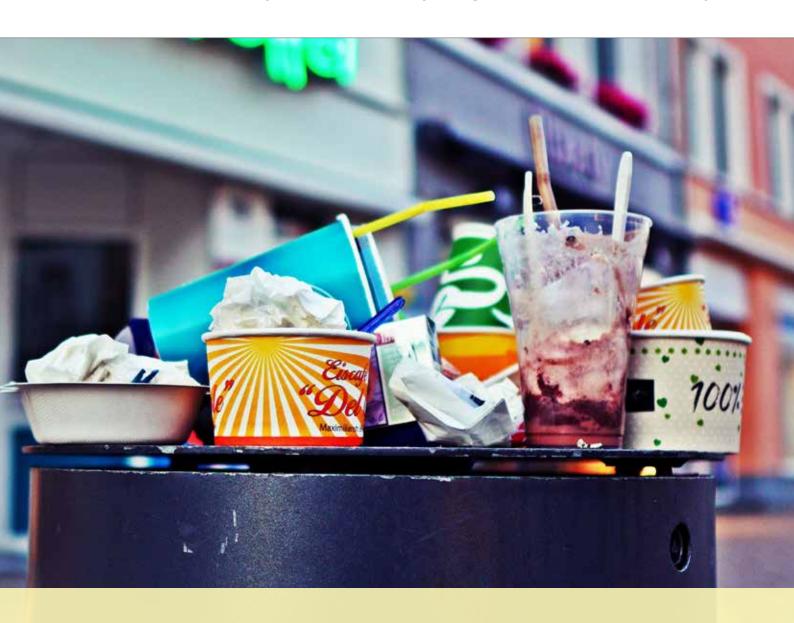
# Overview of national waste prevention programmes in Europe







## **General information**

Name of the country/region	Greece	
Coverage of the waste prevention programme (national/regional)	National	
Type of programme (stand alone or integrated into waste management plan)	Stand-alone prevention programme	
Title of programme and link to programme	Εθνικό Πρόγραμμα Πρόληψης Δημιουργίας Αποβλήτων 2021-2030 (National waste prevention programme 2021-2030) <a href="http://www.opengov.gr/minenv/wp-content/uploads/downloads/2021/03/EPPDA_04-03-2021final-%CE%94%CE%99%CE%91%CE%92%CE%9F%CE%A5%CE%94%CE%98%CE%95%CE%A5%CE%A3%CE%97.pdf">http://www.opengov.gr/minenv/wp-content/uploads/downloads/2021/03/EPPDA_04-03-2021final-%CE%94%CE%99%CE%91%CE%92%CE%9F%CE%A5%CE%A3%CE%97.pdf</a>	
Duration of programme	2021-2030	
Language	Greek	
Development process of the programme/revision	The national waste prevention programme was approved by the Ministerial Council in June 2021	
Budget envisaged for implementation of the project	At national level, funding for waste prevention and management actions is included in the EU structural funds programming period 2014-2020, while additional funding support for the measures and actions towards the circular economy (including waste prevention) is expected in the programming period 2021-2027  Funding of waste projects, including prevention, also exists through the investment law (Law 3908/2011 as amended by Law 4635/2019 (A' 167)) and the 'Green Fund' In addition, funding projects and infrastructure	
	for upgrading waste management (including prevention) is also envisaged and provided at the level of local government programmes. The Hellenic Recycling Agency is responsible for preparing and implementing waste prevention programmes including programmes for the alternative management (extended producer responsibility) of packaging waste, whereas	

producers' responsibility organisations (PROs) are also responsible for undertaking waste prevention actions

Specific tools for funding waste prevention actions will be included in the regional waste management plans being developed and also within the context of the local waste management plans. Finally, since November 2019, the LIFE integrated project 'Circular economy implementation in Greece' has been implemented by the Ministry of Environment and Energy, as coordinating partner, and 18 beneficiaries. It is intended to make a decisive contribution to the implementation of the national waste management plan, the national waste prevention programme (NWPP) and the national circular economy strategy, focusing on the promotion of good practices and behavioural change. Among the project actions, waste prevention is a priority

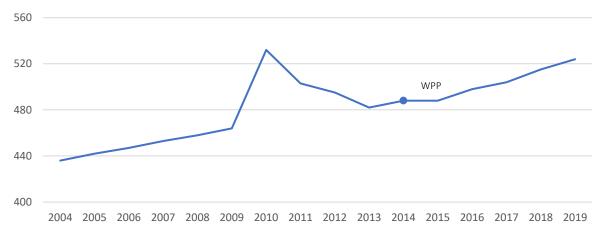
#### Waste generation

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

#### Municipal solid waste

- The generation of municipal solid waste (MSW) per capita increased steadily, from 436 kg in 2004 to 524 kg in 2019 (see Figure 1).
- The lowest level of waste generation was in 2004 (436 kg per capita), with a strongly increasing trend until 2010.
- The generation of MSW strongly declined between 2011 and 2013, probably influenced by the global financial crisis that developed shortly before this period.
- Overall, Greek MSW generation of 524 kg per capita is above the European average of 502 kg per capita/year.
- The first Greek NWPP came into force in 2014, but since then MSW generation has slightly increased. This increase might be influenced by many factors, such as population and household expenditure.

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

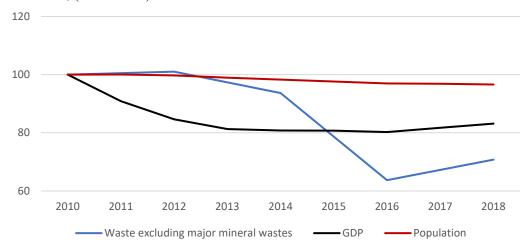


Source: Eurostat Circular Economy Monitoring Framework.

#### Total waste

- Total waste generation in Greece decreased significantly between 2010 and 2018 (see Figure 2).
- Although Greece's economic growth in terms of GDP also decreased in that period, a few differences can be observed. The GDP decreased at a fast pace between 2010 and 2013, stabilised until 2016 and increased in the years that followed. The generation of waste, on the other hand, decreased slowly between 2010 and 2014, sharply between 2014 and 2016, and along with GDP, started increasing from 2016 onwards.
- Although a longer time series is needed to confirm any conclusions on decoupling, Greece does not seem to be on track to decouple total waste generation from economic growth.
- A link between population growth and waste generation cannot be observed, as the population decreased steadily over time.

Figure 2: Growth rate of waste (excluding major mineral wastes), GDP and population in Greece, 2010-2018, (2010 = 100)



Source: Eurostat.

## Waste prevention programme

## Objectives and priorities

1. Waste prevention objectives of the programme: quantitative objectives (waste reduction) and qualitative objectives (reduction of hazardous substances/environmental impacts)

The general objectives set out in the former national waste generation prevention strategic plan (2015-2020) are also adopted by the NWPP (p. 19):

- improve public information on and awareness of waste prevention
- promote sustainable consumption of products
- promote product reuse

The main objective of the NWPP is the development of a coordinated approach to create the conditions for less consumption of raw materials and the transformation of consumer standards, with the ultimate aim of achieving a gradual reduction in waste generation (p. 20)

The general qualitative objectives, in detail, are:

- promoting circular consumption, informing, raising awareness and providing tools for citizens to move from a linear to a circular model of behaviour and consumption
- using the 'Just Transition' mechanism in the framework of the European Green Deal and InvestEU programme
- adopting waste reduction targets for specific streams
- promoting the understanding that waste is a resource to be used in the wider context of the circular economy
- strengthening waste prevention actions by means of an integrated and systematic public awareness campaign
- develop and promote a new industrial strategy to encourage circularity in the production process
- maximising the introduction of best available techniques (BATs) in the production process to prevent waste generation and improve waste qualitative characteristics
- developing methodologies to minimise the presence of harmful/hazardous substances in recycled materials
- promoting 'industrial symbiosis' to maximise waste valorisation and reduce waste exports that will contribute increasing business competitiveness

#### Quantitative target:

• The strategic objective of the NWPP is, by 2030, a 30 % reduction in food waste per capita compared with food waste produced in 2022 at retail and

consumer level, and the reduction of (1) food waste in primary production, in processing and manufacturing, in retail and other distribution of food, in restaurants and food services, as well as in households, and (2) food losses along the production and supply chain. Such provision has been made in Article 20, para. 2, of Law 4819/2021, transposing Directive 2018/851 into national legislation. In addition, a specific programme for food waste prevention is under development and will be finalised soon

 Reduction of the consumption of single-use plastic (SUP) products (cups for beverages, food containers according to Part A of the Annex to the SUP Directive) by 30 % by 2024 and 60 % by 2026, compared with 2022 (p. 22)

There are also qualitative targets set for the remaining priority waste streams as follows: paper, packaging waste, plastic (SUPs, plastic bags), waste electrical and electronic equipment (WEEE), textiles, furniture, industrial waste, construction and demolition waste, including excavation. In addition, the Ministry of Environment and Energy will set quantitative targets and timelines for reaching these targets, for municipal waste (in total) and specific products/materials, by December 2022

2. Sectors covered

- Primary food production sector
- Food processing and manufacturing sector
- Retail and other food distribution sector
- Wholesale and retail trade sector
- Supply sector
- · Catering sector
- Restaurants and food services
- Households
- · Construction industry
- Plastics industry
- Public sector
- Private sector
- 3. Priority waste types
- Food waste
- Paper
- Packaging/packaging waste
- Specific categories of plastic products/waste (plastic bags, SUPs)
- WEEE from private households
- Specific categories of municipal waste (textiles, bulky waste)
- Industrial waste (hazardous, non hazardous)
- Excavation, construction and demolition waste (ECDW) (table on p. 20)

4. Target groups

The programme addresses households and businesses and a broad group of stakeholders in the supply chain, including product producers, economic operators and citizens/consumers (p. 13)

Food waste

The target groups for the proposed prevention measures are:

- primary food production sector
- food processing and manufacturing sector
- retail and other distribution of food
- restaurants and care services
- households (p. 30)

#### Paper

The target groups for the proposed prevention measures are:

- businesses and industries
- public sector
- education institutions
- press (newspapers and magazines)
- consumers (households) (p. 41)

#### Packaging/packaging waste

The target groups for the proposed prevention measures are:

- businesses and industries
- public sector
- education institutions
- consumers (households) (p. 48)

#### Special categories of plastics

The target groups for the proposed prevention measures are:

- plastic industry producing these special categories
- wholesale and retail trade
- catering companies
- households (p.54)

#### **WEEE**

The target groups for the proposed prevention measures are:

- businesses
- public sector (municipalities)
- consumers (pp. 66-68)

#### Specific categories of municipal waste

#### **Textiles**

The target groups for the proposed prevention measures are:

- businesses/textile industries/producers
- municipalities
- consumers (pp.72-74)

#### Bulky waste — furniture

The target groups for the proposed prevention measures are:

- businesses/industries/producers, importers
- municipalities
- consumers (pp.79-81)

#### Industrial waste

The target groups for the proposed prevention measures are:

• industries (pp. 84-86)

## ECDW

The target groups for the proposed prevention measures are:
construction industry

- public sector
- private individuals (p. 89)

1. Indicators proposed

The following overall indicators for waste prevention are set (p. 26):

- reduction (%) of produced municipal waste per resident per year on the basis of equivalent population
- produced municipal waste per million euros of GDP on an annual basis

In addition, to more effectively monitor the progress of the implementation of the measures, it is proposed to monitor indicators per action (p. 35)

## Food waste (pp. 36-40)

- Indicator Action 1: Establishment and operation of a monitoring system for food waste production
- Indicator Action 2.1: Undertaking a study for the barriers/limitations to food donation; creation of specifications/criteria for the suitability of food for donation
- Indicator Action 2.2: Establishment of national guidelines and/or further legislation
- Indicators Action 2.3: Establishment of economic incentives; number of enterprises making use of financial incentives
- Indicator Action 2.4: Implementation and operation of the platform for food donation; number of users/year; number of cooperation agreements concluded between donors to and charities benefiting from the platform
- Indicator Action 3.1: Integration of the thematic module for food waste in agricultural vocational training programmes
- Indicator Action 3.2: Creation of a guide to be used by agri-food businesses
- Indicator Action 4.1: Number of pilot projects to reduce food waste generated in the food industry
- Indicator Action 4.2: Number of small and medium-sized enterprises receiving support; number of companies that have adapted their procedures with a view to reducing the generation of food waste
- Indicator Action 4.3: Number of training programmes implemented in food supply sector; number of employees by sector participating in training programmes
- Indicator Action 4.4: Number of volunteer agreements concluded
- Indicator Action 4.5: Number of campaigns, incentives, etc., for encouraging the sale of visually unattractive food and close to 'best before'/'use by' date food
- Indicator Action 4.6: Optimisation of the labelling of packaged food
- Indicator Action 4.7: Number of workshops held; number of participants attending workshops
- Indicator Action 5.1: Number of companies that received

- the relevant information; number of companies that have adapted their procedures with a view to reducing food waste
- Indicator Action 5.2: Number of training programmes implemented in catering sector; number of employees by sector participating in training programmes
- Indicator Action 5.3: Number of companies offering leftover food as a 'package'
- Indicator Action 5.4: Number of businesses with the special mark
- Indicator Action 5.5: Number of agreements concluded in catering sector
- Indicator Action 5.6: Integration of food waste reduction in the Hellenic Food Authority guidelines
- Indicator Action 5.7: Number of public contracts written where specific terms on food waste reduction are mentioned
- Indicator Action 6.1: Percentage reduction of food waste and food loss in the households
- Indicator Action 6.2: Number of campaigns per target audience; number of households affected by the campaigns
- Indicator Action 6.3: Number of consumers who received information
- Indicator Action 6.4: Number of actions undertaken by municipalities; amounts of subsidies granted

## Paper (pp. 45-47)

- Indicator Action 1.1: Number of users participating in electronic services
- Indicator Action 1.2: Number of households participating in the actions; percentage of compliance with the instructions on the 'Stop advertising' sticker, measured by number of complaints, etc.
- Indicator Action 1.3: Creation of the guide for paper waste prevention and its use by households/businesses; percentage of compliance with the instructions on the 'Stop advertising' sticker, measured by the number of complaints, etc.
- Indicator Action 2.1: Number of enterprises participating in the actions; quantity of office paper purchased by paper type
- Indicator Action 2.2: Number of local authorities participating in digitisation; number/percentage of services provided digitised by local authorities
- Indicator Action 2.3: Number of electronic subscribers per service of general interest; integration of electronic invoicing into contracts of the organisations of services of general interest
- Indicator Action 2.4: Number of enterprises participating in the action of single printed receipt; number of machines at point of sale that provide the possibility of single printer receipts

- Indicator Action 2.5: Implementation of the action of book reuse; number of books that are reused/year
- Indicator Action 3.1: Number of programmes and participants at municipal level/year
- Indicator Action 3.2: Implementation of the action of press releases by solid waste management bodies and municipalities, regarding paper saving actions; number of actions paper saving/municipalities/year
- Indicator Action 3.3: Number of communication messages/year

## Materials/packaging waste (pp. 51-53)

- Indicator Action 1.1: Number of relevant actions/year regarding the promotion of new consumer daily behaviour on the use of packaging, individually and collectively; number of households participating in the relevant actions; number of relevant beverage distribution systems/year; quantity of packages of beverages placed on the market, per inhabitant and type of packaging
- Indicator Action 1.2: Number of relevant actions/year encouraging restriction of packaging and multipackaging; percentage of reusable packaging on the basis of total packaging
- Indicator Action 1.3: Quantities of reusable packaging/year
- Indicator Action 2.1: Number of incentives to implement eco-design; percentage of reusable packaging compared with the total quantity packaging placed on the market
- Indicator Action 2.2: Implementation of the relevant action regarding promotion of labelling for environmentally friendly packaging
- Indicator Action 3.1: Percentage of the number of ecologically designed packaging types compared with the total number of types of packaging, by category of packaging; change in household behaviour towards ecodesigned packaging
- Indicator Action 3.2: Percentage of the number of ecologically designed packaging types compared with the total number of types packaging, per packaging class; change in household behaviour towards using ecologically designed packaging
- Indicator Action 3.3: Submission by packaging PROs of a revised study to determine the financial contributions; approval of the study by the Hellenic Recycling Organisation (EOAN) and implementation of the new contributions
- Indicator Action 3.4: Number of relevant tools/studies developed in the framework of packaging eco-design

Special categories of plastics (pp. 58-60)

#### Single-use plastics

• Indicator Action 1.1: Undertaking a study to assess

- adopting tax incentives to reduce the consumption of SUPs for which there are no alternatives or to increase their life span
- Indicator Action 1.2: Quantity of reusable utensils, including cutlery and cups, used at events
- Indicator Action 2.1: Number of innovations developed; amount of plastic used in the packaging
- Indicator Action 2.2: Number of surveys conducted; quantity of utensils made from biodegradable materials
- Indicator Action 3.1: Development of the relevant tool for the promotion of the use of reusable products
- Indicator Action 3.2: Quantity of multipurpose products placed on the market; reduction (%) of SUPs placed on the market annually (cups and food containers)
- Indicator Action 3.3: Number of households participating in the actions regarding small habit changes
- Indicator Action 3.4: Number of public fountains installed; quantity of plastic water bottles consumed
- Indicator Action 4.1: Number of agreements reached between Ministry of Environment and Energy, industries, retail and educational institutions
- Indicator Action 4.2: Number of agreements reached in hotel and restaurant sector
- Indicator Action 4.3: Number of agreements reached in bottling companies sector
- Indicator Action 5.1: Number of campaigns implemented for plastic container reuse; percentage of households affected by the campaigns

#### Plastic carrier bags (pp. 64-65)

- Indicator Action 1.1: Undertaking a study on the banning of plastic bags
- Indicator Action 2.1: Preparation of a report on an evaluation of adopting tax incentives related to the reduction of the consumption of plastic carrier bags
- Indicator Action 3.1: Quantity of plastic carrier bags sold; quantity of carrier bags made of biodegradable or environmentally friendly materials sold
- Indicators Action 4.1: Quantity of reusable carrier bags placed on the market; quantity of plastic carrier bags placed on the market
- Indicator Action 5.1: Number of voluntary agreements reached for reducing plastic carrier bag consumption, mainly in retail
- Indicator Action 6.1: Number of campaigns polls carried out on changing consumer behaviour; undertaking a study to evaluate changing consumer behaviour

#### WEEE (pp. 69-71)

• Indicator Action 1.1: Number of businesses active in electrical and electronic equipment (EEE) repair

- Indicator Action 1.2: Number of repair centres operating/year; quantities of EEE that are repaired/year
- Indicator Action 1.3: Design/implementation of electronic platform for reuse; installation of an electronic platform; number of platform users/year
- Indicator Action 1.4: Design/implementation of the action for organising centres for preparing for reuse at municipal level; number of new preparation for reuse centres
- Indicator Action 2.1: Exchange centres sales/year; quantities of EEE exchanged or sold/year
- Indicator Action 2.2: Design/implementation of online platform (connected with action 2.1); installation of an electronic platform; number of platform users/year
- Indicator Action 3.1: Number of criteria determined for used EEE that can be reused
- Indicator Action 3.2: Number of incentives, mainly tax incentives, for the repair and reuse of EEE
- Indicator Action 3.3: Quantities of EEE required to meet the needs of the public sector
- Indicator Action 3.4: Phases of project implementation (timeline, type/quantities of EEE, percentage of needs covered/year) (connected with action 3.3);

Specific categories of municipal waste (pp. 75-78)

#### **Textiles**

- Indicator Action 1.1: Creation of a guide and its use by households/businesses/craftspeople to promote reduced consumption of new textiles
- Indicator Action 1.2: Establishment of new textile collection centres; quantities of clothing undergoing preparation for reuse, to be reused/year
- Indicator Action 1.3: Number of approved PROs
- Indicator Action 1.4: Number of enterprises that are active in ecolabelling of second-hand clothes; number of consumers choosing eco-labelled second-hand clothes
- Indicator Action 1.5: Number of enterprises that introduce new business models
- Indicator Action 1.6: Establishment of new repair clothing centres and new creative material reuse centres; quantities of clothing repaired/year
- Indicator Action 1.7: Establishment of new networks for the collection of textiles; number of municipalities that participate in the actions/year
- Indicator Action 1.8 (connected with actions 1.2, 1.5, 1.6): Design/implementation of an electronic platform; installation of an electronic platform; number of platform users/year
- Indicator Action 2.1: Formulation of a guide for clothing producers; number of textile undertakings using the guide
- Indicator Action 2.2: Formulation of a guide for employing used textiles to make new products; number of textile enterprises using old textiles in their products

- Indicator Action 2.3: Number of tax incentives to enterprises/year to promote repair
- Indicator Action 2.4: Number of enterprises extending warranties/services by companies/brands
- Indicator Action 3.1: Certification of the absence of hazardous chemicals; number of eco-labelled clothes
- Indicator Action 3.2: Implementation of improved designed clothing promoting reuse and recycling; number of companies that apply improved design in their production process
- Indicator Action 3.3: Creation of environmentally friendly label
- Indicator Action 3.4: Number of products that are awarded with EU Ecolabel

#### Bulky waste — furniture (pp. 82-83)

- Indicator Action 1.1: Strategy definition for furniture waste prevention
- Indicator Action 1.2: Number of creative material reuse centres created; quantities of furniture reused/year
- Indicator Action 1.3: Design/implementation of digital platforms; number of green public contracts concluded, including terms of sharing economy/year
- Indicator Action 1.4: Creation of new repair centres
- Indicator Action 1.5: Number of participating companies applying new business models for circular economy-compliant furniture products
- Indicator Action 1.6: Establishment and approval of PROs
- Indicator Action 1.7 (connected with actions 1.3, 1.6): Number of participating companies in strengthening return and warranty schemes
- Indicator Action 1.8: Design/implementation of an electronic platform for furniture repair centres; installation of an electronic platform; number of users/year
- Indicator Action 2.1: Number of enterprises introducing innovative business models
- Indicator Action 2.2: Design/implementation of a guide for the improved design and procurement of circular economy-compliant furniture; number of enterprises that apply the guide
- Indicator Action 2.3: Number of enterprises applying improved design in their production process
- Indicator Action 2.4: Percentage of achievement of objectives set out in the project 'Clean furniture economy'

## Industrial waste (pp. 87-88)

• Indicator Action 1.1: Number of training programmes on BAT implementation of the competent licensing authorities; number of participants in training programmes

- Indicator Action 1.2: Creation of new guides for basic waste prevention principles; number of enterprises participating in the action
- Indicator Action 1.3: Number of enterprises that have trained their employees in the use/application of waste prevention techniques and methods; number of seminars; number of participants
- Indicator Action 2.1: Design/implementation of electronic platform to promote synergy between industries for the recovery of industrial waste (hazardous and non-hazardous); installation of an electronic platform; number of platform users/year
- Indicator Action 2.2: Number of grouped streams of industrial waste (connected with action 2.1)
- Indicator Action 2.3: Number of enterprises applying the relevant standards, including the EU Eco-Management and Audit Scheme (EMAS), ISO 14001, ecolabelling and eco-design
- Indicator Action 2.4: Number of research projects; number of enterprises financed

#### ECDW (pp. 93-95)

- Indicator Action 1.1: Number of good practices distributed/year regarding construction circularity
- Indicator Action 1.2: Number of education curricula that have incorporated eco-design issues
- Indicator Action 1.3: Number of beneficiaries of the 'Energy saving' programme who have integrated ecorenovation issues
- Indicator Action 1.4: Number of buildings certified as 'sustainable buildings', having incorporated the principles of waste prevention
- Indicator Action 1.5: Number of buildings renovated
- Indicator Action 2.1: Quantities of construction and demolition waste that were collected and reused
- Indicator Action 2.2: Number of surveys conducted
- Indicator Action 2.3: Number of education curricula that have incorporated the principles of prevention and reuse of ECDW
- Indicator Action 2.4: Standards for the quality of reusable materials adopted
- Indicator Action 3.1: Quantity of excavation waste
- Indicator Action 3.2: Number of new centres/reuse areas
- Indicator Action 4.1: Number of pilot projects implemented to develop technologies and techniques producing less waste
- Indicator Action 4.2: Number of good practice guides distributed or downloaded
- Indicator Action 4.3: Number of agreements concluded in construction sector
- Indicators Action 4.4: Life cycle assessment tool for buildings design/implementation; number of users/year

2. Quantitative targets

In addition, the following quantitative targets are set:

#### Food waste

• The strategic objective of the NWPP is, by 2030, a 30 % reduction in food waste per capita compared with food waste produced in 2022 at the retail and consumer level, and the reduction of (1) food waste in primary production, in processing and manufacturing, in retail and other distribution of food, in restaurants and food services, as well as in households and (2) food losses along the production and supply chain. Such provision has been made in Article 20, para. 2,, of Law 4819/2021, transposing Directive 2018/851 into national legislation. In addition, a specific programme for food waste prevention is under development and will be finalised soon

#### Single-use plastics

• Reduction in the consumption of SUP products (cups for beverages, food containers according to Part A of the Annex to the SUP Directive) by 30 % by 2024 and 60 % by 2026, compared with 2022, as provided for in Law 4736/2020, on the reduction of the impact of certain plastic products on the environment. (p. 22)

These quantitative targets will be achieved primarily using financial and fiscal incentives/disincentives, the promotion of research and development to produce cleaner technologies, the promotion of reuse and finally through the conclusion of voluntary agreements and the implementation of information and awareness-raising campaigns (p. 22)

As also mentioned above, the Ministry of Environment and Energy will set quantitative targets and respective timelines for reaching the targets, for municipal waste (in total) and specific products/materials, by December 2022

3. Monitoring of programme

To monitor more effectively the progress of the implementation of the measures, it is proposed to monitor indicators per action, as described above. In addition, a national observatory for the circular economy will be established (p. 27)

4. Evaluation of the programme

The Ministry of Environment and Energy is responsible for evaluating the progress of the implementation and effectiveness of the programme and its revision, if necessary. More specifically, according to Article 57, para. 4,, of Law 4819/2021, transposing Directive 2018/851 and 2018/852 into national legislation, the 'NWPP is evaluated by the General Secretariat of Waste Management Coordination of the Ministry of Environment and Energy at least every fifth year and revised as appropriate and, where relevant, in accordance with articles 16 to 21 and 25'

#### **Prevention measures**

Prevention measures implemented in accordance with to Article 9 of the Waste Framework Directive

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

Promote and support sustainable production
and consumption models

#### Food waste

 Action 5.1. Provide support to the catering sector and related services to strengthen the relevant processes of knowledge acquisition and capacity building

## Paper

 Measure 1. Provide advice to households and businesses on preventing waste and ecologically responsible paper consumption

#### Materials/packaging waste

• Action 3.1. Promote design for reuse and recyclability of packaging

#### EEE/WEEE

- Measure 2. Establishing networks for exchange/sale of used EEE
- Measure 3. Promotion of used EEE procurement in public and private sectors

#### Textile waste

- Measure 2. Extend the life of textiles
- Measure 3. Promote the improvement of the environmental quality of textiles

## Bulky waste — furniture

- Action 1.5. Explore the development of financial instruments to support new business models in line with circular economy principles for furniture products
- Action 2.1. Support innovation in the furniture sector

#### **ECDW**

 Measure 1. Develop eco-design and ecorenovation of buildings to allow their adaptability, extend their life span and facilitate their dismantling and recycling (pp. 149-150)

## Encourage the design, manufacture and use of products that are resource-efficient, durable (including in terms of life span and

#### Materials/packaging waste

• Action 3.1. Promote design for reuse and recyclability of packaging

absence of planned obsolescence),			
repairable.	reusable and upgradeable		

• Measure 3. Promote eco-design of packaging

## Special categories of plastics

 Measure 1. Use planning measures that promote the efficient use of resources

#### Textile waste

- Measure 2. Extend the life of textiles
- Measure 3. Promote the improvement of the environmental quality of textiles

#### Bulky waste — furniture

- Action 2.2. Develop a guide to the principles for the improved design and procurement of circular economycompliant furniture
- Action 2.3. Establish strict criteria for eco-design in the furniture-manufacturing sector

#### **ECDW**

• Measure 4. Develop new (structural) circular economy-related practices in the construction sector (p. 150)

Target products containing critical raw materials to prevent those materials becoming waste

#### EEE/WEEE

- Measure 1. Promote the establishment and use of EEE repair centres throughout the country
- Measure 2. Establishment of networks for the exchange/sale of used EEE

#### Industrial waste

- Measure 1. Provide guidance to businesses on the implementation of waste reduction and prevention techniques and methods
- Measure 2. Promotion of industrial symbiosis with the aim of networking industrial sectors and enterprises for the exchange of materials and waste reintroduced as raw material/auxiliary material in the production process, as well as the use of tools/standards (EMAS, ISO 14001, ecolabelling, eco-design) (pp. 150-151)

Encourage the reuse of products and the setting up of systems promoting repair and reuse activities, including in particular for electrical and electronic equipment, textiles and furniture, as well as packaging and construction materials and products

#### Materials/packaging waste

- Action 1.3. Systematic inventory of reusable packaging
- Measure 2. Encourage the reuse of packaging to prevent the depletion of resources

#### EEE/WEEE

- Measure 1. Promote EEE repair centres throughout the country
- Measure 2. Establishment of networks for the exchange/sale of used EEE

#### Textile waste

- Action 1.2. Encourage collection for reuse
- Action 1.6. Develop initiatives by craftspeople/manufacturers/importers of clothing to organise centres for clothing to be repaired and creative material reuse centres, where the existing network is not considered adequate
- Action 2.3. Encourage repair through tax incentives
- Action 3.3. Establish quality criteria for second-hand clothing that can be reused

#### Bulky waste — furniture

- Action 1.2. Encourage collection for reuse
- Action 1.4. Encourage repair
- Action 1.6. Implement extended producer responsibility for furniture

#### **ECDW**

- Measure 2. Develop reuse practices for construction and demolition waste
- Measure 3. Prioritise the reuse of excavation wastes on the site where they are created (pp. 151-152)

#### EEE/WEEE

- Action 1. Promote EEE repair centres throughout the country
- Measure 2. Establishment of networks for the exchange/sale of used EEE

#### Textile waste

 Action 1.6. Development of initiatives by craftspeople/manufacturing or clothing importing companies for the organisation

Encourage, as appropriate and without prejudice to intellectual property rights, the availability of spare parts, instruction manuals, technical information, or other instruments, equipment or software enabling the repair and reuse of products without compromising their quality and safety

- of centres for clothing repair and creative material reuse centres, where the existing network is not considered adequate
- Action 2.3. Encourage repair through tax incentives
- Action 2.4. Extension of warranty/service period by companies/brands

#### Bulky waste — furniture

- Action 1.4. Encourage repair
- Action 1.7. Strengthen guarantees and refunds (p. 153)

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

#### Food waste

 Measure 4. Encourage the food processing, manufacturing and trading sectors to reduce food waste

#### Textile waste

- Action 1.1. Promote reduced consumption of new textiles
- Action 1.4. Promote ecolabelling of second-hand clothing
- Action 2.1. Develop a design guideline for clothing producers/manufacturers

#### Bulky waste — furniture

- Action 1.1. Establish a policy to avoid furniture waste by adopting appropriate levers along the entire supply chain
- Action 2.2. Develop a guide to the principles for the improved design and procurement of circular economy-compliant furniture

#### Industrial waste

 Measure 1. Provide guidance to businesses on the implementation of techniques and methods to reduce and prevent waste generation. This includes training of management staff

#### **ECDW**

- Action 4.1. Use pilot projects to develop innovative technologies and techniques that produce less waste
- Action 4.2. Disseminate good practices and support for training for new techniques (p. 153)

Reduce the generation of food waste in primary production, in processing and manufacturing, in retail and other distribution of food, in restaurants and food services as well as in households as a contribution to the UN Sustainable Development Goal to reduce by 50 % per capita global food waste at the retail and consumer levels and to reduce food losses along production and supply chains by 2030

The main pillars of measures established on food waste (p. 29) are to:

- improve knowledge about food waste production
- support food donation for human consumption
- promote food waste reduction in the primary sector
- enable the food processing, manufacturing and trading sectors to reduce food waste
- implement circular economy principles in the catering and related services sector (e.g. restaurants, hotels, cafeterias), including canteens (e.g. in schools, universities, hospitals, courts, public services) to reduce food waste
- inform and raise awareness among households and the catering sector about changing behaviour in food consumption and management

These pillars, combined with the leveraging of funding (National Strategic Reference Framework, LIFE+, etc.), will contribute decisively to reducing food waste in Greece

#### Food waste:

- Action 2.1. Investigate barriers/constraints to food donation with proposals to address them and develop specifications/criteria for the suitability of food for donation
- Action 2.2. Establish national guidelines and/or further legislation on food donation
- Measure 3. Promote food waste reduction in the primary sector
- Measure 4. Activate the food processing, manufacturing and trading sectors to reduce food waste
- Measure 5. Implement circular economy principles in the catering and related services sector (e.g. restaurants, hotels, cafeterias), including canteens (e.g. in schools, universities, hospitals, courts, public services) to reduce food waste

Measure 6. Informing and raising awareness of households and the catering sector about changing behaviour in food consumption and management

Encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and reprocessing into non-food products

Promote the reduction of the content of hazardous substances in materials and products, without prejudice to harmonised legal requirements concerning those materials and products laid down at EU level, and ensure that any supplier of an article as defined in point 33 of Article 3 of Regulation (EC) No 1907/2006 of the European Parliament and of the Council provides the information pursuant to Article 33(1) of that regulation to the European Chemicals Agency as from 5 January 2021

#### Food waste

- Action 2.2. Establish national guidelines and/or further legislation on food donation
- Action 2.3. Financial incentives for food donation (p. 154)

#### Textile waste

Measure 3. Promote the improvement of the environmental quality of textiles

#### Bulky waste — furniture

- Action 2.2. Develop a guide to the principles for the improved design and procurement of circular economycompliant furniture
- Action 2.4. Strengthen efforts in the context of achieving a 'clean furniture economy'

#### Industrial waste

- Action 1. Provide guidance to businesses on the implementation of techniques and methods to reduce and prevent waste generation. This includes training of management staff
- Measure 2. Promote industrial symbiosis by networking industrial sectors and enterprises for the exchange of materials and waste reintroduced as raw materials/auxiliary material in the production process and the use of tools/standards (EMAS, ISO 14001, ecolabelling, eco-design)

#### **ECDW**

Action 1.4. Integrate aspects related to waste prevention, avoidance of harmful substances and waste management throughout the life cycle of a building, into the standards of 'sustainable buildings' (pp. 154-155)

Reduce the generation of waste, in particular waste that is not suitable for preparing for reuse or recycling

#### Materials/packaging waste

• Measure 3. Promote eco-design of packaging

## Specific categories of plastics

 Measure 2. Promote research and development in the field of achieving cleaner products and technologies that produce less waste, and the distribution and use of the results of such research and development for plastic products

#### Bulky waste — furniture

- Action 1.1. Establish a policy to avoid furniture waste by adopting appropriate levers along the entire supply chain
- Action 2.2. Develop a guide to the principles for the improved design and procurement of circular economycompliant furniture
- Action 2.4. Strengthen efforts in the context of achieving a 'clean furniture economy'

#### Industrial waste

 Measure 1. Provide guidance to businesses on the implementation of techniques and methods to reduce and prevent waste generation. This includes training of management staff

#### **ECDW**

- Action 1.1. Strengthen the implementation of good practices regarding the circularity of construction
- Action 1.5. Encourage the renovation of a building rather than its demolition
- Action 4.4. Development of a life cycle assessment tool for buildings (pp. 155-156)

Identify products that are the main sources of littering, notably in natural and marine environments, and take appropriate measures to prevent and reduce litter from such products; where Member States decide to implement this obligation through market restrictions, they should ensure that such restrictions are proportionate and non-discriminatory

#### Specific categories of plastics

- Action 1.1. Investigate the ban on the use/consumption of plastic carrier bags, e.g. in retail
- Action 2.1. Evaluate the implementation of tax incentives related to the reduction of plastic carrier bag consumption (p. 156)

Aim to halt the generation of marine litter as a contribution towards the UN Sustainable Development Goal to prevent and significantly reduce marine pollution of all kinds Promote awareness-raising events in schools and educational institutions and corresponding educational programmes for children, on the importance of reducing the consumption of SUPs to reduce marine pollution. This will enable young people to adopt sustainable behaviour and promote their contribution to the achievement of the sustainable development targets (pp. 156-157)

Develop and support information campaigns to raise awareness about waste prevention and littering

#### Food waste

- Action 4.3. Implement training programmes for employees in food supply businesses
- Action 4.7. Organise thematic workshops and establish a 'food waste reduction' award
- Action 5.2. Implement training programmes for employees in the catering and related services sector
- Measure 6. Inform and raise awareness of households and the catering sector on changing behaviour in food consumption and management

## Materials/packaging waste

 Action 1.2. Promote new everyday consumer behaviour regarding the use of packaging, at individual and collective level

#### Paper

- Measure 2. Further promote the concept of reducing paper consumption and encourage its reuse
- Measure 3. Raise awareness of all target groups, where large and unnecessary paper consumption is identified, about the possibilities/opportunities that preventing paper waste offers, both by environmental protection through resource savings and by reducing businesses' operational costs

#### Specific categories of plastics

 Measure 5. Organise awareness-raising and information campaigns targeted at the general public or specific consumer groups about SUPs

#### Horizontal measures

A general framework for raising awareness among stakeholders/public on waste prevention. Key elements of this will be (1) the organisation of awareness-raising and information campaigns

aimed at the general public or specific groups of consumers and (2) the creation of an autonomous website for the NWPP

#### **ECDW**

- Action 1.2. Integrate eco-design and eco-renovation of buildings into the curricula of specialists in professional schools and higher education schools
- Action 2.3. Integrate the principles of prevention and the reuse of ECDW in specialist curricula in professional and higher education schools (p. 157-158)

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

#### Food waste prevention

#### Food waste generation

The *UNEP Food waste index report 2021* estimates that the amount of food wasted in Greece is about 142 kg per capita per year — almost twice the European average (74 kg/capita/year) — and equates to 1.48 million tonnes of food wasted per year (1).

A 2015 study on food waste generation in Greek households showed that 30.1 % of the total food waste is avoidable and comprised mainly cooked food (24.5 %), fruit (24.9 %), vegetables (14.9 %), bread (13.6 %), dairy products (11.3 %), desserts (2.6 %) and other food (8.2 %). The unavoidable food waste consisted mainly of fruit and vegetable peelings (89.7 %), cooked food (4.8 %) and other food (55 %) (<sup>2</sup>).

#### Measures to prevent food waste

In 2014, measures to prevent food waste were proposed under the national waste prevention strategic plan. It included awareness-raising activities, 'best practice guides', a food waste website, consumer communication campaigns, roadshows, events/meetings, communication activities and the promotion of voluntary agreements and food donation (3).

In the updated NWPP for the period of 2021-2030, the following main pillars of measures to prevent food waste are included:

- improving knowledge about food waste production;
- supporting food donation for human consumption;
- promoting food waste reduction in the primary sector;
- enabling the food processing, manufacturing and trading sectors to reduce food waste;
- implementing the circular economy principles in the catering and related services sector (e.g. restaurants, hotels, cafeterias), including canteens (e.g. in schools, universities, hospitals, courts, public services) to reduce food waste;
- informing and raising awareness among households and the catering sector about changing behaviour in food consumption and management (4).

In 2018, Greece published the national circular economy strategy and the national operational action plan on circular economy 2018-2019, which included further actions for reducing food waste. There were four actions relevant to food loss and waste, specifically reducing food loss, developing methodology to measure and monitor food waste, adopting circular tax incentives, and developing programmes for informing consumers and raising awareness on food waste (5).

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjo5a6imKbzAhUg\_7s IHV49BFQQFnoECBcQAQ&url=https%3A%2F%2Fwww.ebrd.com%2Fdocuments%2Flegal-reform%2Fgreece-food-waste-sector-

guidelines.pdf%3Fblobnocache%3Dtrue&usg=AOvVaw0HWfv1EFaGs48n7JHLkxjd

<sup>(1)</sup> https://www.unep.org/resources/report/unep-food-waste-index-report-2021

<sup>(2)</sup> Abeliotis, K., et al., 2015, 'The implications of food waste generation on climate change: the case of Greece', Sustainable Production and Consumption 3, pp. 8-14 (https://doi.org/10.1016/j.spc.2015.06.006).

<sup>(3)</sup> https://circulareconomy.europa.eu/platform/sites/default/files/national\_circular\_economy\_strategy.pdf

 $<sup>\</sup>label{eq:content_ploads_downloads_2021_03_EPPDA_04-03-2021_-final-wce_994_ce_999_ce_91_ce_92_ce_95_ce_45_ce_98_ce_98_ce_95_ce_43_ce_97.p_df$ 

The new Greek circular economy action plan and roadmap (6), covering the period 2021-2025, was issued in November 2021 (7). Within the context of the circular economy action plan, food waste prevention issues are included, in line with the NWPP, such as monitoring the 30 % reduction target and the formulation, implementation and monitoring of the specific programme for food waste prevention.

According to Article 20 of Law 4819/2021 (GG 129 A) (transposing Directives 2018/851 and 2018/852 into national legislation) a food waste hierarchy is to be adopted, in which specific measures should be taken by 2030, to reduce food losses along the production and supply chain and reduce food waste by 30 % per capita compared with food waste produced in 2022 at the retail and consumer levels. (This target will be reviewed by 1 January 2024 at the latest by the Ministry of Environment and Energy.) In addition, measures encouraging the donation and redistribution of food and setting out the obligations of donors and the minimum requirements for human safety health are set, as well as provisions for food surpluses. Moreover, free redistribution of food is allowed, in the event that food products are received or seized by competent authorities for reasons unrelated to food safety, for the relief of vulnerable social groups, provided that such goods do not endanger public health (including food donation to public services, companies, municipalities, churches) and a 20% reduction of taxes is envisaged in cases of food donation (Article 21 of Law 4819/2021).

According to Article 20 of Law 4819/2021, and in order to measure food waste and food surpluses donated, a specific electronic platform will be set up and operated, where the entities obliged to do so must submit the relevant data annually, starting in 2022. This obligation refers to environmentally permitted establishments producing food waste classified in Chapter 02 of the European List of Waste, meat markets, fish markets and vegetable markets, supermarkets, catering companies, hotels with more than 100 beds, healthcare facilities, hostels (e.g. youth hostels) and nursing homes.

#### **Reuse of products**

#### Data

With regard to the Commission Implementing Decision (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L\_.2021.010.01.0001.01.ENG&toc=OJ%3AL%3A2021%3A010%3ATOC), this section will be updated by the EEA accordingly.

#### Measures to support reuse

Among the objectives, measures and actions of the new NWPP, specific priority is given to increasing reuse and reusable products by setting up 'creative material reuse centres' and repair centres (EEE, furniture, textiles), organising and undertaking information and awareness-raising events and campaigns for citizens, consumers, schools (including educational material), designing/implementing electronic platforms for reuse, and promoting eco-design in several products, such as packaging, plastic products and textiles. Moreover in the NWPP, reuse is encouraged by anticipating the expansion of extended producer responsibility schemes to new categories of products, such as textiles and furniture, while measures for promoting reuse are included in the chapters for the specific waste categories such as:

- food donation:
- reuse of books in education;
- gradually introducing the obligation to use reusable utensils, cutlery and cups at public events;
- encouraging consumers to turn to reusable plastic products and reusable carrier bags;
- encouraging research on the development of alternative reusable utensils and other SUP products;
- promoting voluntary agreements for the use of reusable products in the hotel and restaurant sector;

<sup>(6)</sup> https://ypen.gov.gr/wp-content/uploads/2021/12/SXEDIO-DRASHS-KO-FINAL\_.pdf

<sup>(7)</sup> https://ypen.gov.gr/perivallon/kykliki-oikonomia/16052-2/

- adopting tax incentives for the repair and reuse of EEE;
- promoting used EEE in public/private procurement;
- promoting research for the reuse of construction materials.

The Greek national operational action plan on circular economy (2018-2019) included actions for reuse such as developing ecological design criteria, creating urban spaces as 'creative reuse centres' through 'green points/centres for recycling, training and sorting at source (KAEDISP)', managing and developing the potential for product reuse and creating a forum for the development of a circular economy.

Within the context of the new circular economy action plan and roadmap (2021-2025) actions for reuse are included, such as:

- providing financial incentives for the development of activities in the sharing economy (mainly digital platforms);
- providing financial incentives such as reduced VAT and tax exemptions, to boost (1) repair services and the purchase of second-hand products and (2) crafts and handicrafts that adopt circular economy practices, such as the use of recyclable or recycled materials, textiles and used products;
- legislative adoption of citizen reward systems in the case of reuse and/or recycling in special infrastructures (green spots, recycling corners, etc.) with indirect benefits such as priority of service, and discounts on municipal services such as kindergartens, municipal transport;
- developing a national policy on the circularity of electronic products in view of the relevant EU circular electronics initiative in line with the new EU circular economy action plan.

Moreover, within the provisions of Law 4819/2021, measures for promoting reuse are adopted. More specifically:

- According to Article 17, manufacturers or importers of furniture and EEE are obliged to
  inform the seller in writing about the availability of necessary spare parts and their availability
  period. In addition, manufacturers of products containing software are obliged to inform the
  seller in writing about the period for which updates will be available.
- According to Article 18, solid waste management bodies in collaboration with municipalities may set up 'creative material reuse centres', where used items such as EEE, toys, furniture, bicycles, books and textiles can be stored and repaired to be reused.
- According to Article 19, manufacturers, importers and distributors of textiles, EEE, daily hygiene products, and footwear that is not suitable for sale, in particular due to errors or defects or deficiencies in the packaging, labelling or weight, or withdrawal from the market or proximity to the expiry date, and in compliance with the waste hierarchy, must examine the possibility of donating these products before treating them as waste.

In addition, reuse is promoted in general within the extended producer responsibility schemes (i.e. existing schemes for packaging, WEEE), whereas according to Article 10 of Law 4819/2021, it is envisaged that new extended producer responsibility schemes will be established for textiles, agricultural plastic products, such as greenhouse plastics and irrigation pipes, medicine intended for home consumption, mattresses, furniture, toys and sports equipment, light personal electric vehicles and electric bicycles.

The fee (EUR 0.07, excluding VAT) paid by consumers for every plastic carrier bag supplied at the point of sale of goods or products, regardless of wall thickness, excluding biodegradable plastic carrier bags (Article 79 of Law 4819/2021) has contributed to reductions in the consumption of plastic carrier bags and a parallel increase in uptake of reusable bags.

#### **Best practice examples**

#### Food waste prevention

Greece launched a national 'Alliance for the Reduction of Food Waste' in 2020, an initiative of the Boroume organisation and AB Vassilopoulos. Under the auspices of the Ministry of Environment and Energy, the Alliance brings together key stakeholders, such as professional and industry associations, companies from across the food supply chain, civil society organisations, and the academic and research community (8). Around 35 stakeholders signed this voluntary cooperation agreement. In March 2021, the American College of Greece (ACG) presented the first report, which included a total of 57 actions, best practices and initiatives to prevent and reduce food waste (9).

#### Reuse of products

In Athens, there are second-hand stores that sell products that can be reused for several years. Moreover, the private sector (including banks, airlines, food industries, supermarkets) and non-governmental organisations (NGOs) undertake initiatives and implement actions aimed at reusing products. Through 'Social Grocery' stores, a variety of products, such as free groceries, food, water, soft drinks, detergents, frozen products, clothing, household items and toys, are donated to families facing serious financial problems.

Various NGOs collect (mainly from donations) medicines, even if they have been used, as long as the expiry dates have a time horizon of more than 1 year and donate them to people in need or who do not have access to medical care. Such charitable actions are considered quite successful. In addition to the environmental benefit, they contribute to supporting vulnerable social groups.

In 2016, the first two Repair Cafés (Patras and Lefkada), affiliated to the global reuse chain Repaircafe.org, were set up, where special volunteers with a wide range of repair skills repair products, such as clothes, furniture, electrical appliances and bicycles.

Within the framework of the LIFE REWEEE project aimed at preventing WEEE, two sorting centres — one in Attica and one in Central Macedonia — have been established for the collection, storage and sorting of used EEE and, depending on its condition, its repair or preparation for either reuse or further treatment. Technicians inspect devices that can be repaired, clean them of any data (in the case of laptops and computers) and repair them to either sell at affordable prices or donate to NGOs and vulnerable groups.

In addition, a platform has been created (rewee.hua.gr), where anyone interested can make a functional or repairable device available, stating whether they are interested in exchanging it or donating it.

More details are included in Annex I: Existing waste prevention actions of the NWPP (p. 112)

<sup>(8)</sup> https://www.boroume.gr/en/news/news/alliance-for-the-reduction-of-food-waste/

<sup>(9)</sup> https://www.acg.edu/news-events/news/national-alliance-for-the-reduction-of-food-waste-acg-featured-in-the-first-report-on-food-waste-prevention-and-reduction-best-practices/

## Links to the circular economy

Topic	Addressed in the programme	Comments
Eco-design	Yes	Promoting eco-design of
		packaging (p. 45)
Repair, refurbishment and	Yes	Promoting centres
remanufacture		that repair of EEE
		throughout the country
		(p. 66)
Recycling	Yes	
Economic incentives and finance	Yes	Financial instruments and other measures to provide incentives to apply the waste hierarchy (p. 55)
Circular business models	Yes	New business models for producing circular economy-compliant furniture (p. 146)
Eco-innovation	No	
Governance, skills and knowledge	Yes	Improving knowledge about food waste production (p. 27)