# Waste prevention country profile



December 2024









# **Draft country profile: Poland**

# General information

| Name of the country/ region   | Poland  |
|---|---|
| Geographical coverage of the<br>waste prevention programme<br>(national/ regional)                                      | National  |
| Type of programme (stand<br>alone or integrated into waste<br>management plan or into the<br>circular economy strategy) | Integrated  |
| Title of programme and link to programme  | Krajowy program zapobiegania powstawaniu odpadów (KPZPO) (Załącznik nr 1do Krajowego planu gospodarki odpadami 2028 ( <u>KPGO 2028</u> )) |
|   | National waste prevention plan (Attachment 1 to the national waste management plan ( <u>KPGO 2028</u> ))                                  |
| Duration of programme   | 2023 - 2028   |
| Language  | Polish  |
| Contact person in the country/region  | Dr Beata Klopotek, beata.klopotek@klimat.gov.pl<br>Department of Waste Management, Ministry of Climate and<br>Environment                 |
| Development process of the programme/ revision  | The recent national waste plan was published 12 <sup>th</sup> July 2023.  |
| Foreseen budget for<br>implementation of the<br>programme   | No specific budget for the implementation of the programme is included in the programme.  |

#### WASTE GENERATION

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

#### Municipal Solid Waste (MSW)

The generation of municipal waste per capita (see Figure 1) increased rapidly between 2004 and 2005 and after that it levelled off until 2012. Poland implemented its first WPP in 2011and in 2014 the generation dropped by 15% to 272 kg per capita. This decrease is, however, most likely due to methodological changes in data reporting rather than changes in the waste generation due to the implementation of WPP. Break in series was reported for 2013 and 2014. Since 2014 MSW generation started to increase and in 2022 the municipal waste generation reached 364 kg per capita.

Overall, the Polish municipal waste generation in 2022 is below the European average of 513 kg per capita in the same year.



Figure 1: Municipal waste generation in Poland (kg per capita), 2004-2022

Source: Eurostat [ENV\_WASMUN]. Note: break in series 2013 and 2014

#### Total Waste

Waste generation excluding major mineral waste was increasing until 2018. In 2020 the generation of waste dropped, most likely due to the Covid-19 outbreak, but started to increase slightly again in 2022. The total waste generation trend is mainly driven by a significant decrease in generation of combustion waste which is countered by increased generation of mixed and recyclable waste. Poland's GDP increased since 2010 with a drop in 2020, most likely due to the Covid-19 outbreak. GDP continued to increase since 2021. As population in Poland stagnated with only a slight decline in 2021, waste generation doesn't seem to be linked to population. A decoupling of waste generation from economic growth can be observed since 2016.

Figure 2: Total waste generation (excluding major mineral waste), GDP, and population in Poland, 2010-2022, (2010=100).



Source: Author's compilation based on data extracted from Eurostat [ENV\_WASGEN, NAMA\_10\_PC, DEMO\_GIND].

## WASTE PREVENTION PROGRAMME

# **Objectives and priorities**

| 1. | Waste prevention objectives<br>of the Programme<br>- quantitative objectives<br>(waste reduction)<br>- qualitative objectives<br>(reduction of hazardous<br>substances/ environmental<br>impacts) | <ul> <li>Objectives of the programme are listed below (table 74 of the programme):</li> <li>Decoupling economic growth from total waste generated.</li> <li>Reducing the mass of mining waste generated in relation to the volume of mineral extraction.</li> <li>Reducing the mass of waste generated in energy sector in relation to the amount of energy produced.</li> <li>Reducing environmental impacts of waste by increasing the number of eco-labelled products manufactured in Poland.</li> <li>Maintaining economic growth and a low rate of municipal waste generation.</li> <li>Reducing the weight of packaging waste in relation to the weight of products.</li> <li>The development of re-use.</li> <li>Increasing the mass of equipment recovered for re-use (electrical and electronic equipment).</li> <li>Increasing the re-use of parts from end-of-life vehicles</li> <li>Development of separate municipal waste collection facilities (PSZOK) for acceptance of products for re-use and repair points.</li> <li>In addition, programme includes a separate food waste prevention programme, where 5 main objectives are listed:</li> <li>Reducing food waste in catering and restaurants by implementing rational methods and portion control.</li> <li>Increasing public awareness of food waste prevention and food waste management.</li> <li>Ensuring effective transfer of food with an upcoming expiration date for use by those in need.</li> <li>Supporting activities related to the optimization of production processes aimed at reducing food losses</li> </ul> |
|----|---|---|
|    |   | • Supporting activities related to the optimization of production processes aimed at reducing food losses and food waste in the processing and manufacturing of food products.  |
| 2. | Sectors covered   | <ul> <li>mining and mineral sector</li> <li>energy sector</li> <li>other industrial sectors</li> <li>households</li> <li>public services</li> <li>private service activities</li> </ul>   |
| 3. | Priority waste types  | In the programme there are no priority waste mentioned,<br>other than food waste, for which there is a separate   |

|                  | <ul> <li>programme. Other waste types mentioned in the objectives include:</li> <li>mining waste</li> <li>waste from energy sector</li> <li>municipal waste</li> <li>packaging waste</li> <li>WEEE</li> <li>ELVs</li> </ul> |
|------------------|---|
| 4. Target groups | The new programme addresses actions towards general public, farmers, public institutes, households, industry.   |

# Targets, indicators and monitoring

| 1. | Indicators used to monitor progress   | The new programme contains indicators linked to the<br>objectives of the programme:<br>• total waste generated<br>• waste generated in relation to GDP<br>• ratio of waste generated during processing of non-ferrous<br>metal ores and copper ore mining<br>• ratio of mining waste generated during rinsing and cleaning<br>of minerals and hard coal mining<br>• ratio of waste generated in the energy sector to generated<br>electricity<br>• number of eco-label certificates issued in Poland<br>• municipal waste generated per capita, per GDP<br>• packaging waste generation in relation to GDP<br>• mass of accepted products for re-use and repair at separate<br>municipal waste collection facilities (PSZOK)<br>• share of WEEE prepared for re-use in relation to the mass<br>of collected WEEE<br>• number of separate municipal waste collection facilities<br>(PSZOK) with repair and re-use points<br>• mass of re-used parts from ELVs<br>In addition, indicators to monitor food waste prevention are<br>mentioned:<br>• mass of food from retail chains and food producers donated<br>to Food Banks<br>• reducing the weight of generated food waste in reference to<br>year 2020 |
|----|---|---|
| 2. | Quantitative targets  | Trend of indicators is followed in comparison to their reference values for years 2018-2020.  |
| 3. | Monitoring mechanism of the programme   | In the programme indicators to monitor the measures of<br>waste prevention are specified and the source of the<br>information is provided.  |
| 4. | Evaluation of the programme   | Poland has introduced a new waste prevention programme<br>that has not yet been evaluated. The programme does not<br>specify an evaluation approach; however, indicators outlined<br>in the waste management plan are scheduled to be calculated<br>every three years as part of the implementation reports for the<br>waste management plan (Chapter 8).   |
| 5. | Evaluation of policy<br>effectiveness in the<br>programme (policy<br>measures evaluated, waste<br>streams addressed, brief<br>methodology description<br>and, availability of an<br>evaluation report with a<br>link) | Economic instruments and other measures encouraging the<br>application of the waste hierarchy resulting from Directive<br>2018/851 are included in Annex No. 4a to the Waste Act.<br>The evaluation of the measures is carried out in chapter 3 of<br>the programme (Table 75).<br>Evaluation of measures used for waste prevention as<br>described in the Appendix 5 of Waste Act was carried out in<br>chapter 4 of the programme (Table 76).   |

### **Prevention measures**

| Implemented prevention          | Already implemented measures have been listed in chapter 4 (Table |
|---------------------------------|---|
| measures according to Article 9 | 76) of the programme.   |

The waste prevention programme includes 19 measures that are proposed to avoid waste generation (Chapter 5, Table 77). The measures are listed in Table 1.

| Table 1: Specific waste prevention measures s   | tructured according to Art 9 WFD  |
|---|---|
| Promote and support sustainable consumption models  | <ul> <li>Campaigns promoting the waste hierarchy, including sustainable consumption lifestyles.</li> <li>Collecting and sharing educational materials on waste prevention and proper waste management for schools.</li> <li>Introducing waste prevention and proper waste management into the core curriculum in vocational schools.</li> <li>Information and educational activities aimed at consumers on the topic of negative effects of over-buying.</li> <li>Supporting research and development of technologies to enable the recycling of waste containing significant amounts of critical raw materials that have not yet been recycled. This is particularly relevant for materials such as rare earth metals, gallium, and indium, which are used in renewable energy production and innovative technologies applications. Their recycling requires substantial technical and economic resources.</li> <li>Promoting and supporting research and development technologies enabling recycling of waste containing significant amounts of critical raw materials that have not been subject to such recycling so far.</li> <li>Coordination and support for the implementation of scientific and research work in the field of waste management.</li> </ul> |
| Encourage the design, manufacturing and<br>use of products that are resource-efficient,<br>durable (including in terms of lifespan and<br>the absence of planned obsolescence),<br>reparable, re-usable and upgradable. | <ul> <li>Initiating the exchange of information and cooperation with industry associations in terms of taking possible additional actions by enterprises or industry sectors to set up own waste prevention goals or improvement of unsustainable products or packaging.</li> <li>Promoting eco-design, including extending the life cycle of products.</li> </ul>  |
| Target products containing critical raw<br>materials to prevent that those materials<br>become waste.   | • Promoting eco-design, including extending the life cycle of products, in particular the production of which requires critical raw materials and promoting the repair of these products, as well as replacing critical raw materials with more easily available materials.   |

Table 1: Specific waste prevention measures structured according to Art 9 WFD

|  | • | Analysis of possibilities to introduce obligation<br>and definition of rules to provide consumers with<br>information on the properties and environmental<br>features of products, including the presence of<br>critical raw materials that generate waste.   |
|--|---|---|
| Encourage the re-use of products and the<br>setting up of systems promoting repair and<br>re-use activities, including in particular for<br>electrical and electronic equipment, textiles<br>and furniture, as well as packaging and<br>construction materials and products.   | • | Establishing a cooperation to determine the<br>possibility of expanding statistical research of<br>public statistics to include data on exchange,<br>sales, quantities and types of products used,<br>including: furniture, textiles, electrical and<br>electronic equipment, construction materials and<br>products.<br>Including in the priorities of the National Fund<br>for Environmental Protection and Water<br>Management in the financial perspective for<br>2022–2028, the possibility of supporting<br>enterprises for activities related to creating new<br>systems for waste prevention activities.<br>Information and educational activities aimed at<br>consumers on the topic of promoting servicing<br>and repair of products. |
| Encourage, as appropriate and without<br>prejudice to intellectual property rights, the<br>availability of spare parts, instruction<br>manuals, technical information, or other<br>instruments, equipment or software<br>enabling the repair and re-use of products<br>without compromising their quality and<br>safety. | • | Promoting good practices in the field of waste<br>prevention by indicating specific activities for<br>entrepreneurs, e.g. in the form of catalogues of<br>eco-solutions.<br>Coordination and support for the implementation<br>research and demonstration projects in the field<br>of waste prevention technologies, including an<br>information campaign on applying for EU funds<br>for research and demonstration projects,<br>dissemination of research results.  |
| Reduce waste generation in processes<br>related to industrial production, extraction<br>of minerals, manufacturing, construction<br>and demolition, taking into account best<br>available techniques.  | • | Including in the priorities of the National Fund<br>for Environmental Protection and Water<br>Management in the financial perspective for<br>2022–2028, the possibility of supporting<br>enterprises for activities related to changing<br>technologies to low-waste, innovative<br>technologies (analogous to energy efficiency<br>programs).  |

| Reduce the generation of food waste in<br>primary production, in processing and<br>manufacturing, in retail and other<br>distribution of food, in restaurants and food<br>services as well as in households as a<br>contribution to the United Nations<br>Sustainable Development Goal to reduce by<br>50 % per capita global food waste at the<br>retail and consumer levels and to reduce<br>food losses along production and supply<br>chains by 2030.  | • | Educational campaigns on food waste<br>prevention for residents, in gastronomy and<br>other sectors.<br>Encouragement of inventory control in order to<br>use food before its expiration date.<br>Implementing in households clear markings with<br>the shelf life.<br>In gastronomy (including workplaces, schools,<br>hospitals): introducing different portion sizes,<br>monitoring of food waste to improve purchasing<br>structure, promoting local and seasonal products,<br>early selection of menu for groups. |
|--|---|--|
| Encourage food donation and other<br>redistribution for human consumption,<br>prioritising human use over animal feed and<br>the reprocessing into non-food products.  | • | Taking food that has not expired to various types<br>of food courts, community fridges and other<br>points for use by those in need.   |
| Promote the reduction of the content of<br>hazardous substances in materials and<br>products, without prejudice to harmonised<br>legal requirements concerning those<br>materials and products laid down at Union<br>level, and ensure that any supplier of an<br>article as defined in point 33 of Article 3 of<br>Regulation (EC) No. 1907/2006 of the<br>European Parliament and of the Council<br>provides the information pursuant to article<br>33(1) of that regulation to the European<br>Chemicals Agency as from 5 January 2021. |   |  |
| Reduce the generation of waste, in<br>particular waste that is not suitable for<br>preparing for re-use or recycling.  | • | Promoting initiatives and contests for "low-<br>waste" municipalities.<br>Analysis of possibilities to introduce obligation<br>and definition of rules to provide consumers<br>with information on the properties and<br>environmental features of products.   |
| Identify products that are the main sources<br>of littering, notably in natural and marine<br>environments, and take appropriate<br>measures to prevent and reduce litter from<br>such products, where Member States decide<br>to implement this obligation through market<br>restrictions, they shall ensure that such<br>restrictions are proportionate and non-<br>discriminatory.  | • | Promoting and supporting activities aimed at<br>replacing materials used in agricultural activities<br>with environmentally friendly materials<br>eliminating problematic waste, e.g., agricultural<br>plastic films.  |
| Aim to halt the generation of marine litter<br>as a contribution towards the United<br>Nations Sustainable Development Goal to<br>prevent and significantly reduce marine<br>pollution of all kinds.   | • | Analysis of the effectiveness of actions taken to<br>prevent littering in terms of fees for single-use<br>products.  |
| Develop and support information<br>campaigns to raise awareness about waste<br>prevention and littering.   | • | Conducting a nationwide information and<br>educational campaign on waste prevention and<br>counteracting littering.  |

| • | Conducting an annual survey on public                |
|---|--|
|   | awareness of waste prevention, in particular         |
|   | regarding the type and amount of product re-use.     |
| • | Educational campaigns in the field of waste          |
|   | prevention for public institutions, resulting in the |
|   | introduction of specific waste prevention            |
|   | activities (including food waste prevention) and     |
|   | the inclusion of criteria related to environmental   |
|   | protection waste prevention and food waste           |
|   | prevention in public procurement                     |

### FOOD WASTE PREVENTION

#### Food waste generation

Recently, waste producers who are required to maintain waste records have been obligated to include information on the weight and types of food waste generated in their reports on waste generation and waste management. At the same time, in order to estimate the amount of food waste generated, the Institute of Environmental Protection – National Research Institute (IOS-PIB) in Warsaw is undertaking the project "Poland's reporting to the European Commission on measuring food waste levels in a four-year cycle: 2020–2023". This initiative involves developing a methodology for gathering data on food waste generated at each stage of the supply chain. In Table 2 the estimated weight of food waste for the year 2020 is shown (data reported to Eurostat).

#### Table 2 Amount of food waste in 2020

| Stage of the food supply chain     | Total food waste [Mg] |
|------------------------------------|-----------------------|
| Production                         | 673 160               |
| Processing and manufacturing       | 787 017               |
| Retail and other food distribution | 511 905               |
| Restaurants and food services      | 250 756               |
| Households                         | 2 275 921             |
| SUM                                | 4 498 759             |

#### Measures to prevent food waste

In 2019 a law to prevent food waste was passed in Poland (Journal of Laws of 2020, item 1645). In the law rules for handling food are outlined and responsibilities for food sellers are set. The main objective is to minimize waste and negative effects on society, environment, and the economy related to food waste.

Main measures mentioned in the food waste prevention programme are listed here in Table 1. In addition to the main measures, there are numerous initiatives in Poland led by diverse entities and organizations which aim to decrease food waste generation.

- System MOST, project of Federation of Polish Food Banks and Warsaw University of Life Sciences, aimed to facilitate cooperation between companies and organizations dealing with food redistribution. The main outcome of the project is the donation of food to Food Banks. The emphasis is placed on products with a short shelf life and to guarantee food safety and quality.
- Applications Too Good To Go and System Food Cloud aim at making surplus food available to consumers and charities.
- PrO4Bake, an EIT project, aims to provide tools that could reduce food losses and waste in bakeries.

- Numerous awareness raising and education campaigns, e.g., "Eat without remorse", which aimed at building habits of food waste prevention by meal planning, or "Let's save lonely bananas", which drew attention to the problem of single, detached fruits from bunches that cannot find buyers.
- Campaign "I don't waste, I pack" promotes the attitude of taking home the uneaten part of the meal, which is an alternative to throwing away leftovers.
- Community fridges, citizens' initiative, aims at food sharing everyone can bring food, but also everyone (regardless of their social position) can benefit from it.
- Community shops, organized by non-governmental organizations, where food at risk of being wasted that reaches stores is distributed free of charge to people in need.

### **RE-USE OF PRODUCTS**

In 2024 EEA published re-use dataset (Re-use flows according to the implementing decision (EU) 2021/19 (europa.eu)).<sup>1</sup>

Based on the data collected Poland reported re-use of the following in 2021:

- 4.8 tonnes of electrical and electronic devices;
- 34.9 tonnes of furniture.

The method used to measure re-use could not estimate the weight of re-used products due to the lack of precise information on product subcategories reported by respondents in the textiles and building materials categories. It should be noted that these data have been reported for the first time. As the reporting process matures, it is expected that this data will strengthen but for now caution is advised in drawing insights from the dataset. More information about the interpretation and limitations of the data set are available.<sup>2</sup>

Initiatives to support re-use based on the information provided in Annex A<sup>1</sup>:

- logistic measures: the statutory obligation of municipalities to ensure cleanliness in their areas, in particular by establishing and maintaining repair and re-use points for products or parts of products that are not waste;
- economic and fiscal measures: funding of waste prevention activities, especially re-use, from domestic environmental protection and water management funds;
- educational measures: carrying out information and educational activities on waste prevention;
- other measures: the Ministry of Climate and Environment has commissioned and published on its portal Recommendations for building a network for repair and re-use.

 $<sup>^{1}\</sup> https://www.eea.europa.eu/en/datahub/datahubitem-view/0686c969-093c-450a-ac59-847a53d83ee6$ 

<sup>&</sup>lt;sup>2</sup> https://sdi.eea.europa.eu/catalogue/srv/api/records/99101ccf-00a6-40fc-9129-

<sup>122</sup>e836d0db5/attachments/Reuse%20metadata%20annex%20Version%201.pdf

### **Best practice examples**

Food waste:

The Federation of Polish Food Banks is a non-profit organization founded by different Food Banks in Poland. There are 31 Food Banks operating across the country<sup>3</sup>. In 2023, Food Banks supported approximately 1.5 million people in need in Poland, providing a total of over 32 500 tons of food for social purposes.

Under the National Recovery and Resilience Plan, the Ministry of Agriculture and Rural Development has outlined investments to diversify and shorten the supply chain for agricultural and food products while enhancing the resilience of supply chain actors. This includes support for organizations redistributing food for social purposes, as well as assistance for the storage and marketing of agricultural, fisheries, aquaculture products, and agri-food commodities.

<sup>&</sup>lt;sup>3</sup> https://bankizywnosci.pl/en/o-bankach-zywnosci-2/informacje-ogolne/

### Links to circular economy

Waste prevention is an integral part of the comprehensive transformation towards a circular economy. It reduces the input of natural resources into the economy as well as the necessary efforts to collect and recycle waste.

Approaches for improving circularity are often highly interlinked with successful waste prevention. The following table shows which circular strategies are explicitly integrated into the Polish waste prevention programme.

| Торіс                            | Addressed in the programme | Comments |
|----------------------------------|----------------------------|----------|
| Eco-design                       | Х                          |          |
| Repair, refurbishment and        | Х                          |          |
| remanufacture                    |                            |          |
| Recycling                        | Х                          |          |
| Economic incentives and finance  | Х                          |          |
| Circular business models         | Х                          |          |
| Eco-innovation                   |                            |          |
| Governance, skills and knowledge | Х                          |          |