Overview of national waste prevention programmes in Europe



North Macedonia 😹

2021

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European Environment Agency

General information

Name of the country/region	North Macedonia
Coverage of the waste prevention programme (national/regional)	National
Type of programme (stand alone or integrated into waste management plan)	
Title of programme and link to programme	The waste prevention plan for North Macedonia 2018-2024 is available as draft version (link not available)
Duration of programme	2018-2024
Language	Macedonian
Development process of the programme/revision	A draft version of the programme is currently available. Launch date unknown
Budget envisaged for implementation of the project	Not available

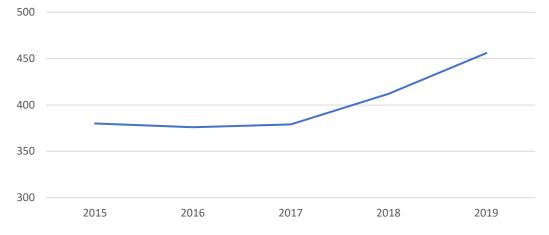
Waste generation

The following figure illustrates the progress towards waste prevention and decoupling of waste generation from economic growth in North Macedonia:

Municipal solid waste

• Figure 1 shows the generation of municipal solid waste (MSW) in North Macedonia. The amount generated has grown since 2015, both in absolute terms (tonnes per year) and per capita. This indicates that the generation of municipal waste parallels economic growth and has not yet been decoupled from it. The impact of the waste prevention programme, drafted for 2018-2024 ,is not yet visible in terms of decreasing amounts of waste generated. Nevertheless, waste generation per capita remains below the EU average of 502 kg per capita per year.

Figure 1: Municipal waste generation in North Macedonia (kg per capita), 2015-2019



Source: State Statistical Office, North Macedonia.

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 of the draft waste prevention programme are: preventing unnecessary and inefficient consumption of materials designing out waste recovering residual resources from waste streams reusing of end-of-life goods
2.	Sectors covered	 The programme covers: agriculture construction and infrastructure manufacturing sale, retail and transport households private service activities, hospitality public services
3.	Priority waste types	 Food/organic Paper Packaging Waste electrical and electronic equipment/batteries
4.	Target groups	Not available

Targets, indicators and monitoring

	Not available
Quantitative targets	Not available
Monitoring of programme	Generation of total waste and selected waste fractions is monitored by the State Statistical Office (total, hazardous, packaging, organic, etc.)
Evaluation of the programme	Not available
	Monitoring of programme

Prevention measures

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amework Directive	

Planned prevention measures

Table 1 is based on information from the draft waste prevention programme and individual ongoing or recently finished development projects. The measures listed there have been structured in accordance with Article 9 of the Waste Framework Directive, which obliges Member States to take action on a variety of aspects with regard to waste prevention.

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

Promote and support sustainable consumption models Encourage the design, manufacture and use of products that are resource-efficient, durable (including in terms of life span and absence of planned obsolescence), repairable, reusable and upgradeable	 The draft waste prevention programme includes the following actions: Undertaking a waste audit across the entire business, innovating to reduce wastage and setting targets for waste reduction. Wherever possible, waste should be 'designed out' of business practices Developing and implementing purchasing guidelines that place an emphasis on waste prevention and circular economy principles Where appropriate, considering the adoption of new business models, such as leasing and sharing of equipment and vehicles to reduce wastage The government should favour procurement of reusable goods rather than single-use items and bulk staples Promote 'bags for life', manufactured from recycled textiles, as replacements for single-use plastic shopping bags
Target products containing critical raw materials to prevent those materials becoming waste	Promote repair services to extend the life of (electrical) equipment and share less frequently used equipment with other citizens or businesses
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	Reuse is supported by 'Let's do it Macedonia' projects, which follow zero waste principles (Recupero, 2019)
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	The programmes under the law on electrical and electronic equipment and waste from electrical and electronic equipment introduce workshops for including the informal sector in new green business

Reduce waste generation in processes related to industrial production, extraction of minerals, manufacturing, construction and demolition, taking into account best available techniques	Infrastructure construction using industrial secondary raw materials has been demonstrated in Skopje with new technologies (Anon., 2020) The new national waste prevention plan, which is under preparation, will cover waste reduction in the industrial production, extraction of minerals, manufacturing, and construction and demolition sectors
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	NGO-driven experiential learning programme about food waste for school students. The aim is to empower young people to understand the implications of food waste in order to lead the next generation in the changes required to address food insecurity and food waste (Ajde Makedonija, 2017)
Encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and reprocessing into non-food products	Web platforms have been created that connect businesses with non-governmental organisations (NGOs), by redistributing surplus food within 'Let's do it Macedonia'. The surplus food distribution system, 'Site Siti' aimed to save 60 tonnes of food and provide 200 000 meals in 2019 (Ajde Makedonija, 2018)
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	The UN Economic Commission for Europe recommends in its Environmental Performance Review (UNECE, 2019) that North Macedonia strengthens its efforts to report regularly on the control of transboundary movements of hazardous wastes and their disposal
Reduce the generation of waste, in particular waste that is not suitable for preparing for reuse or recycling	Development of bio-energy clusters and sustainable solutions for efficient use of agricultural waste streams (Interreg IPA-CBC, 2018a,b)
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	North Macedonia is a landlocked country and in absolute terms not a main source of plastic waste in the sea. However, the International Union for Conservation of Nature global marine and polar programme reports that, per capita, North Macedonia is a significant contributor to littering of the Mediterranean, contributing an estimated 3 kg per year per person (Spasić, 2020)

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	Various NGOs are involved in clean-up activities (e.g. Go Green, Let's do it Macedonia). Municipalities, e.g. Karpoš (Anon., 2019), have organised widespread eco-action events to clean up the environment
Develop and support information campaigns to raise awareness about waste prevention and littering	In 2020, the NGO 'Zero Waste' started an educational campaign in Karpoš municipality directed towards primary schools. The project was titled 'Eco Heroes of the Planet' and includes educational workshops on 'Primary waste selection and environmental protection'
	Go Green, an association for sustainable development and environmental protection, organised training for municipalities and volunteers, waste mapping and waste prevention campaigns (Zelen, 2019)

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

Food waste prevention

Food waste generation

Precise data on food waste in North Macedonia is currently not available. The association for a clean environment 'Let's do it Macedonia' has estimated that food waste makes up more than 10 % of the solid waste generated in the country, i.e. 100 000 tonnes of edible food, mostly coming from agricultural surpluses (Let's do it Macedonia, 2018). According to a 2020 survey of households, most households throw away less than 2 % of the food they purchase. The most wasted food groups are milk and dairy products and fruit and vegetables (Bogevska et al., 2020).

Measures to prevent food waste

'Let's do it Macedonia' has created a web platform connecting businesses with NGOs, to redistribute surplus food. The organisation has also promoted and supported the establishment of the first food surplus donation law in North Macedonia (Let's do it Macedonia, 2018).

Reuse of products

Data

Data on reuse is currently not available for North Macedonia.

The strategy for waste management for the period 2008-2020 set the overall goals and basic principles for reducing, reusing and recycling waste. However, a national policy for reducing, recycling and reusing waste has not yet been prepared (UNECE, 2019).

Best practice examples

Eliminating the use of single use plastics

The government of North Macedonia and the state institutions announced that as of 2020, they will no longer procure plastic products and single-use packaging. According to the Ministry of Environment, this means the ministries and other institutions replacing public procurement of items in plastic bottles with items in glass ones, that plastic cups, straws and other single-use plastic goods will no longer be procured, and staples, e.g. sugar, will be procured in bulk. A draft law on managing packaging and waste also envisages the elimination of nylon shopping bags as of 2021 (Beta SEE, 2019).

Links to the circular economy

Торіс	Addressed in the programm	e Comments
Eco-design	Manufacturers innovating to reduce the amount of packaging and using returnable/reusable packaging where appropriate	Relates to the priority waste stream packaging
Repair, refurbishment and remanufacture	No	
Recycling	No	
Economic incentives and finance	No	
Circular business models	No	
Eco-innovation	Creating infrastructure construction materials from secondary raw materials from the industry	EU-funded project 'Cinderela'
Governance, skills and knowledge	Promotion of paperless offices in government, municipalities, educational establishments, etc. to lead by example	Relates to the priority waste stream paper