

# Waste prevention country profile

# Portugal

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European Environment Agency



## Country profile: Portugal

### General information

Name of the country/ region	Portugal
Coverage of the waste prevention programme (national/ regional)	National
Type of programme (stand alone or integrated into waste management plan)	Integrated in National Strategic Plan for Municipal Solid Waste (PERSU 2020)
Title of programme and link to programme	Strategic Plan for Urban Waste <a href="http://apambiente.pt/zdata/DESTAQUES/2014/RelatorioPropostaPERSU2020_Fev14_v2.pdf">http://apambiente.pt/zdata/DESTAQUES/2014/RelatorioPropostaPERSU2020_Fev14_v2.pdf</a>  PERSU2020+ REFLEXÃO ESTRATÉGICA E AJUSTAMENTOS ÀS MEDIDAS DO PERSU 2020 (Strategic Reflection and Adjustments to PERSU 2020 measures) <a href="https://apambiente.pt/sites/default/files/Residuos/Planeamento/PERSU2020mais.pdf">https://apambiente.pt/sites/default/files/Residuos/Planeamento/PERSU2020mais.pdf</a>
Duration of programme	2016 – 2020 (may be extended to 2025) A new version was being developed in 2022 but it was not yet available at the time of updating this profile.
Language	Portuguese
Contact person in the country/region	Cristina Carrola, <a href="mailto:cristina.carrola@apambiente.pt">cristina.carrola@apambiente.pt</a> Portuguese Environment Agency (Agência Portuguesa do Ambiente — APA) <a href="http://www.apambiente.pt/">http://www.apambiente.pt/</a>
Development process of the programme/ revision	PERSU 2020+ makes adjustments to PERSU 2020 due to the revision of European Directives, and does not replace it. Everything regulated in PERSU2020 that is not subject to adjustment in this document remains in force.  PERSU 2020+ presents the general lines of alignment that need to be introduced to the <i>Strategic Plan for Municipal Waste 2020</i> in order to correct the current trajectory to achieve the 2020 targets ( <i>with the assessment in 2022</i> ), already paving the way with solutions to be complemented in the new <i>Strategic Plan for Municipal Waste (after closure of PERSU 2020)</i> to meet the commitments until 2035.
Foreseen budget for implementation of the project	N/A

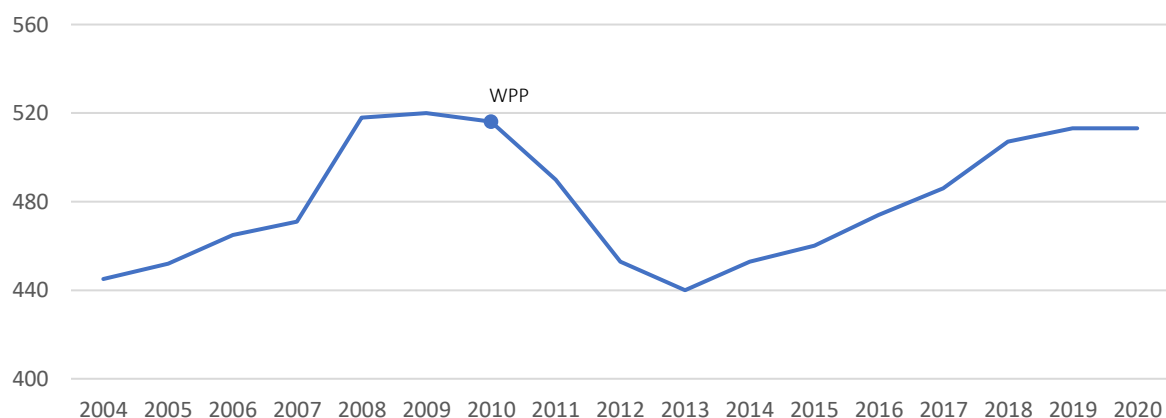
## WASTE GENERATION

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

### MSW

- The generation of municipal waste per capita (see Figure 1) increased between 2004 and 2020, from 452 kg per capita to 513 kg per capita.
- The lowest level of waste generation was reached in 2013 (440 kg per capita), after which a steeply increasing trend has followed.
- With the implementation of Portugal's first WPP in 2010, the waste generation decreased steeply, which has probably been influenced by the global financial crisis as well that developed shortly before this period.
- From 2013 to 2019, an increasing trend can be observed, from 453 kg per capita in 2014 to 513 kg per capita in 2020, which can have been influenced by many factors such as population or household expenditure.
- Overall, the average MSW generation of 513 kg per capita is slightly below the European average of 517 kg<sup>1</sup> per capita in 2020.

Figure 1: Municipal waste generation in Portugal (kg per capita), 2004-2020



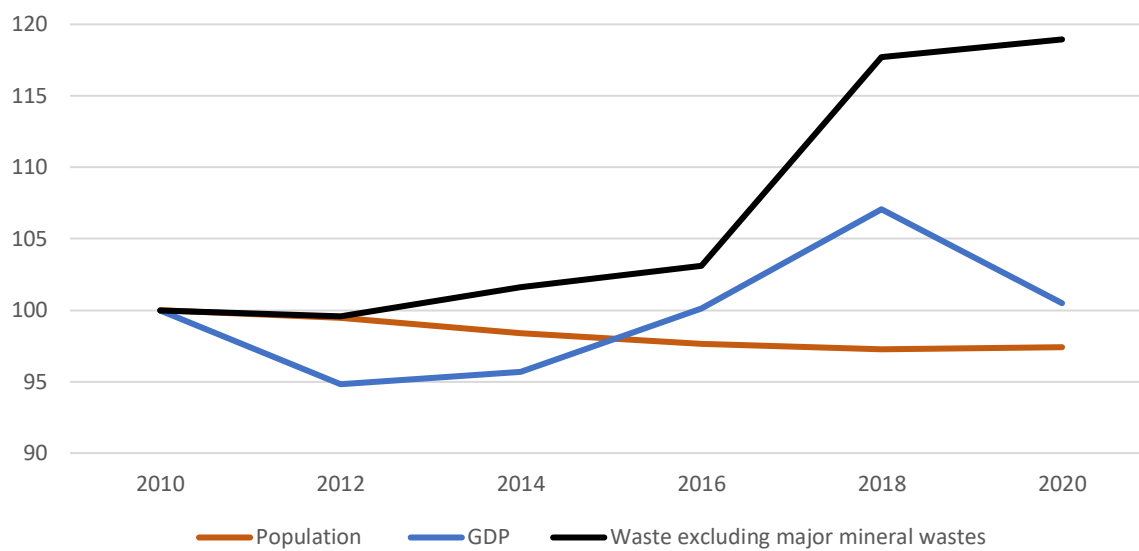
Source: Eurostat [ENV\_WASMUN]

### Total waste

- Total waste (excluding major mineral wastes) generation in Portugal increased between 2010 and 2020 (see Figure 2).
- A similar trend can be observed for Portugal's economic growth in terms of GDP, which – after a short term of decrease - increased steadily between 2012 and 2018 before decreasing again in 2020.
- Although a longer time series is needed to solidify a decoupling conclusion, Portugal does not seem to be on track to decouple total waste generation from economic growth.
- As population decreased throughout that time, the increase of waste generation cannot be led back to population growth.

<sup>1</sup> Based on data collected from Eurostat in September 2022.

Figure 2: Growth rate of waste (excluding major mineral wastes), GDP (main GDP aggregates, chain linked), and population, 2010-2020, (2010=100).



Source: Eurostat [ENV\_WASGEN, NAMA\_10\_PC, DEMO\_GIND]

## WASTE PREVENTION PROGRAMME

### Objectives and priorities

1.	Waste prevention objectives of the Programme - quantitative objectives (waste reduction) - qualitative objectives (reduction of hazardous substances/ environmental impacts)	<p>Promote the production of sustainable products and materials, in order to reduce:</p> <ul style="list-style-type: none"> <li>• The amount of waste produced by the reduction of material resources and energy used and by encouraging their reuse and therefore reducing the amount of waste sent to landfill.</li> <li>• The presence of hazardous substances in materials, products and waste (PERSU 2020, p. 7651).</li> </ul> <p>The main guidelines and strategies of PERSU II are;</p> <ul style="list-style-type: none"> <li>• <i>Reduce, reuse, recycle;</i></li> <li>• <i>Reinforcement of the separation at origin;</i></li> <li>• <i>Reduce landfilling;</i></li> <li>• <i>Encourage the energy recovery of the non-recyclable fraction</i></li> </ul>
2.	Sectors covered	<ul style="list-style-type: none"> <li>• Sale, retail, transport;</li> <li>• households;</li> <li>• private service activities/hospitality;</li> <li>• public services</li> </ul>
3.	Priority waste types	<ul style="list-style-type: none"> <li>• Food/organic;</li> <li>• hazardous waste;</li> <li>• paper;</li> <li>• packaging;</li> <li>• waste electrical and electronic equipment /batteries;</li> <li>• bulky waste.</li> </ul>
4.	Target groups	<ul style="list-style-type: none"> <li>• Supply side: designers, manufacturers, distributors, retailers and service providers.</li> <li>• Demand side: citizens and different communities.</li> <li>• Governance/regulatory system: local, regional and central levels</li> </ul>

## Targets, indicators and monitoring

1.	Indicators proposed	<p>The main quantitative indicator as the reduction of municipal solid waste (MSW) generated per person per year:</p> <ul style="list-style-type: none"> <li>• Goal 1: reduction of 7.6% at the end of 2016 relative to the value of 2012. In 2012 the reference value is 456 kg/(person.year) and thereby, the value to be achieved in 2016 will be 421 kg/(person.year);</li> <li>• Goal 2: reduction of 10% at the end of 2020 relative to the value of 2012. In specific terms, it is intended that the value reached in 2020 is 410 kg/(person.year)</li> </ul>
2.	Quantitative targets	<p>The plan establishes two major objectives to be quantified:</p> <ul style="list-style-type: none"> <li>• up to 31 December 2016, achieving a minimum reduction of waste production per capita of 7.6% by weight relative to the verified value in 2012;</li> <li>• up to 31 December 2020, achieving a minimum reduction of waste production per capita of 10% by weight relative to the verified value in 2012.</li> </ul> <p>The PERSU 2020 foresees, by 31 December 2020, to achieve an overall minimum increase to 50%, by weight, of the preparation for reuse and recycling of WEEE, including paper, cardboard, plastic, glass, metal, wood and biodegradable municipal waste.</p>
3.	Monitoring of programme	A monitoring (GAG) group was created that will evaluate the strategies established in the program. Their progress will be monitored through annual reports (PERSU 2020, p. 7680)
4.	Evaluation of the programme	An evaluation of the WPP was taking place over 2022 and a new version was expected before the end of the year. However, the new version was not available at the time of updating this profile.

## Prevention measures

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

Promote and support <a href="#">sustainable consumption</a> models	Information and awareness campaign aimed at consumers, with the goal of raising awareness of the problem of plastics and enabling them to make choices that minimise the impact on the environment, promoting behavioural change and sustainable consumption habits, also focusing on the fields of education (children and young people) and public and private procurement (PERSU 2020+, p.75).
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	<p>Characterisation of the production situation and development of a selective collection model for textile waste (PERSU 2020+, p.137)</p>
<p>Encourage the design, manufacturing and use of products that are <b>resource-efficient</b>, <b>durable</b> (including in terms of life span and absence of planned obsolescence), <b>reparable</b>, <b>re-usable</b> and <b>upgradable</b>.</p>	<p>Some of the measures with an impact on packaging and packaging waste include the development of quality standards for secondary raw materials to increase the confidence of operators in the single market, and the establishment of an eco-design work plan to promote the reparability, durability and recyclability of products (PERSU 2020+, p.17)</p>
<p>Target products containing <b>critical raw materials</b> to prevent that those materials become waste.</p>	<p>consequent reduction of consumption of natural raw materials of limited resource. The proposals cover the entire life cycle of products: from manufacturing and consumption to waste management and the market for secondary raw materials. (PERSU 2020+, p.16)</p>
<p>Encourage the re-use of products and the setting up of systems promoting <b>repair</b> and <b>re-use activities</b>, including in particular for electrical and electronic equipment, textiles and furniture, as well as packaging and construction materials and products.</p>	<p>Valuation of proximity spaces for materials and waste collection (reuse and repair (PERSU 2020+, p.146)</p> <p>The PERSU 2020 foresees, by 31 December 2020, to achieve an overall minimum increase to 50%, by weight, of the preparation for reuse and recycling of WEEE, including paper, cardboard, plastic, glass, metal, wood and biodegradable municipal waste by encouraging the increase of separate collection, increasing the efficiency of waste treatment. (PERSU 2020+, p.38)</p> <p>These measures will promote the selective collection of some plastic products contributing to the Packaging Directive target as well as to the preparation for reuse and recycling target foreseen in the Waste Framework Directive, a contribution that should be enhanced under this Plan</p> <ul style="list-style-type: none"> <li>• promote prevention and re-use by inhibiting the placing on the market of certain single-use products;</li> <li>• set out specific requirements to be met for specific products as well as marking requirements that will support consumers in their choice;</li> <li>• Provide for greater coverage of extended producer responsibility by placing charges on the producer</li> <li>• increase financial costs also in terms of "clean up litter";</li> <li>• Implementation of warehouse systems;</li> <li>• Set selective collection targets for some of the targeted products and awareness-raising measures. (PERSU 2020+, p.76)</li> </ul> <p>New measures regarding TEXTILE WASTE</p> <ul style="list-style-type: none"> <li>• Characterisation of the production situation and development of a selective collection model for textile waste (PERSU 2020+, p.137)</li> </ul>

<p>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 re-use of products without compromising their quality and safety.</p>	
<p>Reduce waste generation in processes related to industrial production, extraction of minerals, manufacturing, construction and demolition, taking into account best available techniques.</p>	<p>Stimulate and increase campaigns to prevent and reduce waste production, as part of a transition to a circular economy (PERSU 2020+, p.6)</p>
<p>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 United Nations 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.</p>	<p>Increase education and awareness campaigns for citizens' environmental sustainability in articulation with the National Strategy for Environmental Education (ENEA) and the Strategy to Combat Food Waste (PERSU 2020+, p.6) Approval of the National Strategy and Action Plan to Combat Food Waste (PERSU 2020+, p.27)</p> <p>There are already successful initiatives undertaken by civil society, municipalities and Municipal Waste Management System with an impact on food waste reduction and, consequently, on waste generation.</p> <ul style="list-style-type: none"> <li>• "Refood" projects of the <i>Re-food 4 Good</i> Association, which takes leftover food to those in need,</li> <li>• "Dose certa" promoted by LIPOR, which reduces the portion served in participating restaurants so as not to generate waste,</li> <li>• IKEA "Food is precious" project, which assesses organic waste and its causes with a view to analysing and finding answers for it. (PERSU 2020+, p.78)</li> </ul> <p>Increase environmental education and environmental awareness campaigns for citizens in articulation with the National Strategy for Environmental Education (ENEA) and the Strategy to Combat Food Waste (PERSU 2020+, p.124).</p> <p>Support for measures to promote the Food Waste Reduction Strategy (PERSU 2020+, p.131)</p>
<p>Encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and the reprocessing into non-food products.</p>	



<p>Promote the <b>reduction of the content of hazardous substances</b> in materials and products, without prejudice to harmonised legal requirements concerning those materials and products laid down at Union 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.</p>	<p>Regarding the production of textiles and hazardous waste, despite having a reduced presence in the total waste production, they are also subject to assessment in order to implement mandatory separate collection of this type of waste by 2025. (PERSU 2020+, p.44)</p> <p>New measures in respect of HAZARDOUS WASTE</p> <ul style="list-style-type: none"> <li>• Characterisation of the production situation and development of a selective collection model for small quantities of hazardous municipal waste (PERSU 2020+, p.137)</li> </ul>
<p><b>Reduce</b> the generation of <b>waste</b>, in particular waste <b>that is not suitable for preparing for re-use or recycling</b>.</p>	
<p><b>Identify</b> products that are <b>the main sources of littering</b>, notably in natural and marine environments, and <b>take appropriate measures to prevent and reduce litter</b> from such products, where Member States decide to implement this obligation through market restrictions, they shall ensure that such restrictions are proportionate and non-discriminatory.</p>	
<p><b>Aim to halt the generation of marine litter</b> as a contribution towards the United Nations Sustainable Development Goal to prevent and significantly reduce marine pollution of all kinds.</p>	<p>Increased financial costs in terms of "clean up litter" (PERSU 2020+, p.76)</p>
<p>Develop and support <b>information campaigns to raise awareness</b> about waste prevention and littering.</p>	<p>Stimulate and increase campaigns to prevent and reduce waste production, as part of a transition to a circular economy</p> <p>Increase education and awareness campaigns for citizens' environmental sustainability in articulation with the National Strategy for Environmental Education (ENEA) and the Strategy to Combat Food Waste (PERSU 2020+, p.6)</p> <p>Municipal Waste Management System and municipalities should pursue awareness-raising campaigns that promote more responsible consumption and thus contribute to the prevention of waste generation. (PERSU 2020+, p.36)</p> <p>Information and awareness campaign aimed at consumers, with the goal of raising awareness of the problem of plastics and enabling them to make choices that minimise the impact on the environment, promoting behavioural change and sustainable consumption habits, also focusing on the fields of education (children and young people) and public and private procurement. (PERSU 2020+, p.75)</p> <p>Increase environmental education and environmental</p>

	awareness campaigns for citizens in articulation with the National Strategy for Environmental Education (ENEA) and the Strategy to Combat Food Waste. (PERSU 2020+, p.124)
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Additional implemented prevention measures, not covered by Article 9	
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## FOOD WASTE PREVENTION

### Food waste generation

In 2012, a project study on food waste (PERDA) showed that around one million tons of food are lost and wasted annually in Portugal. Most food waste occurs in agriculture and fishing (32.2%) as well as in consumption (31.4%). The rest is wasted in distribution (28.9%) and in the food industry (7.5%).<sup>2</sup>

### Measures to prevent food waste

In 2014, the formal commitment "Combating Food Waste, a commitment of all" came into force as a national common strategy of all stakeholders in the food chain. The strategy intends to change attitudes and develop waste-free practices and management systems for all stakeholders of the food supply chain.<sup>3,4</sup>

In 2018, the National Strategy and Action Plan to Combat Food Waste identifies 14 actions to achieve the goal of preventing and reducing food waste in Portugal. The actions focus on awareness raising, good practices, corporations with all stakeholders, data collection and monitoring of the actions.

1. Promote awareness-raising actions for the consumer
2. Develop awareness-raising actions for the school-age population
3. Develop specific training actions for different segments of the chain
4. Develop pilot projects in the field of health and nutrition.
5. Review and disseminate food safety guidelines to combat waste
6. Disseminate good practices (projects, guidelines and success stories)
7. Promote specific locations for the sale of food products at risk of waste
8. Facilitate and encourage the system of food donation.
9. Improve the interconnection and involvement of the State administration in European and international regulation
10. Create and stimulate a collaborative platform to identify availability by type of food
11. Promote the development of innovative processes
12. Regularly publish a statistics panel on levels of food waste, including the establishment of an area dedicated to this topic on the official statistics portal
13. Prepare periodic reports for general presentation and dissemination
14. Develop a methodology for the calculation of food waste at the different stages of the supply chain.<sup>5,6</sup>

<sup>2</sup> [National Strategy and Action Plan to Combat Food Waste \(europa.eu\)](http://europa.eu)

<sup>3</sup> [guia\\_prevenir\\_desperdicio\\_alimentar.pdf \(cncda.gov.pt\)](http://cncda.gov.pt)

<sup>4</sup> [Food Waste in Portugal – A Public Policy with the Commitment of All Society – Kosmos Publishers](#)

<sup>5</sup> [National Strategy and Action Plan to Combat Food Waste \(europa.eu\)](http://europa.eu)

<sup>6</sup> [Desperdício \(europa.eu\)](http://europa.eu)

## 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](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

Circular Economy Portugal implements the principles of the circular economy in concrete projects, using waste prevention strategies, social innovation and cooperative actions. Concrete projects of Circular Economy Portugal that support the principles of reuse of products are:

- Re:Costura pursues the concept of rescuing clothing that would otherwise have been forgotten and ended up in a landfill or dumpster. These clothes still have some potential and are transformed by seamstresses and designers into new exclusive pieces. As part of Re:Costura, the Re:Stitching project offers sewing workshops with a focus on textile reuse.<sup>7</sup>
- Repair Cafés: In collaboration with FabLab Lisboa and volunteers from AltLab and ReFaz Repair Cafes have been organized in Lisbon and in Port.<sup>8</sup>

### **Best practice examples**

The “Festival Alimenterra” focuses on healthy and sustainable nutrition, food waste and the future of the food system. The festival includes short movies, debates, guided tours, and waste free cooking workshops on these topics. Panellists such as chefs, academics, farmers, and entrepreneurs are invited to the festival to discuss issues of production, distribution, consumption, and food waste.<sup>9</sup>

The project "Dose Certa" aims to reduce and combat food waste by raising awareness and encouraging the population to change their eating habits, focusing on economic, environmental and health aspects. This project is currently being developed in restaurants, school canteens and mass canteens. By accounting and characterizing the food waste generated in restaurants and canteens, it is possible to identify which food groups are wasted and correct the quantities served to customers, thus reducing food waste.<sup>10</sup> The Dose Certa project can reduce food waste in restaurants up to 30%.<sup>11</sup>

FLAW4LIFE is a project co-funded by LIFE's European Union Programme. The idea of the project was to save tons of ugly-shaped but good quality food that farmers throw away every year. This avoids the unnecessary use of resources such as water, land, energy and labour time in production. On a weekly basis, ugly-shaped food is purchased from local growers and then packed into boxes to sell to affiliated consumers who can pick it up at the end of the day. The pilot project was successfully launched in Lisbon and new delivery points with the same concept were opened.<sup>12</sup>

### **Reuse of products:**

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<sup>7</sup> [About us - Re:Sewing \(recostura.com\)](#)

<sup>8</sup> [https://www.circulareconomy.pt/?page\\_id=50](https://www.circulareconomy.pt/?page_id=50)

<sup>9</sup> [Ingredients - Alimenterra](#)

<sup>10</sup> [LIPOR launches Dose Certa \(Right Portion\) project - REFRESH: Community of Experts \(refreshcoe.org\)](#)

<sup>11</sup> [Stop it or wrap it: Preventing food waste in Portugal | REFRESH \(eu-refresh.org\)](#)

<sup>12</sup> [Project | Flaw4Life](#)

The Solidarity Reuse project is about research of the solidarity-oriented reuse sector in Portugal. For this purpose, the website [reutilizacaosolidaria.info](http://reutilizacaosolidaria.info) was created based on Portuguese and European case studies. The website aims to serve as a resource for reuse to inform, inspire and promote collaboration between stakeholders and includes suggestions for actions to promote the sector.<sup>13</sup>

ShareToy is an annual solidary initiative of the delegation of students of students of the Department of Electronics, Telecommunications and Informatics (DETI) at the University of Aveiro. The project collects and repairs toys with electronic components and donate them to disadvantaged children or to social solidarity institutions.<sup>14</sup>

## 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 waste prevention programme of Portugal.

Topic	Addressed in the programme	Comments
Eco-design	Yes	Some of the measures with an impact on packaging and packaging waste include the development of quality standards for secondary raw materials to increase the confidence of operators in the single market, and the establishment of an eco-design work plan to promote the reparability, durability and recyclability of products (PERSU 2020+, p.17)
Repair, refurbishment and remanufacture	Not really	
Recycling	Yes	e.g. the PERSU 2020 foresees, by 31 December 2020, to achieve an overall minimum increase to 50%, by weight, of the preparation for reuse and recycling of WEEE, including paper, cardboard, plastic, glass, metal, wood and biodegradable municipal waste by encouraging the increase of separate collection, increasing the efficiency of waste treatment. (PERSU+, p.38)
Economic incentives and finance	Yes	Economic and financial instruments play an essential role in inducing behaviour as long as they are properly constructed and their values are adjusted to reality. In this regard, it is understood that the TGR, an excellent instrument for inducing behaviour in this area, has not produced the desired effects, so it will be important to adopt measures to correct this situation. (PERSU+, p.138)
Circular business models	No	
Eco-innovation	Yes	Incentives to support innovation in a circular economy context by strengthening incentives for technological innovation and investment in solutions for alternative and sustainable

<sup>13</sup> [Projects - Circular Economy Portugal](#)

<sup>14</sup> [University of Aveiro \(ua.pt\)](http://ua.pt)

		materials, products and business models, seeking to mitigate possible impacts for SMEs that may arise from advances in the European Union on plastics, as well as the creation of demand-side support instruments with the aim of facilitating public procurement processes in innovation (PERSU 2020+, p.75)
Governance, skills and knowledge	Yes	The PERSU 2020 Management Support Group (GAG), as it was established and appointed, revealed difficulties in ensuring the implementation of the measures set out in the plan, given the governance model in place and the fact that many measures are dependent on institutions belonging to ministries other than the Environment Ministry, with other agendas and objectives (PERSU 2020+, p.142)