

2011 Survey of resource efficiency policies
in EEA member and cooperating countries

COUNTRY PROFILE:

Portugal



Country information on resource efficiency policies,
instruments, objectives, targets and indicators,
institutional setup and information needs

May 2011

This country profile is based on the information provided by Cristina Carrola from the Portuguese Environment Agency. The information is current as of March 2011.

This country profile was prepared as part of the EEA-ETC/SCP 2011 survey of resource efficiency policies, which aims to collect, analyze and disseminate information about national experience in the development and implementation of resource efficiency policies in EEA member and collaborating countries. The work resulted in the following outcomes:

- **Short 'country profiles' (this document)** - self assessments prepared by countries, describing the current status of resource efficiency policies, including key strategies and action plans, policy objectives, instruments, targets and indicators used, institutional setup and information needs.
- **Summary report** - prepared by the EEA and ETC/SCP, the report reflects on trends, similarities and differences in policy responses, showcases selected policy initiatives from member countries and identifies information needs and knowledge gaps.
- A session on resource efficiency policies during the 2011 EIONET workshop to discuss further needs and to facilitate information sharing and experience exchange among EIONET members.

More information about resource efficiency policies, including an analytical report "Resource efficiency in Europe" and thirty one country profiles, can be found at:

<http://www.eea.europa.eu/resource-efficiency>

1. Resource use in Portugal – facts and figures

1.1 General Facts and figures about the country



Source:
<https://www.cia.gov/library/publications/the-world-factbook/index.html>

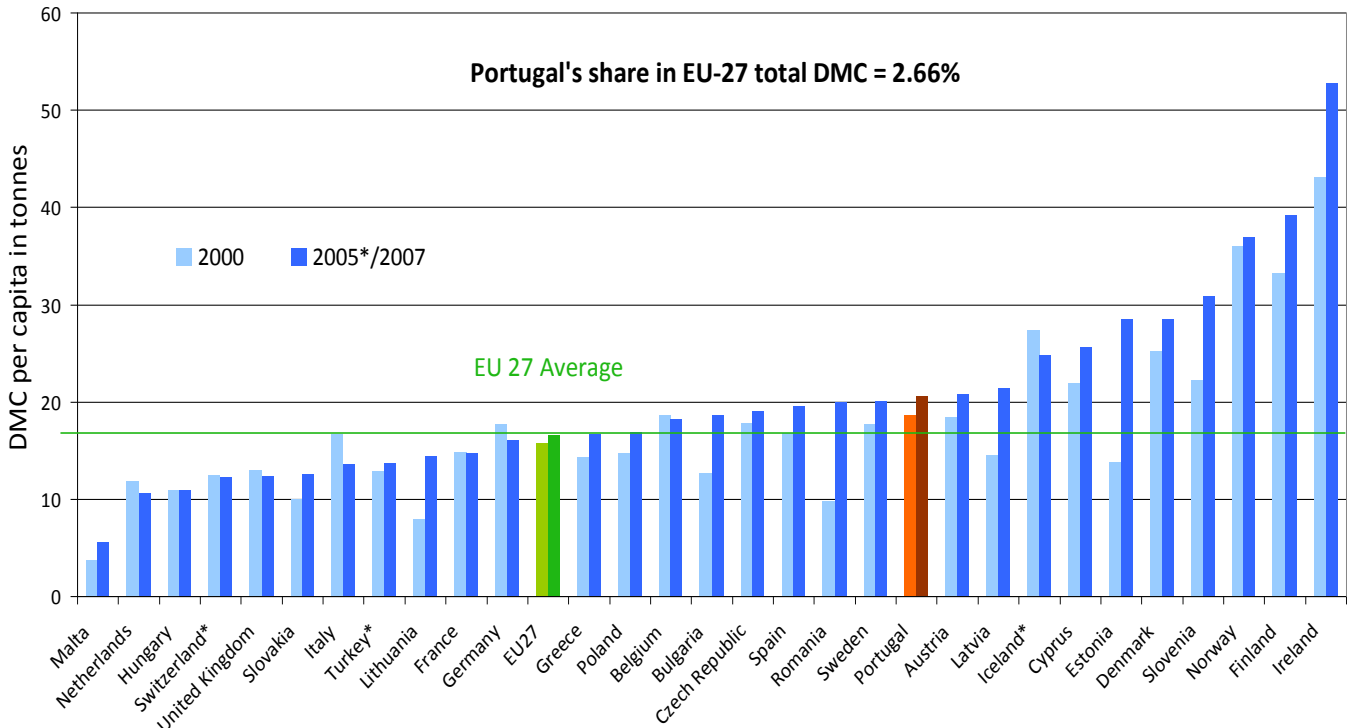
Population (projected inhabitants for 2010) [1]	10,637,713
➤ Percent of total EEA-32	1.8%
Surface area (km ²) [2]	92,090
➤ Percent of total EEA-32	1.6%
GDP at market prices – Purchasing Power Standard – Current Prices (Million Euro, 2009) [3]	200,140.7
➤ Percent of total EEA-32 (minus Liechtenstein)	1.54%
GDP per capita in Purchasing Power Standards (PPS) [4] EU27=100 (2009)	80
Urban population (rate of pop., 2009) [5]	60.1%
Main economic sectors and their share in total GDP (2009 est.) [2]	
Agriculture	2.6%
Industry	23%
Services (2010 est.)	74.5%
EU accession date [6]	1.1.1986

Additional relevant background information on Portugal (and on 37 other EEA member and cooperating countries) can be found at the SOER2010 website:

<http://www.eea.europa.eu/soer/countries/pt>

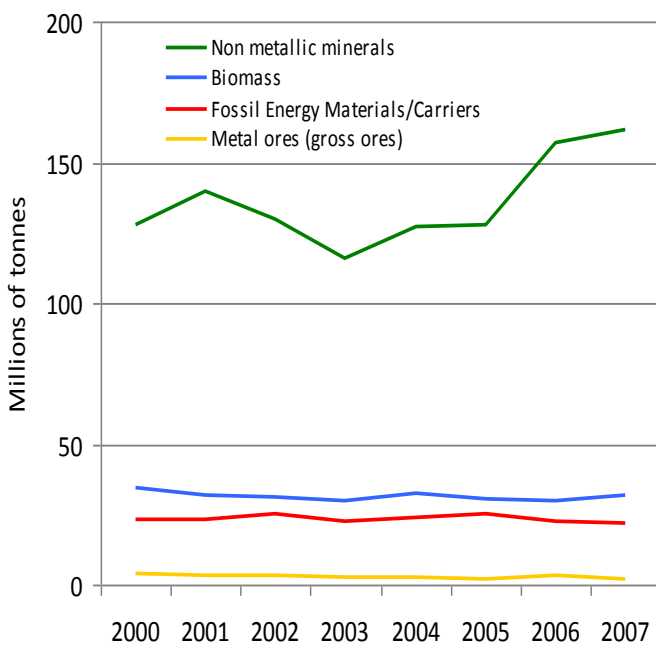
1.2 Facts and figures on resource efficiency for Portugal

Use of resources per capita 2000 and 2007 [tonnes DMC/capita]



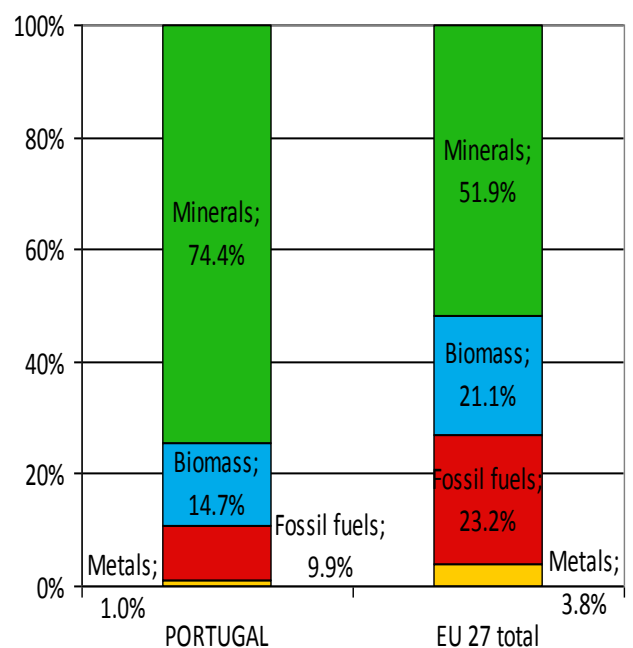
Source: Eurostat, OECD and Total Economy Database [7] * = For these countries data is for 2000 and 2005

Domestic Material Consumption by category over time, Portugal



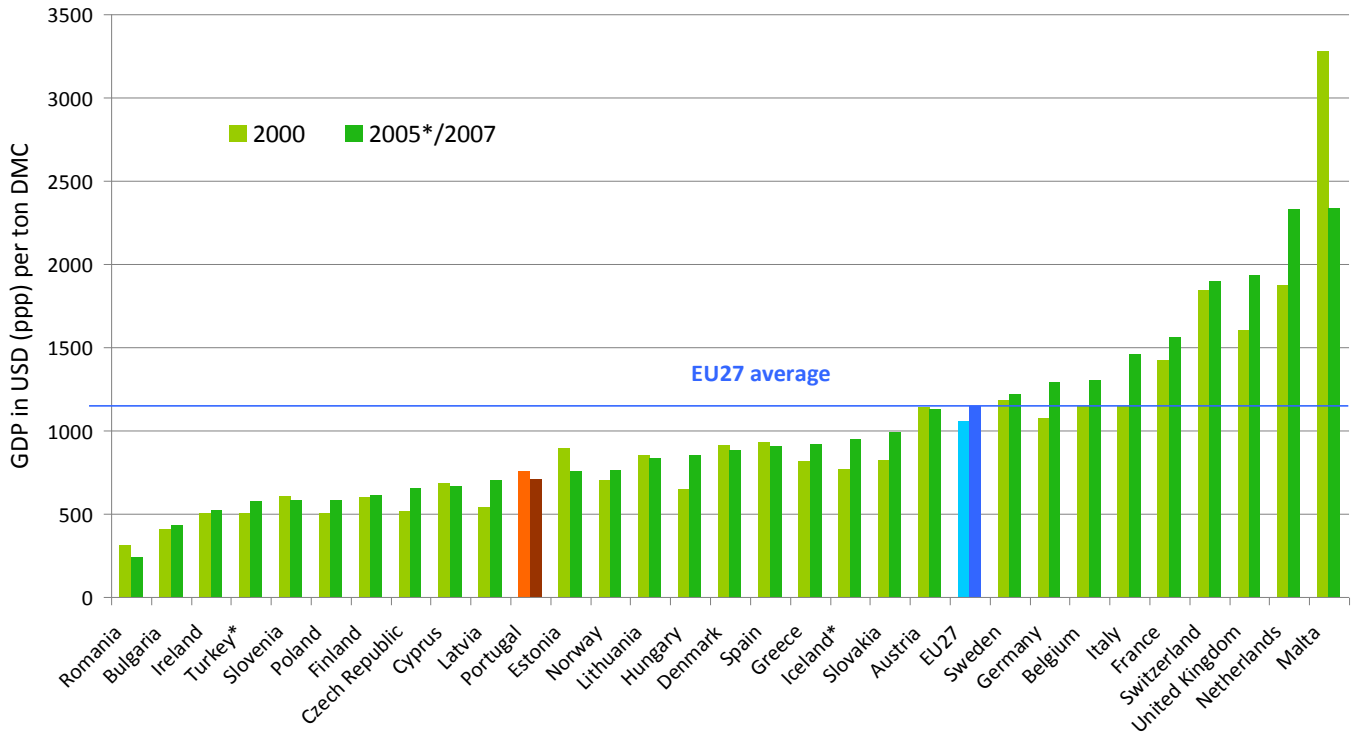
Source: Eurostat [8]

Breakdown of DMC by type of materials (2007)



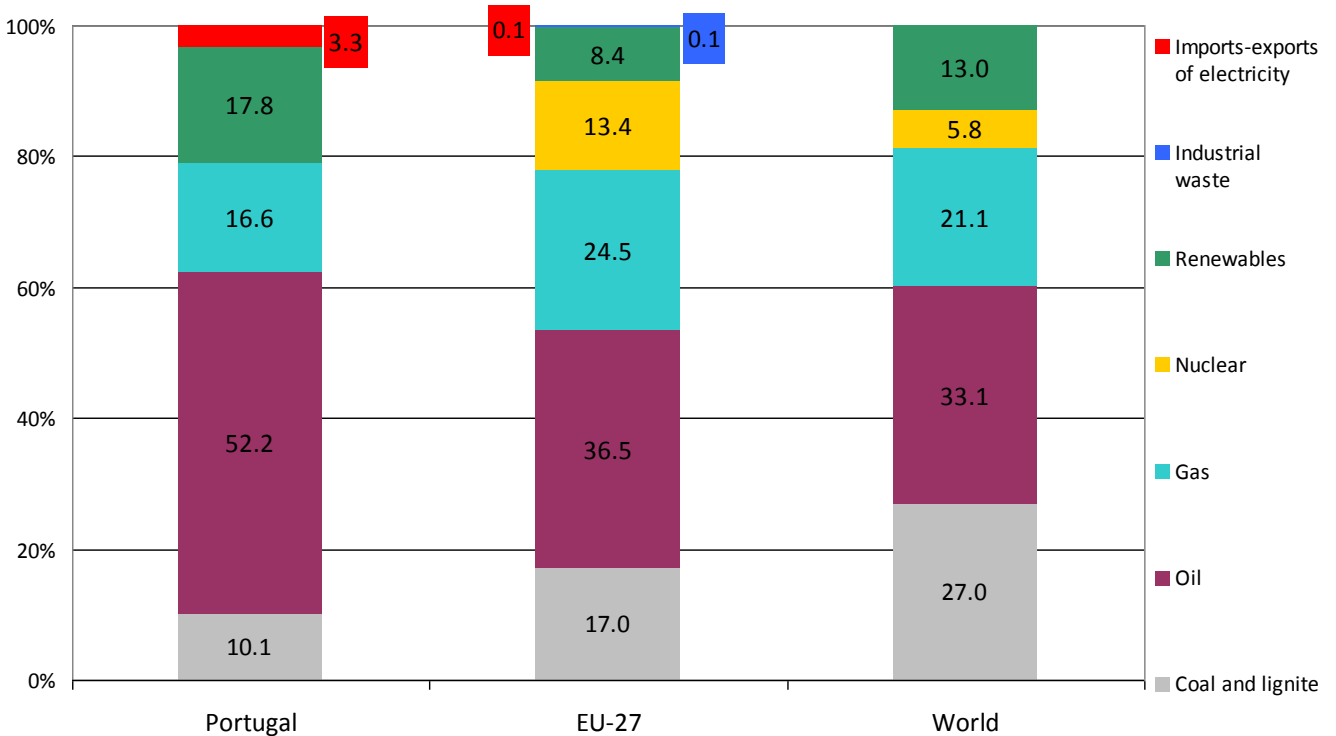
Source: Eurostat [8]

Material productivity 2000 and 2007 [USD ppp/ton DMC]



Source: The Conference Board, Total Economy Database, Eurostat [9]
 * = For these countries data is for 2000 and 2005.

Primary energy consumption



Source: Eurostat [10]

2. Evolution and main drivers for the development of resource efficiency policies

Main driving forces should be focused in the whole production-consumption system. The unsustainable patterns of consumption and, in the supply side, the costs/ liabilities of using/consuming non-renewable resources (air, water, land) in the value chain (taking a lifecycle perspective), should be considered.

3. Overall Policy Approach for Resource Efficiency

Portugal does not have yet a dedicated strategy or action plan on improving resource efficiency.

The overall goal of resource efficiency is of national concern, being addressed in several environmental strategies, policies or action plans briefly described below:

1. GENERAL FRAMEWORK ON ENVIRONMENT

It aims to optimize and ensure the continuity of natural resources use, in a qualitative and quantitative way, as a basic requirement for a self sustained development. It establishes the adoption of measures aiming at the definition of an energy policy based on the rational and sustained use of all the renewable resources, on the diversification and decentralization of the production sources and on the consumption rationalization. It foresees that solid waste may be reused as raw material and energy source.

<http://www.apambiente.pt/divulgacao/Publicacoes/REA/Paginas/REA.aspx>

2. NATIONAL SUSTAINABLE DEVELOPMENT STRATEGY (ENDS 2015)

This Strategy was prepared taking into account the guidance principles of the European Strategy and aiming to respond to its main objectives, namely at the level of climate change, renewable energies, transportation, sustainable production and consumption, and natural resource management and conservation, among others. Establishes, as a main priority, the integrated waste management, particularly of domestic, industrial and hospital waste, aiming at their reduction, reuse, recycling and recovery, as well as their safe disposal; it establishes goals related to the waste prevention and continue a material approach fulfilling recycling targets.

<http://www.apambiente.pt/politicasambiente/DesenvolvimentoSustentavel/EstrategiaNacionalDesenvolvimentoSustentavel/Paginas/default.aspx>

3. INTEGRATED PRODUCT POLICY (PIP)

This integrates several policies and instruments on different areas having as main goals the reduction in use of resources and reduction of environmental impact of products/services along their life cycle.

To that end, management tools are used in both production (product development, manufacturing and distribution) and product consumption (consumption patterns, markets), aiming at a sustainable use of resources. The strategy of this integrated policy is based on three stages of the decision-making process that determine the environmental impact of product life cycle: first, in the application of the polluter-pays principle when setting prices of products; second, in the informed choice of consumer and; third, in the ecodesign of products. Voluntary Environmental Management Systems (EMAS and Environmental labels) and Local Agenda 21 are examples of instruments that can be used in the implementation of an integrated product policy.

4. Strategies or action plans to improve resource efficiency for individual economic sectors, products or product groups

In addition to the instruments mentioned in Q1, at national level there are several others more specific strategies or action plans that improve resource efficiency in individual and economic sectors:

1. GREEN PUBLIC PROCUREMENT (GPP)

The national GPP action plan (NAP) approved for the period 2007-2010 by the Council of Ministers Resolution No. 65/2007 indicates a list of specific products and services for which environmental criteria were developed to foster their reduction of energy use, CO₂ emissions, the use of raw material and natural resources, among others. The following product and service groups are included in the NAP:

- Conception and construction of public works including lighting and equipments;
- Transport, including services and equipment of transports;
- Energy;
- Office supplies, including IT, communication and printers and photocopy machines,
- faxes and multifunction equipment;
- Office items (including paper);
- Cleaning products;
- Services supply in the field of management and maintenance of public equipment and infra structures.

The NAP is currently under review, to define the strategy for the period 2011-2013.

<http://siddamb.apambiente.pt/publico/documentoPublico.asp?documento=27998&versao=1>

2. EUROPEAN UNION ECOLABEL

Also framed by the Integrated Product Policy / Production and Consumption Sustainable Standards, EU Ecolabel is an information-based market instrument that aims to stimulate supply and demand for products with a reduced environmental impact, thereby contributing to a sustainable development. It allows the manufacturer or supplier to communicate the environmental performance of the product and guides the buyer on their market choices, informing them of which products have better environmental performance when compared to other products designed for the same purpose.

3. NATIONAL ENERGY STRATEGY FOR 2020 (ENE 2020)

The National Energy Strategy for 2020 (ENE 2020), established by the Cabinet Resolution 29/2010, of April 15th 2010, continuous the previous strategy (from 2005). Two of the core objectives are the increase of RES and the improvement of energy efficiency, to enable reduction of imports and increase security of supply, as well as reduce the environmental impact and CO₂ emissions. The market deployment of RES and the development of R&D and industrial clusters for new energy technologies became also a major policy objective, aiming to contribute to economic growth/development and job creation. The ENE 2020 is based on five main axes: Setting an agenda for the competitiveness, economic growth and energy independence; Investing in renewable energy; Promoting energy efficiency, namely through sustainable mobility, deployment of smart grids and the implementation of a new National Energy Efficiency Action Plan (NEEAP); Ensuring security of supply, through the diversification of the energy mix as well as the reinforcement of the interconnections with European grids; Promoting economical and environmental sustainability.

The most relevant results expected from ENE 2020 are: the reduction of external energy dependence to 74% by 2020; achievement of the 2020 climate change national commitments (31% of gross final energy consumption from renewable sources, 20% of reduction of the final energy consumption); promotion of a sustainable development and the creation of conditions for fulfilling the Portuguese goals of GHG emissions under the European commitments.

http://www.portugal.gov.pt/pt/GC18/Documentos/MEID/ENE_2020_Apres.pdf

4. NATIONAL RENEWABLE ENERGY ACTION PLAN (PNAER)

Portugal has assumed targets concerning renewable energy, through the submission of the National Renewable Energy Action Plan (NREAP) in July 2010, to the European Commission. According to Directive 2009/28/EC, on the promotion of renewable energy sources, each Member State must submit a NREAP to the European Commission by June 30th 2010. The Action Plan defines the national targets with regard to the share of energy from renewable sources used in the transport, electricity and heating and cooling sectors in 2020, as well as the respective trajectories for penetration in accordance with the time for implementing the measures and actions that have been envisaged for each of these sectors. The Plan considered all pertinent contributions and explored relevant synergies, more specifically, the cooperation between local, regional and national authorities, the possibility of using mechanisms to physically or statistically transfer energy, joint projects with other Member States and national policies to develop existing endogenous resources and to mobilise new endogenous resources.

http://www.ebb-eu.org/legis/ActionPlanDirective2009_28/national_renewable_energy_action_plan_portugal_pt.pdf

5. NATIONAL ENERGY EFFICIENCY ACTION PLAN (PNAEE)

A National Action Plan for Energy Efficiency (PNAEE) was enacted in 2008 by means of the Council of Ministers Resolution 80/2008 and comprises a set of measures aimed at an increase in energy efficiency, equivalent to 9.8% of total final energy consumption by 2015. The Plan is made up of a broad range of programmes and measures considered crucial for Portugal to achieve, and surpass, the 9% target set under Directive 2006/32/EC on End-Use Efficiency and Energy Services. The PNAEE aims to bring greater coherence to energy efficiency policies, address all sectors and aggregate the various measures previously in place. It also introduces a wide range of new measures on twelve specific programmes. The measures in the Action Plan target energy efficiency improvements in all sectors, with more than two thirds of the projected energy savings coming from the transport (38%) and industry combined (30%). Full implementation of the plan could save a total of 1.79 Mtoe of TFC or the equivalent of 4.77 GWh of electricity consumption over the 2008 to 2015 period.

The PNAEE encompasses four broad sectors: Transport (Vehicle renewal; Urban mobility; Transport efficiency system), Residential and Services (Home and office renewal; Building efficiency system; Renewables just in time and solar programme), Industry (Industry efficiency system), and the Public sector (State energy efficiency). It also establishes goals in three cross-cutting areas: Consumer Behaviours (Plus programme; Operation E), Taxation (Green taxes) and Incentives and financing (Energy Efficiency Fund).

<http://www.portugal.gov.pt/pt/Documentos/Governo/MEI/PNAEE.pdf>

http://www.portugal.gov.pt/pt/GC18/Documentos/MEID/PNAEE_Execucao2009.pdf

6. NATIONAL PROGRAMME FOR CLIMATE CHANGES 2006 (PNAC)

The National Climate Change Programme 2006 (PNAC) includes a set of policies and measures aiming to control and reduce emissions of GHG, so that Portugal might meet the commitments under the Kyoto Protocol and the Sharing Agreement in the EU, by which Portugal was forced to limit, between 2008 and 2012, the increase in GHG emissions by 27% when compared to the value registered in 1990. This programme includes policies, measures and instruments as part of a reference scenario and a set of additional measures for different sectors, with impact on the national balance of GHG emissions.

<http://www.dre.pt/pdf1sdip/2006/08/16200/60426056.PDF>

<http://www.dre.pt/pdf1sdip/2008/01/00300/0010600141.PDF>

<http://dre.pt/pdf1sdip/2010/04/06400/0109001106.pdf>

7. NATIONAL PROGRAMME FOR SPATIAL PLANNING POLICY

It is an instrument of territorial development of strategic nature that sets out the main options of relevance to the organization of the national territory, being one of its strategic objectives at national level the following: To preserve and enhance biodiversity, resources and natural landscape and cultural heritage, use of energetic and geological resources in a sustainable way, and prevent and minimize risks.

http://www.dgotdu.pt/pnpot/Storage/pdfs/Sumario_PNPOT.pdf

http://www.dgotdu.pt/pnpot/Storage/pdfs/PNPOT_PAcaoFinal.pdf

8. THEMATIC OPERATIONAL PROGRAMME FOR TERRITORY VALUING (2007-2013)

It promotes the qualification of solid waste management infrastructures and its management optimization (need for adoption of improved processes and management technologies and waste treatment), aiming at the sustainable use of natural resources and reducing the public costs related to this sector by increasing its competitiveness, contributing directly to a sustained growth. The Programme has a Priority Axis "National Infrastructures for Municipal Solid Waste" oriented for:

- a) Installation, remodeling or expansion of units of mechanical treatment and / or biological treatment (MBT), including mechanical separation and / or organic recovery by anaerobic digestion or composting.
- b) Complementary infrastructures of MBT, in particular, composting of green plants, transfer stations, units of recovery of biogas from anaerobic digestion units, and units for recovery of waste fractions, including the production of fuels from waste; actions nationwide with a view to reducing the production of MSW and the mobilization of citizens for waste separation at source.

<http://www.qren.pt/download.php?id=1155>

9. INTEGRATED POLLUTION PREVENTION AND CONTROL (IPPC)

Two of the IPPC operator's obligations are "using energy and water efficiently" and "avoid waste production, or, failing that, to promote their recovery or, if that is not technically and economically feasible, their elimination in order to avoid or reduce their impact on the environment ". IPPC is regulated by the national law 173/2008, 26th August 2008.

IPPC operators should apply the Best Available Techniques (BAT) described in the specific and horizontal BREF (BAT-Reference), including techniques that aim the reduction of water, energy and raw material consumption and waste production. According to the provisions established, not applying the techniques described in BREF must be justified by the operator and are subject to approval.

10. Second National Program for the Efficient Use of Water (PNUEA)

The Portuguese National Program for the Efficient Use of Water - PNUEA, was approved by the Resolution of the Council of Ministers No. 113/2005 of 30 June, and its main objective is to promote efficient water use in Portugal, especially in the urban, agricultural and industrial sectors, helping to minimize the risk of water shortages and improve environmental conditions in water resources. PNUEA sets the following targets to be achieved in ten years time:

- 80% of efficiency in water consumption in the urban sector;
- 65% of efficiency in water consumption in agriculture;
- 85% of efficiency in water consumption in industry sector

<http://siddamb.apambiente.pt/publico/documentoPublico.asp?documento=27314&versao=1>

11. Framework on Waste Management

Some of the general principles established, such as the Prevention and Reduction Principle, the Waste Management Operations Hierarchy and the Citizen Responsibility Principle, contribute for savings in natural resources use.

12. Waste Management National Plan (expected to be adopted in the second half of 2011)

It establishes strategic guidelines, at a national level, for the waste management policy and guidance rules for the waste management specific plans in order to ensure the Principles referred on the framework identified in point 2 above. Its vision is to promote integrated waste management based on products' life cycle, centered on a circular economy aiming at a greater efficiency of natural resources use. One strategic goal is to stimulate the efficient use of natural resources in the economy through the promotion of responsible production and consumption standards, waste prevention and the reduction of materials and resources extraction, as well as through the usage of recycled and recovered materials in products' life cycle.

<http://www.apambiente.pt/politicasambiente/Residuos/planeamentoresiduos/Paginas/default.aspx>

<http://www.apambiente.pt/POLITICASAMBIENTE/RESIDUOS/DOSSIERS/Paginas/default.aspx>

<http://www.apambiente.pt/politicasambiente/Residuos/fluxresiduos/Paginas/default.aspx>

13. Environmental Management Systems (EMAS)

The Eco-Management and Audit Scheme (EMAS) is a voluntary environmental management tool for companies and other organizations to evaluate, report and improve their environmental performance. The scheme aims to promote continuous evaluation and improvements in the environmental performance of participating organizations. The EMAS was implemented in 1999 by national law, which defined the Competent Body (Portuguese Environment Agency) and the Accreditation Body (Portuguese Accreditation Institute).

The Competent Body established EMAS implementation procedures.

There are currently 76 organisations registered under EMAS (92 sites) and 6 accredited environmental verifiers.

The EMAS promotion is mainly developed through:

- Participation in events (conferences, workshops, seminars),
- Information on the Competent Body website,
- Promotion projects for SME,
- EMAS flag (only for registered organisations).

14. Ecodesign for energy related products (Decree-Law No.12/2011)

Defines the ecological design requirements for energy related products, improving the energy efficiency and the level of environmental protection. This Decree-Law transposes the ECODESIGN Directive (Directive 2009/125/EC) into the Portuguese law. Directive 2009/125/EC extends the scope of the former ECODESIGN Directive (Directive 2005/32/EC) to all "energy related products", instead of restraining it only to "energy-using products".

<http://dre.pt/pdf1sdip/2009/01/01800/0055500565.pdf>

15. National Water Plan and river basin management plans

The Water Law (Law No. 58/2005 of 29 December) that transposed into Portuguese law the Water Framework Directive (WFD), introduces three fundamental management tools: (i) a National Plan, (ii) River Basin Management Plans (in compliance with the WFD), and (iii) Specific Plans for Water Management.

Each one of these plans, under elaboration, combine both scientific, technical and economic approaches for managing water resources, as a way to ensure their efficient management and the development of incentive instruments for a more sustainable use of water. Reflecting the premises stated in article 9 of the water framework directive, PT is also reviewing water-pricing policies taking into account the principle of recovery of the costs of water services, action that will certainly contribute to users (namely industry, households and agriculture) use efficiently water resources.

http://www.inag.pt/index.php?option=com_content&view=article&id=9&Itemid=69

16. The Strategic Plan for water supply and Wastewater Treatment (PEAASAR 2007-2013)

This strategic document defines goals and proposes optimization measures both for wholesale water supply services and for end-user services, as well as for improving the water sectors environmental performance, clarifying the role of private initiatives and promoting the means for the creation of a sustainable cluster of enterprises adjusted to the Portuguese reality and needs.

PEASAAR 2007-2013 aims to provide:

- 95% of the Portuguese population with public water supply;
- 90% of the Portuguese population with wastewater treatment services.

As a means to monitor and assess urban water supply and wastewater services, INSAAR (National Inventory for Water Supply and Wastewater), was implemented. This TIC gathers GIS data and information on water consumption, emissions of wastewater, functioning of sanitation infrastructures, areas and population assisted, quality of services administrated and cost/benefits associated to these services.

Information provided by INSAAR contributes to the:

- Creation of indicators for the Statistics on Environment published by the National Institute of Statistics;
- Creation of indicators for monitoring and following the execution of the Strategic Plan for Water Supply and Wastewater Services (PEAASAR 2007-2013);
- Physical characterization of the water supply systems and of the wastewater treatment systems, necessary to study the pressures made on water bodies according to Law No. 58/2005 that transposes the Water Framework Directive;
- Economic and financial characterization of the water sector, including the analysis on how to recover the costs of the water supply public services and of the wastewater treatment public services;
- Creation of indicators for the Sustainable Development Indicators System, for the National Strategy of Sustainable Development and for the State of the Environment Report;
- Creation of indicators for the National Program for the Efficient Use of Water;
- Creation of indicators set at EU level.

<http://www.maotdr.gov.pt/Admin/Files/Documents/PEAASAR.pdf>

17. Construction and Demolition Waste (CDW) legislation (Decree-Law No. 46/2008)

Establishes a chain of responsibility that binds both owners and contractors of works as well as local municipalities to a proper management of the waste produced. Innovative mechanisms in planning and management are introduced, which prevent production of CDW and to recover large amounts of these types of wastes.

<http://www.apambiente.pt/politicasambiente/Residuos/fluxresiduos/RCD/Documents/Legisla%C3%A7%C3%A3o/DecretoLei46.pdf>

<http://www.apambiente.pt/politicasambiente/Residuos/fluxresiduos/RCD/Documents/Legisla%C3%A7%C3%A3o/Portaria417.pdf>

21. Waste Edible Oils legislation (Decree-Law No. 267/2009)

Establishes the Portuguese legal framework for the management of waste edible oils produced by the industrial sector, hotels and restaurants sector and domestic sector. Recycling of waste edible oils through biofuel production, is an important contribution in the context of energy policies, at national and communitarian level.

The guaranty of commercial availability of second generation biofuels, which includes biofuels obtained from waste edible oils, is desired by the communitarian policies for energy of Directive 2009/28/CE, of the European Parliament and of the Council, of 23th of April on the promotion of the use of energy from renewable sources.

The Decree-Law No. 267/2009 focuses the collection of waste edible oils produced by domestic sector, through the assigning of an important role to the municipalities and through the establishment of targets for the constitution of municipal networks for selective collection of this waste stream. Thus, it is allowed that the synergies between collection of waste edible oils and other waste produced by the domestic sector and hotels and restaurants sector are enhanced. Although the intervention of the municipalities is relevant, the legal framework is based on the co-responsibility of all stakeholders in the edible oils life cycle, such as the consumers, manufacturers of edible oils, distribution operators, waste edible oils producers and waste management operators.

To the manufacturers of edible oils are attributed specific responsibilities regarding awareness and information, as well as research and development in the matter of prevention and recovery of waste edible oils.

<http://www.apambiente.pt/politicasambiente/Residuos/fluxresiduos/OAUsados/Paginas/default.aspx>

22. Used Tyres legislation (Decree-Law No. 111/2001)

Establishes principles and standards applicable to the management of tyres and used tyres aiming: the prevention of production of these wastes, retread, recycling and other forms of recovery to reduce the quantity of waste to elimination as well as the improvement of environmental performance of all stakeholders of the tyres life cycle.

This legal framework also sets out the following targets and goals:

Goal of collection	Goal of reuse and preparation for re-use	Goal of recycling	Goal of recovery
96% of used tyres annually produced	27% of produced used tyres	69% of the used tyres collected and not re-used (retread) or prepared for re-use.	Total recovery of used tyres collected and not re-used (retread) or prepared for re-used.

<http://www.apambiente.pt/POLITICASAMBIENTE/RESIDUOS/FLUXRESIDUOS/PU/Paginas/default.aspx>

22. Strategic Plan for Municipal Waste (PERSU II)

This sets out guidelines to prevent waste generation, minimize the negative impacts of waste management in the environment and promote waste as a resource. Some of the guidelines for 2007-2016 contribute to more efficient use of resources, such as:

- Reduce, reuse, recycle;
- Select at the source;
- Minimize the landfill disposal;
- "Waste to Energy" for the not recyclable fraction;

as well as the mechanisms for the prevention of waste production:

- Promotion of Integrated Product Policy (PIP);
- Promotion of eco-consumption and other measures of individual citizens.

<http://www.apambiente.pt/politicasambiente/Residuos/planeamentoresiduos/persull/Paginas/default.aspx>

23. Strategic Plan for Industrial Waste Management (PESGRI)

Sets out the strategic principles that must be satisfied in the framework of the management of industrial waste in the country. It focuses its action in waste prevention, promotion and development of options for reuse and recycling, ensuring a high level of health and environment protection, promoting the elimination of environmental liabilities, and the development of self-sufficiency in the country with regard to waste management. This aims to create an integrated treatment of industrial waste, which contemplates the permanent inventory, monitoring and control of the movements (import/export) of waste, reducing waste requiring disposal and the establishment of a waste exchange centers and construction of integrated, recovery of waste (CIRVER).

<http://www.apambiente.pt/politicasambiente/Residuos/planeamentoresiduos/pesgri/Paginas/default.aspx>

24. National Plan for Industrial Waste Prevention (PNAPRI)

Arises in the context of PESGRI as a planning tool for Public Administration and also for all economic agents, aiming primarily to reduce the amount and hazardness of industrial waste, by implementing pollution prevention technologies within production processes. The success of its implementation is intrinsically linked to the change of strategy, attitude and behavior of economic agents and consumers themselves. 21 Sectoral Technical Guides were prepared,

which are the technical tools available to companies, claiming that the production with quality may mean resources optimization, losses reduction, including raw materials, water and energy, and the availability on the market of products of low environmental impact, with extended life cycles and more easily recyclable.

http://www.iambiente.pt/portal/page?_pageid=73,408080&_dad=portal&_schema=PORTAL&actualmenu=15581175&docs=15566505&cboui=15566505&menu_childmenu=10141024

25. Plan for Municipal Waste Prevention (PPRU)

The overall objective is to decouple economic growth from increased municipal waste production and minimize negative impacts of their management in the Environment, also taking into account their impact on management of natural resources, thus contributing to sustainable development.

http://www.apambiente.pt/politicasambiente/Residuos/prevencaoresiduos/PPRU/Documents/PPRU%202009-2016_Desp3227-2010.pdf

The following also play a role in resource efficiency at the sectoral level: eco-efficiency implementation in industry (different strategies: cleaner production; zero-waste; sustainable value); ecodesign focusing on industrial products (by client demand); environmental management systems implementation (by client demand); Energy performance and efficiency improvement in households, service buildings and public buildings; the promotion of the renewable energies integration is also under way.

5. Individual types of resources identified as priority for national or sector-specific resource efficiency policies

Mineral resources

- National Plan for Industrial Waste Prevention (PESGRI)

Energetic raw materials

- National Renewable Energy Action Plan (PNAER)
- Decree-Law No. 267/2009 on waste edible oils – contribution for biodiesel production

Renewable energy / Fossil fuels

- National Renewable Energy Action Plan (PNAER)

Water

- National Water Plan
- Strategic Plan for Industrial Waste Management (PESGRI) / National Plan for Industrial Waste Prevention (PNAPRI)

Wood/Forest Resources

- Plan for Municipal Waste Prevention (PPRU)
- National Plan for Industrial Waste Prevention (PNAPRI)
- Green Public Procurement

Food

- Plan for Municipal Waste Prevention (PPRU) – one of the components of the plan focused on avoiding food waste produced at home from going to landfill, through their production reduction and through the recovery by composting or anaerobic digestion of the fraction that is not possible to prevent.

Construction materials

- Strategy for Construction and Demolition Waste (Decree-Law No. 46/2008)
- Considering the necessity to limit the use of natural resources and therefore promote the introduction of recycled constituents in the manufacturing of new materials, Portugal establishes the use by public bodies responsible for hiring construction works, rehabilitation or maintenance of road infrastructures of bituminous mixtures incorporating modified bitumen with rubber from the recycling of tyres, in its end-of life, on pavements (Order No. 4015/2007).

Products with high pollutant potential and critical material contents

- National Plan for Industrial Waste Prevention (PNAPRI)

6. Strategic objectives, targets and indicators on resource efficiency

Beyond the objectives and goals set in European Directives, others should be pointed out that integrate several Plans in force or that are being developed in Portugal.

Waste Management National Plan (the upcoming PNGR), National Plan for Industrial Waste Prevention (PNAPRI), National Renewable Energy Action Plan (PNAER), Plan for Municipal Waste Prevention (PPRU) and Strategic Plan for Municipal Waste (PERSU II) settle several strategic objectives, targets and indicators, listed below:

Strategic objectives:

- Resource conservation and increasing efficiency of resource use;
- Increase the life time of products;
- Reduction of use of water, energy and raw materials;
- Ensure compliance with national commitments in the context of European policies on energy and climate change;
- Reduce dependence on foreign energy;
- Consolidate the industrial cluster associated with wind power and create new clusters associated with new technologies in the renewable energy sector creating new jobs;

- Promote sustainable development, creating conditions for fulfilling commitments undertaken by Portugal in reducing emissions of greenhouse gases, through greater use of renewable energy sources and energy efficiency.

Indicators:

- Decoupling of economic growth from the use of natural resources (Domestic gross product at constant prices/ domestic consumption of materials); k€/t (reference year 2007);
- Decoupling of economic growth from the waste production (Waste production / Domestic gross product at constant prices); t/k€ (reference year 2007);
- Increase waste integration in economy ((Preparation for re-use + recycling) / waste production); % (w/w);
- Promote the use of reusable packaging; number of activities offering products in glass reusable package; number of commercial activities promoting reusable bags; number of reusable bags distributed by commercial activities; amounts and types of products offered in reusable glass container in a given region /municipality;
- Rational use of paper and information dematerialization (schools, offices, households); number of activities that apply best practices of responsible consumption of paper;
- Avoid excessive use of packaging materials; number of commercial activities promoting products with less packaging;
- Promotion of domestic composting; number of housing making composting, estimate of the amount of domestic compost produced;
- Reduction on production of domestic waste (capitation);
- Reduce landfilled waste amounts;
- Increase recycling of packaging waste;
- Reduce the % of energy imports;
- Increase the % of final energy consumption with origin in renewable sources;
- Energy intensity.

In addition it could also be referred the Decree-Law No. 117/2010 of 25 October:

Strategic objectives:

Introduction of biofuels and other renewable fuels for road transport practices, replacing fossil fuels with the aim of reducing emissions of GHG to increase the diversification of primary energy consumption and to reduce dependence on foreign energy. It Includes targets for incorporation of biofuels.

Indicators:

- Reduction in GHG emissions.

Waste Management National Plan (the upcoming PNGR) in details:

The upcoming Waste Management National Plan is a macro strategic document, which establishes quantitative targets at this level, linked to performance indicators and a set of operational objectives to be achieved through the implementation of actions.

The underlying vision is "Promoting a waste management integrated in the life cycle of products, centered on a circular economy, ensuring a greater efficiency in the use of natural resources " and advocates a policy of waste management for Portugal based on two strategic objectives:

- **Promoting efficient use of natural resources in the economy**, by the promotion of standards for responsible production and consumption, waste prevention and reduction of material and energy resources extraction, and the reuse of materials, recycled and recovered in the life cycle of products.
- **Prevent or reduce the adverse impacts arising from waste production and management**, through the increased in efficiency of processes and technologies involved in waste management, through a life cycle approach, avoiding the transfer of impacts between life cycle stages of products/materials, namely by the adoption of criteria that combine the technical feasibility and economic viability aiming at the protection of health and the environment.

These Strategic Objectives have the following quantitative targets:

Promoting efficient use of natural resources in the economy:

- Decouple economic growth from material consumption;
- Decouple economic growth from waste generation;
- Increasing integration of waste in the economy.

Prevent or reduce the adverse impacts arising from waste production and management:

- Reduce waste production;
- Reduce the amount of waste disposed;
- Reduce emissions of greenhouse gases from the waste sector.

Given these goals, a road map towards compliance was set till the horizon of PNGR (2020).

PNGR establishes nine Operational Objectives:

- Prevent waste production;
- Promote the closure of material cycles and the use of energy cascading;
- Consolidate and optimize the network of waste management;
- Manage and recover environmental liabilities;
- Encourage environmental citizenship and agents' performance;
- Promote training and qualification of agents;
- Promote awareness of the sector in the logic of life cycle;
- Streamline administrative processes and strengthen control mechanisms;
- Adapt and enhance the application of economic and financial instruments.

Bellow are presented some of the actions associated to the operational objectives:

- Promotion of voluntary agreements with the priority sectors in order to achieve cleaner production and sustainable design of products;
- Promoting communication and awareness for the prevention of waste production;
- Promotion of purchases in the public sector with sustainability criteria that prevent waste and encourage reuse;

- Establish and implement an action program to promote the demand for recovered materials;
- Promote the establishment of industrial symbiosis;
- Promote the establishment of new industrial areas developed with plans for rationalization of energy and materials and rehabilitation of existing industrial zones.

7. The institutional setup for the development and implementation of resource efficiency policies

The process of development and implementation of policies addressing the topic of resource efficiency involve several Ministries including Environment and Spatial Planning, Economy, Agriculture, Health, Education and Science.

- POEM – Maritime Spatial Management Plan is an inter-Ministerial initiative and is being promoted and coordinated by INAG, IP. This Plan is being developed by a multidisciplinary team, involving various ministries as well as several universities providing advisement.

This Plan is one of the fundamental pillars of the National Strategy for the Seas and aims to survey all activities taking place in maritime space, manage its use and guarantee the sustainability of its resources, in conjunction with coastal zone management.

Ministry for Education

- **National Plan for the Efficient Use of Water (PNUEA)**

The Ministry of Education is part of the Inter-ministerial Workgroup, under PNUEA. PNUEA's main objective is to promote efficient water use in Portugal, especially in the urban, agricultural and industrial sectors, helping to minimize the risk of water shortages and improve environmental conditions in water resources.

Agriculture and Forestry

The Operational Program for Agriculture and Rural Development (AGRI) and the Measure Agriculture and Rural Development of Regional Operational Programs (AGRIS) met during closing, having intended as objective, a "strong alliance between agriculture as a modern and competitive productive activity, and sustainable development of rural areas in environmental, economic and social terms.

These programs began in 2001 providing a wide range of measures to support investment for modernization of farms, processing of agricultural products, promotion of quality and certification, forestation, agro-environmental, training, dissemination, etc.

For the period from 1 January 2007 to December 31, 2012, the Operational Program for Fisheries, known as PROMAR, was approved by the European Commission for assistance from the European Fisheries Fund (EFF) in Portugal.

The priorities of PROMAR are as follows:

- Axis 1 - Measures for the adaptation of the Portuguese fishing fleet;
- Axis 2 - Aquaculture, processing and marketing of fishery and aquaculture;
- Axis 3 - Measures of common interest;
- Axis 4 - Sustainable development of fishing areas;
- Axis 5 - Technical assistance.

The assessment of the impacts of the strategic nature of the interventions outlined in PROMAR was the subject of an environmental report entitled "Strategic Environmental Assessment".

Transport

The **Sustainable Mobility Project**, an APA initiative was aimed at the development/consolidation of Sustainable Mobility Plans for 40 municipalities selected for the project. The project's overall goal is to provide safer, healthier and more environmental friendly mobility within urban communities, addressing concerns such as equitable accessibility to social facilities and central areas, public transport services, development of soft modes of transport, air quality and climate change, road safety, among others.

Besides the Ministry of Environment and Spatial Planning, the development and implementation of the Project also involved Ministry for Public Works, Transport and Communications and the Ministry for Internal Administration, which formed the Environment and Transport steering committee that assisted the Project in its various phases.

<http://www.apambiente.pt/politicasambiente/mobilidadesustentavel/Paginas/default.aspx>

The National Spatial Development Policy Programme

The National Spatial Development Policy Programme (NSDPP), adopted by Parliament in July 2007 (Parliament Act 58/2007, 4 September 2007), is a strategic policy document, defining the vision and the territorial development model for the whole Portuguese territory with a medium-term perspective (2025). It is an instrument for the coordination of all public policies with territorial impact.

The NSDPP is coherent with the main national policies and strategies, namely, with the National Sustainable Development Strategy and the Lisbon Strategy, being a key instrument for its implementation.

The NSDPP sets strategic and specific objectives also for the different sectoral policies with territorial impact and identifies measures to fulfil those objectives.

Being the keystone document of the territorial management system, it sets the strategic framework and guidelines for all the other spatial and urban development instruments at national, regional and local level.

The “Territorial Model” defined by the NSDPP is structured according to 4 areas: (i) Hazards; (ii) Natural resources, agriculture and forest development; (iii) urban system and (iv) accessibility and international connectivity.

The National Plan for Environment and Health (PNAAS) is coordinated by the Portuguese Environment Agency (APA) and the Directorate - General of Health (DGS). It aims to improve the effectiveness of policies to prevent, control and reduce health risks caused by environmental factors, promoting the integration of knowledge and innovation and thus contributing to the economic and social development of the country.

PNAAS seeks a deeper understanding, systematization and integration of scattered information, the reinforcement of research and the identification of emerging issues, to focus on prevention, control and reduce risks, determine the adequacy of policies by priority, increased awareness, education and training of professionals and the general population, and greater articulation with international initiatives on environment and health.

<http://www.apambiente.pt/politicasambiente/AmbienteSaude/emportugal/Paginas/default.aspx>

In order for the reduction of energy consumption be achieved without reducing indoor air quality and, as a result, the health of occupants, Decree-Law No. 79/2006 of April 4, established limits for the main contaminants of indoor air, which require regular inspections of indoor air quality and verification of components of HVAC systems, performed by qualified experts.

Depending on the specific instrument concerned, different forms of partnerships were established: Steering Committees and Working groups, the involvement of non-Governmental Environmental Organizations, the civil society and other stakeholders.

The European Commission presented its Communication entitled “A resource-efficient Europe - Flagship initiative under the Europe 2020 Strategy” to Member States on Council Working Party for Environment and on Council Working Party for Energy. Portugal is therefore being called to present its position through Ministry of Environment and Ministry of Economy. At this level, both Ministries are playing an important role at discussions.

The Environment Ministry is the competent authority for the Thematic Strategy on Resource Efficiency. Following the recent Commission Communication, at the EU level, resource efficiency is being dealt at Council Working Parties, namely Working Party for Environment, Working Party for Energy and Working Party for Competitiveness. National coordination for this purpose is done in regular meetings at this stage. At national level there are several sector initiatives regarding the matter which involve the articulation between different ministries (see examples above).

8. Selected policy instruments or initiatives on resource efficiency presented in more detail

Waste Management National Plan (the upcoming PNGR) in detail:

The upcoming Waste Management National Plan is a macro strategic document, which establishes quantitative targets at this level, linked to performance indicators and a set of operational objectives to be achieved through the implementation of actions.

There are planning instruments for the waste management policy that set nationwide strategic objectives for the coming years and lays down guidelines to be defined by sector-specific plans for waste management.

In 2009, came into force the Portuguese legal framework for creation, management and functioning of the Organised Waste Market (OWM), which comprises all the electronic platforms of negotiation recognized by the National Authority of Waste. In the market waste, all categories, for recovery, can be traded with exception of dangerous waste.

The OWM is an economic voluntary instrument which aims to facilitate and promote waste trading as well as potentiate its recovery and reintroduction in the economic circuit, decreasing the demand for primary raw materials and promoting industrial symbiosis. It aims to be an area of negotiation that gathers the several platforms where the producers give order to buy or sell waste.

In 2010, a management entity was authorized, by the National Authority of Waste, to manage a negotiation platform integrated in the OWM.

With this instrument it is foreseen a contribution to several goals set in economic policies, waste management strategies and sustainable development, such as reduction of waste sent to elimination, the incentive to settlement of new industries for use of waste of other industries and influence of development of new technologies for recovery and use of industrial waste and consequently the minimization of exploitation of natural resources, namely of raw materials and sources of energy reducing environmental impacts.

<http://www.apambiente.pt/POLITICASAMBIENTE/RESIDUOS/MERCADORESIDUOS/Paginas/default.aspx>

The transposition into national law of the Waste Framework Directive took advantage of the clarification of the definition of waste, as well as the procedures identified to be applied, where necessary, to byproducts that are not waste, or to waste that ceases to be waste, which enables the reintroduction of materials in the economy. The establishment of ambitious recycling targets by the Waste Framework Directive, as well as, the approach made by material, was also considered in the national law, in order to potentiate recovery and therefore reduce resource needs.

The legal framework for construction and demolition waste management, approved in 2008, set the technical standards for construction and demolition waste management operations to ensure that waste reduction, reuse and recycling policies are applied to its flow.

Economic instruments can also play a crucial role in the achievement of prevention and management objectives. For example, waste often has value as a resource, and the further application of economic instruments may maximise environmental benefits in other areas. The use of such instruments at the appropriate level can therefore encourage resource economy and was a deliberate choice at national level.

In line with Law No. 58/2005 of 29 December that transposes into Portuguese law the Water Framework Directive, a new economic and financial regime for water resources was introduced for supporting the implementation of a new policy for water pricing in Portugal.

This new regime, published in 2008 (Law-Decree No. 97/2008 of 11 June) foresaw 3 major economic and financial instruments for water management, based on the application of the polluter-pays principle:

- the water resource tax, applicable to the use of water resources, namely to water abstraction, wastewater discharges, extraction of inerts and occupation of public hydric property (into force since July 2008 and paid by all water users);
- the regulation of tariffs charged to water public services (into force since 2009 and created by a tariff guideline made by the Portuguese Water and Waste Services Regulation Authority);
- the Water Resources Protection Fund, that allows the allocation of a part of the incomes arising from the application of the water resource tax, to projects from users that may contribute to the improvement of water resource management (created in 2009 by Law-Decree No. 172/2009 of 3 August and Regulation published in 2010 by Ordinance No. 486/2010 of 13 July).

Portugal's Stability and Growth Plan 2010-13 foresees:

- introducing a fiscal incentive for purchases of electric vehicles by businesses, while discouraging purchases of conventional fuel-powered vehicles and the provision of such vehicles as benefit-in-kind to employees;
- extending tax credits for the purchase of energy efficient equipment;
- extending the excise duties on energy products to electricity, as required under EU legislation;
- revising the vehicle registration tax by annually reducing the CO₂ emission categories by 5g/km, so as to maintain the revenue-raising ability of the tax and better link it to development of the car market;
- rationalisation of tax expenditure related to excise duties on energy products, linking fiscal benefits and exemptions to more rigorous environmental criteria;
- rationalisation of tax expenditure related to vehicle taxes, linking fiscal benefits and exemptions to more rigorous environmental criteria.

In particular, the car scrapping tax incentive was limited to the purchase of vehicles with CO₂ emissions up to 130g/km as from 2010 (from a limit of 140g/km in 2009) and will be progressively restricted to the purchase of electric vehicles and of cars with CO₂ emissions up to 100g/km. However, the 2011 State Budget does not envisage the protraction of the vehicle scrapping scheme for internal combustion engine vehicles. Such incentive is from 2011 onwards restricted to the purchase of electric vehicles.

Source: Ministry of Finance and Public Administration.

Initiative Business and Biodiversity (B&B)

The Initiative B&B seeks to promote, through voluntary agreements and based on public commitments, a common ground for collaboration between business and biodiversity, which promotes the introduction of biodiversity in the strategies and policies of companies, contributing to stop the loss of biodiversity at local, national and global levels.

This Initiative is complementary to other actions and initiatives for biodiversity protection, being included in the set of efforts to halt biodiversity loss. The Initiative B&B was launched in 2007 and 59 companies and organizations have already joined it. This common ground for collaboration between two distinct areas is allowing the development of actions and projects for biodiversity.

The commitments have focused in programs for biodiversity improvement, in minimizing the impact of several activities in biodiversity or in dissemination activities. The majority of such commitments reflect a corporate policy which is focused in a continuous improvement of its environmental performance.

The Business and Biodiversity Initiative is an European initiative launched during the EU Portuguese Presidency.

(http://portal.icnb.pt/NR/rdonlyres/220FFBF4-CBBB-431D-9208-30A20C708D48/0/BB_Sumário_Executivo.pdf)(http://portal.icnb.pt/NR/rdonlyres/2AB3058D-F2E2-4A54-AD8C-6F38044EEA1F/0/BB_Conference_Proceedings.pdf).

The Institute for Nature Conservation and Biodiversity is the sponsor of the Initiative. This is not a national initiative but the way it is promoted and supported does not follow a predetermined format at Europe level. However, it assumes the basic principles / model taken in their release.

<http://portal.icnb.pt/ICNPortal/vPT2007/O+ICNB/Iniciativa+Business+and++Biodiversity/>

Some early indication of results:

year	membership
2007	28
2008	17
2009	4
2010	11

Commitments

Companies and organizations join the Initiative B & B through commitments that include actions, initiatives and projects.

There are several types of actions, some more materialized than others. For example memos include:

- Programs for increasing biodiversity,
- Minimizing the impact of the activity on biodiversity,
- Dissemination of biodiversity,
- Research programs on biodiversity,
- The enhancement management of biodiversity,
- The awarding of prizes to models of sustainable management of an ecosystem,
- Internalization of the concept in its supply chain,
- Intervention in degraded systems with a view to their rehabilitation.

Projects (initiatives, actions) that are developed under the Initiative B & B mostly last several years and have different rhythms. The commitment B & B is, in some cases, the lever to start up projects already equated and associated with others that were already in development. Often several initiatives are undertaken.

Examples of results:

- implementation of habitat restoration projects,
- recovery of water lines,
- study on "Evaluation of Ecosystem Services from a *Montado*",
- installation and conversion of vineyards and olive groves in the organic production method,
- habitat management (improvement, restoration, rehabilitation and maintenance) for specific projects for wildlife,
- Project for the conservation of streams and wetlands in the basin of a reservoir.

The Government is the initiative promoter, through the ICNB.

9. Topics of interest and information needs for follow up work

Portugal considers that the topics listed below are of major importance to be addressed in a future Workshop on Resource Efficiency Policies:

- Sharing of available national resource efficiency programmes and associated framework;
- Discussion of strategic objectives, targets and indicators on resource efficiency within existent resource efficiency programmes;
- Sharing of Good Practices implemented in different countries;
- Debate on resource efficiency policies in other policy frameworks;
- Importance of collecting information in an harmonised way in order to embody resource efficiency policies aiming to compare results and the establishment of common indicators;
- Tailor the ecotax reform to promote resource efficiency policies;
- Extended producer responsibility contribution to resource efficiency.

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