



Portugal

Highlights in 2008

Environment policy in Portugal in 2008 focused on two areas - energy and health - so most effort and resources were concentrated in these areas. Several key policy documents and

laws were approved. They include the National Action Plan on Energy Efficiency, with the objective to save 20% of energy consumption by 2015. Also adopted were the Portuguese Environmental and Health Action Plan for the period 2008-2013 and the Coastal Action Plan for the period 2007-2013. And it is important to point out the approval of the new Public Procurement Code, which includes several environmental measures.

In the coming years, more efforts are needed from Portugal to address the issue of sustainable transport. The decisive input given by the Portuguese presidency of the EU council during 2007 gives reason for a positive outlook.

Climate change and energy

	Portugal				EU-27 total	rank in EU-27
	2000	2005	2006	target		
Total Kyoto GHG emissions						
– million tonnes (Mt) CO ₂ eq.	81.7	87.4	83.2	76.4 (by 2008-2012)	5142.8	
– from energy supply and use, including transport (Mt CO ₂ eq.)	59.4	64.3	59.9		4098.7	
– from transport (Mt CO ₂ eq.)	19.4	19.9	20.1		992.3	
					EU-27 average	rank in EU-27
– per capita (tonnes CO ₂ eq.)	8.0	8.3	7.9		10.4	7
– per GDP (tonnes CO ₂ eq. per 1000€ GDP)	668.3	684.5	642.5		495.7	14
– trend (% change compared to base year*)	+35.9%	+45.4%	+38.3%	+27.0% (by 2008-12)	-10.8%	24

* Base year for CO₂, N₂O and CH₄ is 1990 and for F-gases is 1995.

		target	EU-27 average
– Projected 2010 emissions trend compared to base year*			
– with existing measures, Kyoto mechanisms and carbon sinks	+26.9%	+27.0%	-13.4%
– with existing and additional measures, Kyoto mechanisms and carbon sinks	+22.7%	(by 2008-12)	-16.3%

* Base year for CO₂, N₂O and CH₄ is 1990 and for F-gases is 1995.

	Portugal			target	EU-27 average	rank in EU-27
	2000	2005	2006			
Average CO ₂ emissions from new passenger cars sold (grams CO ₂ /km)	168.0	144.0 (2006)	143.2 (2007)	130 by 2012-15 for EU-27	157.5	1
Electricity produced from renewable energy sources (% gross electricity consumption)	29.4%	(2006)	(2007)		15.6%	4
– from hydropower	25.3%	20.2%	18.4%	(by 2010)	9.2%	
– from wind	0.4%	5.4%	7.4%		3.1%	
– from biomass	3.5%	3.7%	3.9%		3.0%	
Combined heat and power generation (% gross electricity generation)	10.0%	11.6%	11.6%	18% (by 2010 for EU-15)	10.9%	13
Energy consumption per capita (kg oil eq.)	2 452	2 563	2 394		3 694	4
Energy intensity - Energy consumption per 1000€ GDP (kg oil eq.)	236	243	225		202	14

Climate change was a very important environmental policy issue in Portugal in 2008, particularly in relation to energy efficiency. The Portuguese government approved the National Plan on Energy Efficiency, which establishes as one of its objectives to save 20% of energy consumption by 2015. The National Plan

includes an important set of energy efficiency measures in transport, services, industry and the public sector. It is complementary to the measures identified under the National Climate Change strategy, contributing to the achievement of national targets under the Kyoto Protocol.

In 2006, Portugal's greenhouse gas emissions were 38% higher than the base year level, which is well above its Kyoto target of +27% for the period 2008-2012. According to the latest data, Portugal is projected to achieve its target if additional measures are also applied.

In 2007 Portugal produced 30.1% of its electricity from renewable sources, mainly hydro power. The 2010 indicative target for Portugal – according to the 2001 Directive on the Promotion of Electricity produced from Renewable Energy Sources – is 39%. The government's own objective for 2010 is to reach 50% and 59% by 2020. The strategy for achieving these objectives is to increase renewable energy capacity substantially, in particular wind power and solar power capacity

The Strategy for achieving the national targets for blended fuels for transport was also approved. It aims at promoting the use of biofuels in the transport sector. A set of standards was defined, including a certification mechanism for the blending of biofuels, and technical rules that allow the blending of higher biofuel levels.

Following the adoption of the climate and energy package in December 2008, Portugal agreed to a maximum increase of its greenhouse gas emissions by 2020 by 1% compared to 2005 levels for non-ETS sectors (e.g. buildings, road transport and farming). Furthermore, Portugal has committed to achieving by 2020 a share of energy from renewable sources in gross final energy consumption of 31% (up from 20% in 2005).

Nature and biodiversity

	2000	2006	Portugal		target	EU-27 average	rank in EU-27
			2007	2008			
Natura 2000 area (sites designated under Habitats and Birds Directives) as % of terrestrial area		20.3%	20.4%	20.3%		17.0%	
Sufficiency of site designation under the Habitats Directive	81.6%		87.7%	87.9%	100%		
Area occupied by organic farming (% of Utilised Agricultural Area)	1.2%	7.3%	6.3%		7% * by 2008	4.2%	10
Freight transport (billion tkm)	29	47.3	48.8			EU total 2505.0	
– % road	92.5%	94.9%	94.7%			76.9%	22 of 26
– % rail	7.5%	5.1%	5.3%			17.4%	20 of 26

* Indicative target according to the proposed action plan, which was not implemented.

The Portuguese government approved the Sectoral Plan on the Natura 2000 Network, which is developed on a macro scale for its mainland territory and defines the strategic orientations for the management of the territory covered by these areas in order to ensure their environmental conservation.

In June 2008, the Operational Programme on Territorial Valorisation was approved. This Operational Programme is part of the National Strategic Reference Framework 2007-2013. It focuses on solving the problems that Portugal still faces in terms of structure and spatial planning and on promoting

the factors that improve the competitiveness of regions. It involves integrated action in the areas of natural resources and risk management, urban and rural development, transport, energy and climate change, competitiveness, and infrastructure and public services.

As part of Portuguese restructuring of the policy for the conservation of nature and biodiversity, the Assessment of the National Strategy for the Conservation

of Nature and Biodiversity was under consultation in 2008. This process includes consultation with the National Heritage on issues including: scientific research and knowledge, the Nature Conservation Network, valorisation and conservation of protected areas and the Natura 2000 Network, cooperation between local and State administrations, etc.

Environment and health

	Portugal				EU-27 average	rank in EU-27
	2000	2005	2006	Ceiling		
Urban population exposure to air pollution by particles (annual mean concentration, $\mu\text{g}/\text{m}^3$)	32.4	34.3	32	30.0	30.0	13 out of 23
Urban population exposure to air pollution by ozone (SOMO35 level, $\mu\text{g}/\text{m}^3 \cdot \text{day}$)	2 203	4 145	4 225	1 632	4 417	10 out of 23
Air pollutant emissions (thousand tonnes)				(by 2010)	EU27 total	
– sulphur dioxides (SO_2)	307	214	191	160	7946	
– nitrogen oxides (NO_x)	298	289	267	250	11198	
– non-methane volatile organic compounds (NMVOCs)	284	287	284	180	9391	
– ammonia (NH_3)	71	63	65	90	4006	
	1990	Latest available year (2005)				
Water exploitation index	9.9%			1.5%	n.a.	3

In June 2008 the Portuguese Environment and Health Action Plan for the period 2008-2013 was approved. The overall goals of this plan are: prevention, control and risk reduction strategies; integration of knowledge and innovation; and economic and social development. The Action Plan aims to systematize and integrate dispersed information; strengthen research and identify

emerging issues; focus on prevention, control and reduction of risk; adapt consultation policy to each priority area; increase awareness, education and training for professionals and the general public; and reinforce coordination with international efforts on environment and health.

Natural resources and waste

	Portugal			target	EU-27 average	rank in EU-27
	2000	2006	2007			
Municipal waste generated (kg per capita)	472	545	472		522	11
– % landfilled	71.6%	63.7%	62.9%		41.0%	15
– % incinerated	20.3%	20.3%	19.3%		19.9%	
	2000	2005	2006			
Recycling of packaging waste (as % total packaging waste)	31.0%	44.3%	51.4%	55%-80% (by 2011)	56.5 %	14

As far as the waste framework is concerned, in March 2008, the specific regime on the management of waste generated by construction and demolition was approved by the Ministers Council. This regime is designed to implement measures to reduce, reuse and recycle waste.

In February 2008, the Coastal Action Plan 2007-2013 was approved. This Plan includes proposals for actions to be taken along the Portuguese coast for the period 2007-2013. It defines priorities for action at national level, and other measures at regional level.

Better regulation and implementation

	Portugal			EU-27 total
	31/12/2006	31/12/2007	31/12/2008	
Infringements of EU environmental legislation	28	26	21	481

Portugal has a high (but decreasing) number of complaints compared to other Member States. Several NGO complaints relate to infrastructure with negative effects on the Natura 2000 network. The implementation of infrastructure projects inside or affecting the Natura 2000 network (dams, high-speed train, the new Lisbon airport, tourist resorts, and irrigation schemes) is one area of concern. In 2008, Portugal adopted a national plan for the construction of 10 new dams, which was contested by some NGOs.

Use of market-based instruments

	Portugal			EU-27 average
	2000	2005	2006	
Share of environmental taxes in total tax revenue	8.0%	8.7%	8.2%	6.4%

There was an important initiative in 2007-2008 related to market-based instruments: motor vehicle taxation was reformed. With effect from July 2007, the taxable base included a 70% component related to engine capacity and a

30% environmental component related to CO₂ emissions. Since January 2008, these percentages have been changed to a 40% component related to engine capacity and a 60% environmental component related to CO₂ emissions. The purpose of this initiative is to encourage consumers to purchase more energy-efficient vehicles.

Environmental technologies

The most outstanding event in 2008 was the launching of the InovJovem Programme as a way to inspire young entrepreneurs and companies through the processes of training and internships. Its objective is to promote the training of young businesspeople, to give incentive to innovation, and to nurture growth and stability in employment. One of the training areas is environmental protection.

The ECOXXI project, coordinated by the European Blue Flag Association, aims to distinguish the good practices developed by Portuguese municipalities, towards sustainability at local levels, particularly in matters relating to environmental quality and education for sustainability. The ECOXXI project is inspired by the Agenda 21 objectives, through a system of 23 indicators and several sub-indicators, assessment of the sustainability aspects of resources management, information for households on energy, mobility, forests, waste, nature conservation and biodiversity, tourism, air and water quality, agriculture and employment.

As regards pollution prevention and control, an important incentive for the dissemination of best practices is the process for authorising industrial installations. Competent authorities have to set conditions for issuing operating permits for installations in line with the Directive on Integrated Pollution Prevention and Control (IPPC). This requires that all industrial permits be issued by 30 October 2007. Portugal reported that by April 2008, 350 authorisations had been issued or reconsidered and, where necessary, updated out of a total of 632.

Outlook for 2009

The Strategic Environmental Assessment of the 'Strategic Plan on Industrial Wastes' is expected to be approved in 2009 after review of the Plan.

As regards water resources, implementation of the new institutional model with the consolidation of the National Authority of Water and the five Hydrographical Region administrations will be finalised.

