Country profile

# Overview of national waste prevention programmes in Europe

Photo: © Mario Cvitkovic from Pixabay

# Italy

2021

European Environment Agency

## General information

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| Name of the country/region | Italy |
| Coverage of the waste prevention programme (national/regional) | National |
| Type of programme (stand alone or integrated into waste management plan) | Separate programme |
| Title of programme and link to programme | Programma nazionale di prevenzione dei rifiuti (National programme for waste prevention) https://www.mite.gov.it/sites/default/files/archivio/normativa/dm_07_10_2013_programma.pdf |
| Duration of programme | 2013-2020 |
| Language | Italian |
| Development process of the programme/revision | |
| Budget envisaged for implementation of the project | |

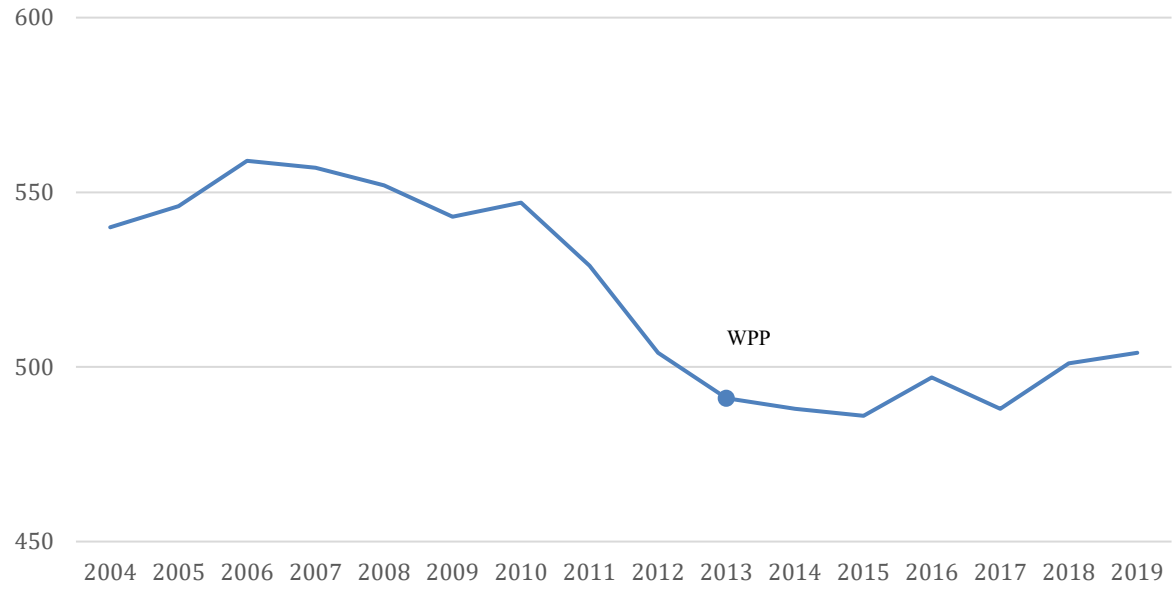
## Waste generation

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

*Municipal solid waste*

- The generation of municipal solid waste (MSW) per capita decreased from 540 kg in 2004 to 504 kg in 2019 (see Figure 1).
- The lowest level of waste generation was reached in 2015 (486 kg per capita), with a slightly increasing trend thereafter.
- The steep decrease between 2010 and 2013 is probably influenced by the global financial crisis that developed shortly before this period.
- Overall, Italian MSW generation of 504 kg per capita (2019) is slightly above the European average of 502 kg per capita per year.
- The first waste prevention programme (WPP) in Italy came into force in 2013, and MSW generation dropped in the following year but increased in the years that followed. This trend might be influenced by many factors such as population or household expenditure.

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

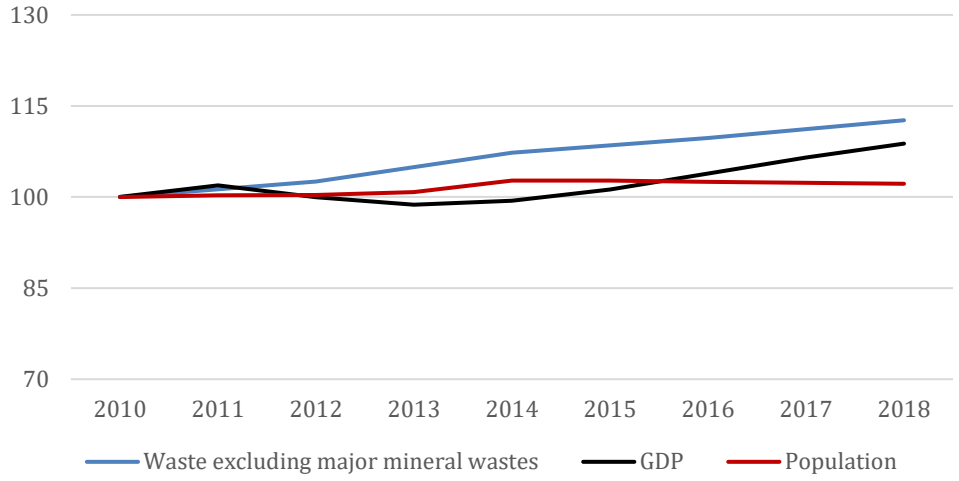



Source: Eurostat Circular Economy Monitoring Framework.

*Total waste*

- Total waste generation in Italy followed an increasing trend between 2010 and 2018 (see Figure 2).
- A different trend can be observed for Italy's economic growth in terms of GDP, which decreased between 2011 and 2013 but grew rapidly in the years thereafter. In fact, since 2013 Italy's GDP has grown steadily. This increase has been followed consistently by a slight increase in waste generation.
- Although a longer time series is needed to confirm any conclusions on decoupling, Italy 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.

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




Source: Eurostat.

## Waste prevention programme

*Objectives and priorities*

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| 1. | Waste prevention objectives of the programme: quantitative objectives (waste reduction) and qualitative objectives (reduction of hazardous substances/environmental impacts) | The programme sets objectives aimed at decoupling economic growth from the environmental impacts generated by waste (p. 7) |
| 2. | Sectors covered | • Agriculture<br>• Construction and infrastructure manufacturing<br>• Sale, retail, transport<br>• Households<br>• Private service activities/hospitality<br>• Public services |
| 3. | Priority waste types | • Food/organic<br>• Construction and demolition waste<br>• Hazardous waste;<br>• Paper<br>• Packaging<br>• Waste electrical and electronic equipment/batteries |
| 4. | Target groups | The target group for each measure is specified (pp. 19-28). Target groups include industry, the public sector, consumers, non-governmental organisations, the catering sector, commerce, the private sector, and the construction and demolition sector |

*Targets, indicators and monitoring*

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| 1. | Indicators proposed | One indicator or more is specified for each measure, which are considered for different waste types.<br><br>Biodegradable waste<br>● Number of decrees or guidelines related to food industry by-products (pp. 19-20)<br>● Number of agreements signed among communities, government bodies in charge of waste management, large-scale distribution companies, voluntary organisations and charities for the redistribution of excess food products generated in the distribution phase of the supply chain; guidelines created (yes/no) and quantity of redistributed excess food products (pp. 20-21)<br>● Number of 'ethical procurement groups' created; these are groups of consumers who cooperate to buy food and other frequently used goods directly from producers at a price that is fair to both parties (pp. 21-22)<br>● Guidelines created (yes/no) for environmental quality certification in the food service sector; number of operators who have applied for this certification as a proportion of the total number of operators (p. 22)<br>● Number of information campaigns related to household food waste; handbook for household food waste reduction created (yes/no) (pp. 22-23)<br><br>Paper waste<br>● Number of 'no junk mail' stickers for mailboxes distributed and number of agreements made with the marketing industry to dematerialise advertising (pp. 23-24)<br>● Number of agreements made with utility companies to promote online communication with their clients and number of utility companies that provide online services (p. 24)<br>● Guidelines for public and private sector offices created (yes/no), amount of paper ordered by offices, and number of public and private sector offices that have adopted the computer protocol (p. 24)<br><br>Packaging waste<br>● Number of agreements signed to promote points of sale of loose/bulk products and number of businesses that sell loose/bulk products (p. 26)<br><br>● Number of information campaigns created to encourage the consumption of tap water instead of bottled water, number of programme agreements to encourage the use of tap water and number of public water fountains installed (p. 26) |

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| | | Waste electrical and electronic equipment<br>● Number of awareness campaigns to encourage consumers to choose less environmentally harmful electrical and electronic equipment and inform them about the correct ways to use and dispose of electrical and electronic equipment (p. 27)<br><br>● Number of products that enter and leave a reuse centre, and number of visits made to reuse centres (pp. 27-28) |
| 2. | Quantitative targets | The programme sets the following targets to be achieved by 2020, based on 2010 levels (p. 7):<br>● 5 % reduction in the ratio of MSW generated to each GDP unit; as a monitoring measure, the trend in the amount of MSW produced per household will also be considered<br><br>● 10 % reduction in the ratio of special hazardous waste generated to each GDP unit<br><br>● 5 % reduction in the ratio of special non-hazardous waste generated to each GDP unit<br><br>Special waste includes, according to Article 184, paragraph 3, of Italian Legislative Decree 152/2006:<br>● waste from agriculture and agro-industry<br>● waste resulting from demolition or construction, and from excavation activities<br>● waste from industrial processes<br>● manufacturing waste<br>● waste resulting from commercial activities<br>● waste resulting from the recovery and disposal of waste, as well as sludge from water treatment<br>● waste arising from sanitary activities<br><br>The programme suggests that these targets could be changed into targets for individual waste streams |
| 3. | Monitoring of programme | There is no information specifically indicating how the overall programme is to be monitored, nor the frequency with which evaluations will be carried out or other requirements. However, it is stipulated that the technical round table that will be created within the Ministry of the Environment will be responsible for monitoring the performance of the national and regional programmes and identifying and proposing priority actions and measures to update these programmes. This group will have to collect the information required to benchmark the outcomes (p. 8)<br><br>Yes. These indicators will also be monitored by the Ministry of the Environment, through a technical round table, which will comprise public officers and the stakeholders involved in accomplishing the measures set out in the programme (pp. 7-8) |

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| 4. | Evaluation of the programme | There is no information specifically indicating how the overall programme is to be evaluated, nor the frequency with which evaluations will be carried out or other requirements. However, it is stipulated that the technical round table that will be created within the Ministry of the Environment will be responsible for monitoring the performance of the national and regional programmes, identifying and proposing priority actions and measures to update these programmes. This group will have to collect the information required to benchmark the outcomes (p. 8) |

## Prevention measures

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

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

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| Promote and support sustainable consumption models | • Technological changes are oriented towards the production process and the modification of plants and, therefore, technologies to reduce waste and emissions as a preliminary step (p. 10)<br>• Action plan for sustainable consumption and production (SCP) and sustainable industrial policy (SIP). The Commission proposes a series of measures to support the implementation, in the EU and internationally, of a policy to promote ecological consumption and production (p. 13) |
| 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 | • Promotion of eco-design (p. 3)<br>• Measures relating to the design of electrical and electronic equipment that is more durable or easier to repair and/or reuse (p. 27)<br>• Optimising product life through easy upgradeability, maintenance and low functional obsolescence (p. 12)<br>• Product reuse and recycling facilities (p. 12)<br>• Application of eco-design regulations contained in Legislative Decree 16 February 2011(15), implementing Directive 2009/125/EC on the establishment of a framework for the setting of eco-design requirements for products related to energy (p. 27) |
| Target products containing critical raw materials to prevent those materials becoming waste | • Changes in raw materials (including substitution practices) correspond to the reduction or elimination from the production process of raw materials that are harmful to humans and/or the environment<br>• Such changes may lead to changes in design or composition, and the new product will have to result in fewer environmental impacts throughout its life cycle, from the extraction of the raw materials until final disposal (p. 10) |

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| 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 | • Promotion of reuse and/or repair of certain discarded products (p. 3)<br>• Decrees defining the operational modalities for the costing and support of accreditation for the establishment and support of repair/reuse centres and networks, including the establishment of simplified authorisation procedures and a sample catalogue of products and product waste that can be subject to reuse (p. 16)<br>• The portal will provide information on consumer choices that favour waste reduction, as well as practical guidance on the possibility of using reuse and repair centres, and providing contacts with local networks (p. 17)<br>• Eliminate the use of packaging by promoting the sale of unpackaged products 'on tap'. This practice involves the use of packaging that can be reused several times, extending its life cycle and therefore reducing waste (p. 26)<br>• Measures to encourage the creation of centres for the repair and reuse of electrical and electronic equipment<br>• Interventions to encourage the creation of reuse and repair centres (p. 27)<br>• Measures relating to the design of electrical and electronic equipment that is more durable or easier to repair and/or reuse (p. 27) |
| 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 | |
| Reduce waste generation in processes related to industrial production, extraction of minerals, manufacturing, construction and demolition, taking into account best available techniques | • From a production point of view, waste prevention requires changes in production models and product design through interventions in the organisational and production models of industrial sectors and product design. In particular, waste prevention for industry can be linked to changes in raw materials, technological changes and good operational practices (p. 10)<br>• Integrated pollution prevention and control covers new and existing industrial and agricultural activities with a high pollution potential, as defined in Annex I of Directive 2008/1/EC (energy activities, metal production and transformation, mineral |

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| | products industry, chemical industry, waste management, animal husbandry). The obligations that an industrial or agricultural installation must fulfil to obtain a permit include the prevention, recycling or disposal of waste by the least polluting techniques (p. 11)<br>• Valorisation of by-products of the food industry (p. 20)<br>• Waste prevention in the construction and demolition sector by green public procurement. 'Road construction and maintenance' and 'construction and maintenance of buildings' are among the categories for which the minimum environmental criteria of the action plan for environmental sustainability of public administration must be adopted. It will be necessary to identify a calculation methodology and tools for to account for this category of waste (p. 28) |
| 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 | • Strategies for improving the efficiency of the food chain in the EU, as set out in Resolution of 19 January 2012 on how to avoid food waste (p. 6)<br>• promotion of environmental quality certification in the context of food services (restaurants, hotels, catering, bars (p. 21)<br>• Measure: reducing household food waste<br>• At the household level, food waste prevention can be done firstly by raising awareness of the amount of food that is still usable, the economic loss it represents and the impact it has on the environment, as well as the environmental issues related to the collection and treatment of this waste. Information campaigns can help consumers to better plan their food purchases.<br>• Tools: information campaigns; development of a manual for reducing household waste (p. 22) |
| Encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and reprocessing into non-food products | |

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| 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 | • In accordance with Directives 2002/95/EC, 2002/96/EC and 2003/108/EC on the reduction in the use of hazardous substances in electrical and electronic equipment and the disposal of these wastes (p. 5), the following measures have been adopted:<br>o 10 % reduction target in the production of special hazardous waste per unit of GDP (p. 7)<br>o substitution of materials to avoid at source or prevent the generation of hazardous waste (p. 10)<br>o prevent the generation of waste electrical and electronic equipment (WEEE)<br>o promote reuse, recycling and other recovery methods for WEEE in a way that reduces the quantity to be sent for disposal<br>o reduce the use of hazardous substances in electrical and electronic equipment (p. 27) |
| Reduce the generation of waste, in particular waste that is not suitable for preparing for reuse or recycling | • Food that has not deteriorated and has not yet reached its expiry date may be intercepted before becoming waste and be distributed to soup kitchens or 'solidarity supermarkets' (p. 20) |
| 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 | • In the distribution phase, a considerable amount of waste is produced by two relevant categories of waste, namely food waste and packaging waste (p. 20) |
| 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 | |
| Develop and support information campaigns to raise awareness about waste prevention and littering | • Measure: promoting short supply chain<br>• Instruments: information campaigns to disseminate knowledge about the benefits of using solidarity purchasing groups and direct agricultural markets<br>• Measure: reducing household food waste<br>• Tools: information campaigns; development of a manual for reducing household waste (p. 22)<br>• Measure: promoting the wider uptake of points of sale for 'on tap' products through information campaigns and awareness-raising initiatives |

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| | • Measure Il: promoting consumption of tap water through information campaigns (p. 26) |

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

## Food waste prevention

*Food waste generation*
In 2013, the Italian Ministry of Environment launched the national plan for food waste prevention. Key players in food waste management, such as Last Minute Market, were involved in the policy process. The plan intended to develop measures that tackle the problem of food waste all along the supply chain from primary production (only agricultural production) to final consumption ([1]).

Around 55 % of the waste is generated at the consumer level and is mainly the result of surplus food. In 2020, after years of fighting against food waste, the Italian average amount of food wasted was 149 kg per person per year, which is below the European average. Yet, the costs for Italy, at about EUR 13 billion every year, are very high ([2]).

*Measures to prevent food waste*
In 2016, Italy passed a law against food waste throughout the whole food supply chain that simplifies the donation and distribution of surplus food and pharmaceutical products. Instead of coercive measures, the law focuses on incentives (e.g. tax reduction) for entities to donate or distribute surplus food and pharmaceuticals. The law includes products in supermarkets and also agricultural products.

In 2013, Last Minute Market and the municipality of Bologna launched the voluntary agreement 'Zero Waste Charter'. The charter sets out various measures to reduce food waste along the food supply chain.

Measures on awareness raising include:

- raising awareness and promoting the campaign 'One year against waste';
- establishing nutrition education courses (e.g. in schools, companies);
- simplifying the expiry date information on food labels and clarifying the difference between 'best before' and 'use by' dates;
- establishing an observatory or national agency for reducing food waste;

- developing a manual for reducing food waste production in households.

Measures to promote and create incentives include:

- supporting public and private initiatives that aim to (re-)distribute food, reduce food waste and manage food waste;
- favouring companies in governing public contracts that ensure free redistribution of recovered food waste for the benefit of less affluent citizens;
- promoting concrete actions to reduce food waste further up the supply chain;
- promoting discounted sales when a product is about to expire or has a defect ([3]).

Measures on donation include:

- donating food surpluses for social solidarity purposes;
- permitting donations of perishable food worth less than EUR 15 000 to be made without following official procedures
- reducing waste tax for entities doing food donation ([4][5]).

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([1]) http://www.reducefoodwaste.eu/situation-on-food-waste-in-italy.html
([2]) https://zerowasteeurope.eu/wp-content/uploads/2020/11/zwe_11_2020_factsheet_italy_en.pdf
([3]) http://www.reducefoodwaste.eu/situation-on-food-waste-in-italy.html
([4]) https://zerowasteeurope.eu/wp-content/uploads/2020/11/zwe_11_2020_factsheet_italy_en.pdf
([5]) www.eu-fusions.org/phocadownload/country-report/FUSIONS%20IT%20Country%20Report%2030.06.pdf

For a more comprehensive mapping of country efforts to prevent food waste, please visit the European Commission's Food Loss and Waste Prevention Hub.

## Reuse of products

*Data*
The reuse and repair sectors contribute to extending the use of goods and avoiding waste. According to data processed by Eurostat, in 2018 there were just over 25 000 companies in Italy carrying out repairs of electronic goods and also other personal goods such as clothing, footwear, watches, jewellery and furniture, ranking Italy in third place among the five most important economies in Europe, behind France (over 33 000 repair companies) and Spain (over 28 600).

The trend over the last 10 years shows how the 2008 crisis wiped out about 6 000 repair companies (one fifth of those operating in 2018) in Italy, which bucks the trend seen in other European countries (France +6 000, Spain +7 200, Germany +3 900). However, considering the value of production in 2018 at a national level, these Italian companies generated about EUR 2.3 billion, which represents a reduction of about EUR 800 million compared with 2008, behind France (EUR 5.7 billion) and Germany (EUR 2.5 billion).

*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*
In 2020, the 2018 EU Directives 2018/849 to 2018/852 of the European circular economy package came into force in Italy. The new Italian legislative framework is shifting towards waste prevention, reuse and recycling ([6]).

The Italian ReMade certification system supports reuse by evaluating the content of products made from the waste stream. It is an independent third-party certification and measures the percentage of recycled content in a product. The certification indicates the traceability of production (source of input raw materials) and final product ([7]).

The Italian map of repairers shows 28 Repair cafés, Restarters (specialising in repairing electronic goods) and other independent companies. The map tries to distinguish between places that repair and places that reuse products ([8]).

## Best practice examples

*Avoiding food waste*
In 2010, Last Minute Market and the Department of Agricultural and Food Sciences of the University of Bologna launched the campaign 'One year against waste'. This is a repeating communication campaign aiming at raising awareness among citizens, institutions and companies about the causes and consequences of food waste. The campaign targets different audiences (general public, children, local, national and European institutions, and businesses). It includes a number of communications tools and initiatives such as publications, books, conferences, public meetings, theatrical performances and food waste prevention awards.

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([6]) https://www.interregeurope.eu/smartwaste/news/news-article/9743/circular-economy-directives-into-force-in-italy/
([7]) https://www.remadeinitaly.it/wp-content/uploads/2017/01/Remade-in-Italy-EN.pdf
([8]) https://www.restarters.it/mappa-dei-restarters-e-dei-repair-cafe-italiani/, https://www.italiachecambia.org/2020/05/diritto-alla-riparazione/

As part of the project 'The pleasure not to waste', products close to their expiry date are set out and sold at a discounted price. The project involves 275 large-scale retailers in the Piedmont and Aosta Valley regions ([9]).

In large-scale retail trade, food waste is often linked to warehouse management and mainly comprises unsold products close to their expiry date and products with damaged packaging. These can be intercepted before they become waste and usefully distributed to social canteens or solidarity supermarkets. One example of good practice is the project 'More donations, less waste', a protocol of understanding between the municipality of Parma, the local health unit of Parma, Enia, Fondazione Banco Alimentare Emilia Romagna Onlus and Federdistribuzione. This protocol envisages that participating large-scale distributors can benefit from a discount on the variable portion of the waste tariff, in proportion to the amount of urban or assimilated waste produced that the producer, by presenting completed and signed self-certification and transport documents, proves has been sent for recovery ([10]).

*Reuse of products*

ReMade in Italy is a non-profit, non-governmental organisation promoting recycled products through independent, third-party certification. The certification system is the first in Italy and in Europe and verifies the recycled content of a product ([11]).

The 'Waste Prevention Portal' is the tool developed by the Emilia-Romagna region to collect and highlight the numerous initiatives, allowing those who collaborate in the projects promoted by the region to accredit themselves and interface with the regional authority to provide information and data using specific web applications. In this way, this tool intends to give transparency to the regional activity, share knowledge, and simplify the interaction with the companies, associations and administrations participating in the various initiatives. As far as companies are concerned, the portal will provide information on possible waste prevention actions to be undertaken by creating a database with a list of best practices and providing direct support to those who request it. The portal will provide information on consumption choices that favour waste reduction, as well as practical information on the possibility of turning to reuse or repair centres and providing contacts with local networks. Citizens will also be able to submit their own proposals. As far as schools are concerned, the portal will contain information for teachers to develop educational projects on the topic. For local public administrations, the portal will provide support in the preparation of waste prevention programmes ([12]) ([13]).

([9]) http://www.eu-fusions.org/phocadownload/country-report/FUSIONS%20IT%20Country%20Report%2030.06.pdf
([10]) Ministry of Environment, Land and Sea, 2013, *National programme for waste prevention* (https://www.mite.gov.it/sites/default/files/archivio/normativa/dm_07_10_2013_programma.pdf).
([11]) https://www.urbanwins.eu/remade-in-italy/
([12]) https://ambiente.regione.emilia-romagna.it/it/rifiuti/temi/rifiuti/portale-della-prevenzione
([13]) Ministry of Environment, Land and Sea, 2013, *National programme for waste prevention* (https://www.mite.gov.it/sites/default/files/archivio/normativa/dm_07_10_2013_programma.pdf).

## Links to the circular economy

Waste prevention is an integral part of the comprehensive transformation towards a circular economy. It reduces not only the input of natural resources into the economy but also the efforts required to collect and recycle waste.

Approaches to improving circularity are often linked to successful waste prevention. The following table shows which circular strategies are explicitly integrated into the Italian waste prevention programme.

| Topic | Addressed in the programme | Comments/examples |
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| Eco-design | Yes | Redesign of products through interventions in the organisational and production methods of industrial sectors |
| Repair, refurbishment and remanufacture | Yes | Measures relating to the design of electrical and electronic equipment so that is more durable or easier to repair and/or reuse |
| Recycling | Yes | Promote the reuse, recycling and other recovery methods for WEEE to reduce the quantity sent for disposal |
| Economic incentives and finance | Yes | Economic incentives are considered a tool/instrument to encourage waste prevention |
| Circular business models | Yes | They have to change to shift to more sustainable production patterns |
| Eco-innovation | Yes | Technological changes focusing on reducing waste and emissions upfront through innovations in production processes |
| Governance, skills and knowledge | Yes | Information campaigns to disseminate knowledge on the benefits of solidarity purchasing groups and direct agricultural markets |