best practice fact sheets on waste prevention techniques, material- and energy-efficient technologies and on waste prevention behaviour in private households

The webpage [www.bewusstkaufen.at](http://www.bewusstkaufen.at) contains a plethora of corresponding information and the sustainability assessment of 2,175 household items.

There are also various webpages concerned with this topic, e.g. those of the federal provinces or the waste management associations.

This measure is thereby implemented. It is expedient to continue the information pages and update them on an ongoing basis.

Information campaigns on

- waste prevention opportunities in households and similar facilities,
- the availability of fact sheets and
- waste prevention through consumption behaviour that emphasises quality of life

Support for waste advisors in the municipalities and waste management associations

A stronger focus on waste prevention in the „Sustainable weeks“ and „Being aware of what you buy“ initiatives by

- drawing up and distributing fact sheets on waste prevention,
- getting the local and regional authorities (particularly those concerned with environmental and waste advice) to help them reach a wider audience,
- bundling communication measures for sustainable consumption



Figure 12: Waste prevention by way of needs-oriented consumption

There are several initiatives, especially in the public sector, which include information campaigns; effecting changes in consumer behaviour will take longer, however.

An increase in the amount of information provided on the actual potential service life of the equipment, greater motivation to actually implement a sustainable, needs-oriented consumption and having direct contact with the waste consultants seem necessary.

#### 1.7.1.4. AREA OF ACTIVITY „PREVENTION OF FOOD WASTE“

Preparation and implementation of training programmes for the staff and integration of the topic in sector-specific training, e.g. for the retail trade

The level of knowledge exhibited by enterprise staff in relation to the prevention of food waste has certainly increased. There is a need for initial training and education in relation to the schooling of new employees and for the purpose of maintaining awareness.

Collection of examples of best practice from the economy and publication of the information via brochures, internet platform

A brochure has been published. Examples of best practice for preventing food waste specifically in relation to food processing companies are still pending. The key problem associated with implementation of this measure lies in the range of sectors and techniques to be considered.

Development of incentive schemes for undertakings with the objectives of

- disposing of less food or
- passing on leftover food which has nothing wrong with it.

Existing incentive schemes can be used as a basis, e.g. integration into the eco-business plan, into environmental management programmes (training of assessors and advisors, awarding of an effective promotional award or prize (such as Sozialmarie, the Integration Award, etc.)).

Food is primarily passed on by retail establishments (total amount passed on in 2013: 11,100 tonnes). Further incentives are also brought about through awards (e.g. the Viktualia award) or the positive impact on marketing.

The retail sector in particular has extended its cooperation with welfare organisations.

Clarification of the legal position regarding any liability claims when passing on food to welfare organisations or clarification of the term „waste“ when passing on edible foodstuffs. Harmonisation of the legal framework for forwarding foodstuffs across all federal provinces.

Development of a handbook as a support tool when it comes to passing on foodstuffs to welfare organisations.

The most important issues are clarified by means of the handbooks devised.

Regular training courses on handling foodstuffs for employees of welfare organisations

This measure is ongoing.

Preparation of a quality standard (e.g. certificate, quality seal) for welfare organisations which pass on foodstuffs.

This measure has not yet been implemented.

Preparation and implementation of training programmes for employees and integration of the topic in sector-specific training

Collation of examples of best practice from the sector

Creation of incentive schemes analogous to corresponding measures in production, industry, retail and the catering trade and integration into existing programmes

These measures are implemented within the framework of the „United Against Waste“ initiative.

In the area of commercial kitchens, accommodation services and the catering trade, a relatively large potential for preventing food waste was identified. Realisation of this potential should also result in appreciable cost savings.

Creating awareness on the topic of „Prevention of food waste“ and showing how people can do things differently by integrating the subject matter into informational material, events and focus activities

(Further) development of measures to create framework conditions that allow for the steering of people's behaviour towards a more mindful approach to food (pilot projects, studies)

A nationwide campaign (TV, print media) was conducted in order to make people aware of the problems.

In principle, there is a large amount of interest in preventing food waste. Even though an intensive array of measures has already been undertaken hitherto in this sector, awareness needs to be raised further in order to bring about a change in behaviour.

Integration of the topic of food waste prevention in continuing education and training programmes for teachers and the preparation of training documents and learning materials for kindergartens and schools

Training documents have been realised within the framework of the initiative „Food items are precious!“. Integration of the topic in continuing education and training programmes for teachers ought to be pursued more intensively.

Integration of the topic „Prevention of food waste“ in the guidelines of the process organisation of public bodies (such as canteens or hospitals)

The „United Against Waste“ initiative compiles the basics which may be used in the preparation of these guidelines.

Consideration of the prevention of food waste in public procurement

There are appropriate specifications as a result of the EcoBuy (ÖkoKauf) guidelines for Vienna. The application of these specifications in all areas of public administration should be guaranteed in the next step.

#### 1.7.1.5. ACTION AREA „REUSE“

Public relations work on reuse: national campaign

Since no umbrella brand was implemented across the federal provinces in relation to the reuse sector, a nationwide campaign is less expedient.

Promotion of product services, particularly by conducting market entry research, pilot projects and subsidising start-ups

Recent experience has shown that „service instead of purchase“ has a market, especially in the price segment above € 1,000. This is utilised by enterprises although there are limited cases of application for households.

Procurement guidelines that facilitate reuse: adaptation of procurement law and the relevant existing directions for action

The Federal Ministry of Agriculture and Forestry, Environment and Water Management champions the fact that criteria governing reuse in public procurement are also laid down during transposition of the EU Directive on public procurement (Directive 2014/24/EU) in Austria.

Reuse of reusable items disposed of by public authorities: examination of areas of potential, implementation of provisions for public bodies

This measure is still to be implemented.

Collating examples of good practice from at home and abroad of combined reuse and second-hand activities in the waste management and socioeconomic sectors;

Networking platform for active and interested municipal and welfare organisations, concepts for the distribution of reuse products to socially disadvantaged households, e.g. through household-related social services, social markets

Strengthening reuse enterprises through pan-business networking and innovative cooperation models

Model concept and development of technical solutions for reuse logistics

Technical working groups which develop joint solutions for the reuse sector

Coordination group for the funding strategy and coordination of start-up subsidies for reuse projects

Modular sample concept for regional reuse networks for regions with varying structures

Aids for reuse enterprises (permanent advisory body, sample business plans, implementation manual, checklists, sample contracts, sample cooperation models, information documents, topic-specific instructions, templates for forms, contracts, records, internal training documents and internal instructions for working procedures, etc.)

Contractual terms for the reuse sector in the area of waste collection, particularly within the framework of collection schemes in accordance with the Federal Waste Management Act 2002: drafting of sample contract clauses for all significant interface situations

Modular training programme for various target groups (reuse enterprises, collection centres, waste advisors and public authorities)

Reuse networks were established in seven federal provinces. The level of development ranges from established across the province (ReVital in Upper Austria) to a pilot stage. As a result, the comprehensive establishment and economic consolidation of the reuse sector is a good deal closer. A further exchange of experience across the country is helpful in this regard.

At the present time, social enterprises are unable to develop any long-term business segment strategies in the reuse sector based on the funding guidelines for developing the labour market. In this regard, stable, long-term funding strategies are required. The actual economic activities undertaken by social enterprises should be taken into consideration by the funding authority. The circular economy and greenjobs approach could provide an inter-agency framework here.

Insurance service package on the „liability risk for reuse enterprises“

Clarification was provided of the fact that the liability risk for reuse enterprises can be covered by employer's liability insurance.

Online sales portal for reuse products that is not tied to specific enterprises

In Lower Austria, the sales portal [www.sogutwieneu.at](http://www.sogutwieneu.at) was set up.

In federal provinces in which a reuse network is well established and this network operates a website, an online sales portal that is not tied to specific enterprises is probably not required (also simply because private online portals for second-hand goods are currently thriving in any case).

Nationwide reuse campaign  
Creation of a reuse umbrella brand  
Offensive to attract reuse enterprises

A nationwide campaign, nationwide umbrella brand and offensive to attract reuse enterprises did not prove necessary since the reuse sector is currently also developing apace without these measures.

„Think tank“: product services and innovative reuse business models

Several experts are addressing the issue of product services and innovative reuse business models; a „think tank“ has not been established as yet.

Furthermore, a reuse conference was arranged; this topic was the focal point during Re-resource 2016.

Design manual for reuse shops

Significant progress was achieved in the design of reuse shops. A good example is Contrapunkt in Klagenfurt.

A design manual was provided by ReVital.

Collection boxes (reuse box) for reusable goods are provided in some regions.



Figure 13: "48er Tandler" - the Vienna used-goods market

## Submission, subsidisation/co-financing of development projects on the subject of reuse

Development projects on the subject of reuse were promoted.

## Creating and implementing uniform quality standards for reuse networks, enterprises, collection centres and products; test standards and directions for action for every relevant reuse product group

The existing norms and standards are currently adequate, based on recent experience.

## Adapting the structure of collection entities to the requirements for reusable waste (with thought given to careful storage and appropriate transport)

The 2014 amendment to the WEEE Ordinance laid down the obligation incumbent upon municipal collection points to create a separate collection channel for reusable waste electrical equipment and binding cooperation with a reuse enterprise.

In the case of collection points for recoverables which do not participate in reuse networks, there is still a need for the collection structure to be adapted.

## 1.7.2. EVALUATION OF THE WASTE PREVENTION PROGRAMME 2011 USING INDICATORS

The following trends can be deduced on the basis of the indicators laid down in the Waste Prevention Programme 2011:

During the period 2004 to 2007, annual growth in the quantity of municipal waste generated by households and similar facilities per capita averaged 2.4%. During the period 2007 to 2015, the rate of annual growth in terms of the quantity of municipal waste generated was only 1.0%.

The quantity of residual waste generated during the period 2004 to 2015 rose in a relatively uniform manner with an average growth rate of 0.32% per year. This rate of growth is slower than the rate of population growth, which averaged 0.49% per year.

The volume of waste from trade and industry decreased by 21% from 2007 to 2015.

The cause of this decline and the low growth rates in the quantities of waste generated since 2007 may be the low level of economic growth since 2008 and the waste prevention measures undertaken since then.

In the area of food waste, the statistical surveys were improved. No clear trend can be deduced from this, however.

According to information provided by experts

- both the number and annual turnover of reuse enterprises
- and the quantity, number and turnover of the reuse products sold or utilised annually

have risen significantly in recent years. From 2011 to 2017, reuse networks were established in a further six federal provinces. In 2015, approximately 1,800 tonnes of waste electrical and electronic equipment were reused. Compared with 2009 (reference year of the Federal Waste Management Plan 2011), this corresponds to an increase of 85%.

Since the measures under the waste prevention programme in the construction sector largely have a long-term perspective, the effects cannot be anticipated immediately when the measures are implemented. Consequently, there was just the annual updating of the data pertaining to the quantity of waste generated from building activities and its whereabouts (cf. in this regard also Chapter 3.9. „Construction and demolition waste“ of the Federal Waste Management Plan 2017).

As regards the level of knowledge of consumers, reference is made to the growing interest in terms of the number of visits made to the webpages of the Federal Ministry of Agriculture, Forestry, Environment and Water Management (e.g. [www.bewusstkaufen.at](http://www.bewusstkaufen.at) with approximately 400,000 hits per year) and other institutions (e.g. the environmental consultancy). In 2016, approximately 200,000 visits to the waste pages of the Federal Ministry of Agriculture, Forestry, Environment and Water Management were registered.

#### 1.7.2.1. SELECTED OTHER INITIATIVES IN AUSTRIA WHICH CONTRIBUTE TO WASTE PREVENTION

In addition to the Waste Prevention Programme 2011, at a Federal level, other strategic plans for waste prevention may also be important as they promote sustainable developments, resource-efficient products, services and production or needs-oriented consumption. Examples include:

- the Austrian Strategy for Sustainable Development,
- the Sustainability Strategy of the Federal Government,
- the Green Jobs Master Plan,
- the Incentive Programme for Sustainable Economies,
- the Action Plan for Corporate Social Responsibility,
- the Austrian Sustainable Public Procurement Action Plan.

To sum up, at provincial level, the following waste prevention measures must be emphasised:

- Regional programmes concerning corporate environmental protection assist in the introduction of efficient techniques, the creation of waste management concepts, the implementation of environmental audits and the introduction of environmental management systems;
- Green events are organised with the support of the federal provinces.
- Information and awareness-raising campaigns promote sustainable consumption, the prevention of food waste or the redistribution of surplus foodstuffs to social groups in need.
- The extended use of equipment is promoted through the publication of repair, rental and second-hand guides.
- The development of repair and reuse networks and repair cafés is supported.
- The expansion of the collection points for recoverables to include, inter alia, acceptance and storage of used products as a preparatory step for reuse is supported.

#### 1.7.3. ASSESSING PROPOSALS FOR MEASURES UNDER ANNEX 1 TO FEDERAL WASTE MANAGEMENT ACT 2002 AND ANNEX 4 TO THE EU WASTE FRAMEWORK DIRECTIVE

The usefulness of the measures (that are highlighted in colour in the following subchapters) given by way of example in Annex 1 to the Federal Waste Management Act 2002 and Annex 4 to the EU Waste Framework Directive must be assessed. Chapters 1.7.3.1. to 1.7.3.3. include this assessment for the incorporation of the measures listed in the Waste Prevention Programme 2017. Those measures adjudged to be suitable for implementation, and which have not been implemented hitherto in Austria, were incorporated into the Waste Prevention Programme 2017.

#### 1.7.3.1. MEASURES POSSIBLY IMPACTING THE FRAMEWORK CONDITIONS IN CONNECTION WITH WASTE GENERATION

##### Use of planning measures and other economic instruments that promote the efficiency of resource utilisation

To this end, Austria has a wide range of planning measures and instruments at its disposal, from various topics of environmental and resource policy:

- Waste Prevention Programme 2011
- Austrian Strategy for Sustainable Development and the „Ressourcen.Effizienz.Technologie“ (Resource. Efficiency.Technology) Initiative Reset2020
- Action Plan for Corporate Social Responsibility
- Green Jobs Master Plan
- Incentive Programme for Sustainable Economies
- Sustainable Public Procurement Action Plan

##### **Further measures associated with the 2017 programme**

Review of additional possibilities for a building material information system

The promotion of relevant research and development with the aim of achieving cleaner and less wasteful products and technologies and the dissemination and use of the results of such research and development

Austria has a system in place to promote research and development into more eco-efficient, energy-efficient and climate friendly products and environmental technologies:

- Promotion of research and development into energy/material-efficient and environmentally friendly technologies and services in the incentive programme for sustainable economies
- Support for the environment in Austria in the areas of „Prevention of hazardous waste“ and „Resource management“
- Regional programmes for corporate environmental protection in the federal provinces concerning the advice-supported identification and realisation of waste prevention potential in enterprises
- Promotion of the collection and recovery schemes from the point of view of waste prevention
- Accolades such as the Daphne, Phoenix or Viktualia awards.

Among other things, the distribution and use of low-waste products and technologies are promoted within the framework of research and development programmes, cleaner production initiatives and guidelines for public procurement:

- Green Jobs Master Plan
- Incentive Programme for Sustainable Economies,
- The use of efficient technologies is supported within the framework of environmental funding in Austria through the promotion of projects to prevent hazardous waste.
- Regional programmes for corporate environmental protection in the federal provinces
- Events such as envietech, Re-source.

#### **Further measures associated with the 2017 programme**

Preparation of teaching materials and learning aids on the principles, planning techniques, techniques and technologies:

- for “low-waste construction” and
- concerning the extraction and reuse of entire building components arising from the demolition of buildings
- for the training of specialists in vocational schools and schools of higher education. These teaching materials and learning aids are increasingly involved in the educational and vocational further training of specialists.

The inclusion of design measures concerned with waste prevention and reuse in professional and university education.

The development of waste prevention documentation for technical schools and educational institutions on concrete issues.

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

The following benchmarks are used in connection with the waste prevention programme measures:

- volume of waste in the Federal Waste Management Plan or in status reports
- residual waste analyses in the federal provinces
- various studies on the occurrence of avoidable food waste
- material flow indicators in the indicator reports regarding Austria’s sustainability strategy.

#### **Further measures associated with the 2017 programme**

Surveys on the potential of avoidable food waste in the processing industry

Standardising compilation methods, e.g. in the case of sorting analyses

### 1.7.3.2. MEASURES POSSIBLY IMPACTING THE CONCEPTUAL DESIGN, PRODUCTION AND DISTRIBUTION PHASE

Promotion of ecological design (systematic inclusion of environmental aspects in product design with the aim of improving the environmental balance of the product over its entire life cycle) and of reusable packaging

The reusable proportion of drinks packaging was able to be stabilised at the 2011 level:

- Additional agreement regarding the Sustainability Agenda 2008-2017 of the Austrian beverage packaging industry
- Awareness-raising measures, e.g. the initiative „Sag's am Mehrweg“ [Use reusables]



Figure 14: Logo of the initiative „Sag's am Mehrweg“

#### Further measures associated with the 2017 programme

Developing standards concerning waste prevention design, the avoidance of harmful substances and the reparability, separability and reusability of product parts

Extension of the Ecodesign Directive in the context of the package of measures concerning the circular economy

Working in the EU towards the information obligation concerning

- the period of availability of replacement parts
- the average service life of the products

Repair, reuse and recycling design are to be increasingly incorporated in design curricula.

Provision of information on industrial techniques for waste prevention with a view to facilitating implementation of the state of the art

Several initiatives have already been launched:

- Environmental technology clusters
- COIN (COncrete INnovation) funding programme
- „Waste management“ working group within ECR Austria (Efficient Consumer Response Austria)
- Examples of best practice from EMAS enterprises

#### Further measures associated with the 2017 programme

Other examples of best practice on techniques and technologies that prevent waste, accompanied by an intensive information campaign

Training measures for the competent authorities as regards the inclusion of waste prevention requirements in permits for treatment plants and IPPC installations

Pursuant to the Federal Waste Management Act 2002 and the Industrial Code, an operational waste management concept must be drawn up by all plants with more than 20 employees and when applying for an operating licence. This waste management concept should outline all waste-relevant processes, material flows and waste streams, as well as all current and planned waste prevention measures. Waste prevention measures are initially proposed by planners during plant approval procedures as part of the waste management concept and then reviewed by the authorities.

Waste prevention potential and measures must be identified by the enterprise itself or the planner commissioned by it. In the first instance therefore, the enterprises and planners must be supported in identifying waste prevention potential and techniques.

#### **Further measures associated with the 2017 programme**

Supplementing sector-related blueprints with good examples of waste prevention

The inclusion of measures to prevent waste production at installations not falling under Directive 2008/1/EC; 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, in particular measures which are aimed at small and medium-sized enterprises and work through established business networks

Small and medium-sized enterprises shall receive support in identifying and implementing their waste prevention potential:

- waste management concept
- regional programmes for corporate environmental protection
- domestic environmental support in accordance with the Environmental Aid Act
- support of environmental management systems such as EMAS training programmes
- information booklets, e.g. regarding EMAS.

In enterprises with more than 100 employees, a waste officer shall be appointed and the local authority notified.

#### **Further measures associated with the 2017 programme**

Other examples of best practice on techniques and technologies that prevent waste, accompanied by an intensive information campaign

Continuation of the regional programmes for corporate environmental protection in the federal provinces concerning the advice-supported identification and realisation of waste prevention potential in enterprises

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

Voluntary agreements are increasingly used in the area of waste prevention:

- Sustainability Agenda 2008-2017 of the Austrian beverage packaging industry
- agreement covering the period 2016 to 2025 concerning a reduction in carrier bags
- cooperation partnership within the framework of the initiative „Food items are precious!“

#### **Further measures associated with the 2017 programme**

- Enhanced prevention of food waste during production, processing, in trade and consumption away from home
- Continuation of the Sustainability Agenda
- Canvassing further enterprises regarding the agreement covering the period 2016 to 2025 concerning a reduction in carrier bags

Promotion of environmental management systems including EMAS and ISO 14001

Environmental management systems expedite waste prevention measures:

- regional programmes for corporate environmental protection in the federal provinces promote the implementation of environmental management systems
- EMAS-certified enterprises receive concessions on the certification of products for the Austrian Ecolabel and extra points in the case of public calls for tender in accordance with the Sustainable Public Procurement Action Plan.

**Further measures associated with the 2017 programme**

Further support for environmental management systems, including EMAS, ISO 14001 and Responsible Care

1.7.3.3. MEASURES POSSIBLY IMPACTING THE CONSUMPTION AND UTILISATION 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

- Pursuant to the Packaging Ordinance 2014, the collection and recovery of packaging waste is financed through participation fees in a collection and recovery scheme. The participation fees are calculated according to the specific material used in the packaging distributed and the weight thereof
- Charging final customers for disposable carrier bags in accordance with the voluntary agreement covering the period 2016 to 2025 concerning a reduction in carrier bags
- Promotions and competitions in the context of the „Being aware of what you buy“ and „Use reusables“ initiatives
- Passing on foodstuffs at a reduced rate shortly before expiry of the best-before date

Awareness-raising measures and information for the general public or specific consumer segments

This may be the most important and central measure for promoting waste prevention on the consumer side. Raising awareness involves making people take note of their own consumption behaviour, the values lost through inefficient consumption and the barriers to efficient consumption behaviour:

- the „Being aware of what you buy“, „Food items are precious!“ and „Use reusables“ initiatives
- prevention programmes in the federal provinces
- public relations work on the collection and recovery schemes
- Forum for Environmental Education ([www.umweltbildung.at](http://www.umweltbildung.at))
- RedUSE project to raise awareness amongst schoolchildren

**Further measures associated with the 2017 programme**

- The continuation of information campaigns on
  - waste prevention opportunities in households,
  - waste prevention through consumption behaviour that emphasises quality of life
- Campaigns targeting households: Creating awareness on the topic of „Prevention of food waste“ and showing how people can do things differently
- Integration of the topic of food waste prevention in continuing education and training programmes for teachers
- Campaigns concerning reuse

## Promotion of ecolabels

Important initiatives already exist on the promotion of the ecolabel:

- Austrian Ecolabel
- Sustainability seal for long-life electrical equipment that is easy to repair

### Further measures associated with the 2017 programme

Extension or updating of the guidelines concerning the awarding of the Austrian Ecolabel

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

The „Being aware of what you buy“ initiative already includes a platform for the provision of information regarding waste prevention and environmentally sound products:

- „Being aware of what you buy“ initiative
- „Food items are precious!“ and „Use reusables“ initiatives
- Agreement covering the period 2016 to 2025 concerning a reduction in carrier bags

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

The public sector in Austria plays an important pioneering role in the development of a sustainable national economy and waste prevention. The following implementation measures must be cited:

- Federal Public Procurement Act
- „Ecological Guidelines“ of the Federal Government
- „EcoBuy Vienna“ criteria
- „Green Events Austria“ Initiative
- Austrian Sustainable Public Procurement Action Plan

### Further measures associated with the 2017 programme

- Promoting extension of the useful life of public buildings and material assets
- Promoting the use of recycled building materials in public procurement
- The introduction of procurement criteria concerning products which have been drawn up in accordance with the principles of waste-reducing design as well as concerning durability and reparability
- Review and further development of the public procurement criteria with a view to preventing food waste
- Continued use of usable material assets within the public sector
- Increased communication of the public procurement criteria

Promotion of the reuse or repair of suitable waste, 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. Consideration must be given to the creation of „green jobs“ in this regard.

The topic of reuse and repair has received increasing attention over recent years:

Various initiatives in the federal provinces promote the development of repair networks, reuse initiatives and repair cafés at a local level.





