



## Spain

### Highlights in 2008

Spanish environment policy in 2008 had a strong focus on climate change, energy efficiency and waste. Most initiatives launched and most resources spent cover these three areas. Further, a Green Public Procurement Plan, was approved in

early 2008. It aims to achieve the target agreed in the EU Sustainable Development Strategy, namely to reach by 2010 average green public procurement at the level of the best performing Member States. In April 2008, the Ministry of Environment was merged with the Ministry of Agriculture, Fisheries and Food, creating the new Ministry of Environment and Rural and Marine Environment. The new Ministry has to propose and implement policies related to climate change, protection of natural heritage, biodiversity, sea, water, rural development, and agriculture.

Spain will need to make further efforts to complete its planned infrastructure on waste and water treatment. It also needs to speed up efforts on climate change as Spain has a long way to go to achieve its commitments in this area.

### Climate change and energy

	Spain				EU-27 total	rank in EU-27
	2000	2005	2006	target		
Total Kyoto GHG emissions						
– million tonnes (Mt) CO <sub>2</sub> eq.	385.0	440.9	433.3	333.3 (by 2008-12)	5142.8	
– from energy supply and use, including transport (Mt CO <sub>2</sub> eq.)	289.5	347.6	338.3		4098.7	
– from transport (Mt CO <sub>2</sub> eq.)	87.0	105.6	108.6		992.3	
					EU-27 average	rank in EU-27
– per capita (tonnes CO <sub>2</sub> eq.)	9.6	10.2	9.9		10.4	12
– per GDP (tonnes CO <sub>2</sub> eq. per 1000€ GDP)	610.8	595.7	563.6		495.7	13
– trend (% change compared to base year*)	+32.9%	+52.1%	+49.5%	+15.0% (by 2008-12)	-10.8%	26
– Projected 2010 emissions trend compared to base year*						
– with existing measures, Kyoto mechanisms and carbon sinks		+30.1%		+15.0%	-13.4%	
– with existing and additional measures, Kyoto mechanisms and carbon sinks		+20.5%		(by 2008-12)	-16.3%	

\* Base year for CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub> is 1990 and for F-gases is 1995.

	Spain			target	EU-27 average	rank in EU-27
	2000	2005	2006			
Average CO <sub>2</sub> emissions from new passenger cars sold (grams CO <sub>2</sub> /km)	158.1	154.5 (2006)	152.2 (2007)	130 by 2012-15 for EU-27	157.5	7
Electricity produced from renewable energy sources (% gross electricity consumption)	15.7%	(2006) 17.3%	(2007) 20.0%	29.4% (by 2010)	15.6%	9
– from hydropower	12.8%	8.7%	9.3%		9.2%	
– from wind	2.1%	7.9%	9.2%		3.1%	
– from biomass	0.8%	1.0%	1.2%		3.0%	
Combined heat and power generation (% gross electricity generation)	9.2%	7.8%	7.2%	18% by 2010 for EU-15	10.9%	20
Energy consumption per capita (kg oil eq.)	3 071	3 332	3 261		3 694	11
Energy intensity - Energy consumption per 1000€ GDP (kg oil eq.)	222	221	211		202	12

Spain is far from achieving its Kyoto target. In 2006, Spain's greenhouse gas emissions were 49.5% higher than the base year level, far above its Kyoto target of +15% for the period 2008-2012. According to the latest data, Spain is projected not to achieve its target even using additional measures.

In December 2008, Spain agreed to a 2020 greenhouse gas emission reduction target of 10% compared to 2005 levels for non-ETS sectors (e.g. buildings, road transport and farming). Furthermore, Spain has committed to achieving by 2020 a share of energy from renewable sources in gross final energy consumption of 20% (up from 9% in 2005).

At the end of 2007, the Spanish Climate Change and Clean Energy Strategy – Horizon 2007-2012-2020 was approved. This Strategy is part of the Spanish Development Strategy and includes a series of policies to mitigate climate change, and to palliate its adverse effects. It will also enable fulfilment of Spain's

Kyoto commitments by facilitating public and private initiatives oriented towards increasing efforts of all kinds and from all sectors to fight against climate change. The Strategy also considers measures to achieve energy consumption patterns that are compatible with sustainable development. These measures will constitute the basis for energy planning of public administrations and other private and public entities, and they will encourage citizens to contribute to the fight against climate change.

Continuing its energy and climate change efforts, the government approved the Phase II National Emissions Reduction Plan in January 2008. November 2008 marked the end of the public consultation on the Proposal for emissions allocations for new facilities in the National Allocation Plan 2008-2012, after which the Plan will be finalised. The conditions for new facilities are stricter than the previous ones.

In August 2008, the Energy Efficiency and Saving Plan 2008-2011 was approved by the government. This Plan will strengthen energy efficiency and energy saving measures in order to save an equivalent of 10% of Spanish annual oil imports. It involves an investment of € 245 million, but is expected to save more than € 4 000 million.

A new financial aid programme for strategic investment in energy efficiency and energy savings projects was launched in June. The programme is part of the 2008-2012 Action Plan of the Spanish Energy Efficiency and Saving Strategy and has a budget of € 400 million. It aims to boost investment in projects related to energy-intensive industries, large distribution chains, hotels, transport fleets, etc., sectors whose energy efficiency and energy savings potential is high.

## Nature and biodiversity

	2000	2006	Spain 2007	2008	target	EU-27 average	rank in EU-27
Natura 2000 area (sites designated under Habitats and Birds Directives) as % of terrestrial area		26.8%	26.6%	26.7%		17.0%	
Sufficiency of site designation under the Habitats Directive	93.5%		95.4%	95.8%	100%		
Area occupied by organic farming (% of Utilised Agricultural Area)	1.5%	3.7%	3.9%			4.2%	16
Freight transport (billion tkm)	160.3	252.9	269.4			EU total 2505.0	
– % road	92.8%	95.6%	96.1%			76.9%	23 of 25
– % rail	7.2%	4.4%	3.9%			17.4%	23 of 25

In December 2007 the Law on Natural Heritage and Biodiversity was approved by the general courts. It establishes a statutory system of conservation, sustainable use, improvement and restoration of the Spanish natural heritage and biodiversity, with the objective of guaranteeing rights to a decent environment for well-being, health and development. This law regulates the Natura 2000 network and designates other protected areas at national level, and as a new feature addresses the issue of marine biodiversity.

In August 2008 the National Programme to fight desertification was approved by the government. This is Spain's main commitment as a signatory of the

United Nations Convention to Combat Desertification. The main objectives are prevention of land degradation and recovery of areas already suffering desertification and will require the regions' participation in a strategy towards the sustainable development of susceptible areas. It proposes better coordination of sectoral actions through an institutional framework consisting of the Desertification Observatory in Spain and the Technical Office for Desertification.

Also in December 2007 the Law on the Sustainable Development of Rural Areas was approved. It aims to establish and regulate measures for promoting

the sustainable development of rural areas. Spain implements its rural development policy through 17 Rural Development Programmes established at regional level, which were all approved in 2008. In addition, a National Framework has been set up which includes certain elements common to all 17 regional programmes. The priorities include improving the competitiveness of the agricultural, forestry and agri-food sectors and improving the rural environment and the quality of life in rural areas. For the period 2007-2013,

Spain has been granted approximately €7 billion from the European Agricultural Fund for Rural Development for its Rural Development Programmes, out of which more than 35% has been allocated to actions on land management and environment. Additionally, 15% of the budget of this fund for Spain will be used for agri-environment measures, including the management and protection of Natura 2000 sites.

## Environment and health

	Spain				EU-27 average	rank in EU-27
	2000	2005	2006	Ceiling		
Urban population exposure to air pollution by particles (annual mean concentration, µg/m <sup>3</sup> )	33.4	33.9	33.8	30.0	30.0	15 out of 23
Urban population exposure to air pollution by ozone (SOMO35 level, µg/m <sup>3</sup> . day)	3 118	4 600	4 776	3 104	4 417	16 out of 23
Air pollutant emissions (thousand tonnes)				(by 2010)	EU27 total	
– sulphur dioxides (SO <sub>2</sub> )	1458	1264	1170	746	7946	
– nitrogen oxides (NO <sub>x</sub> )	1462	1529	1481	847	11198	
– non-methane volatile organic compounds (NMVOCs)	1088	990	965	662	9391	
– ammonia (NH <sub>3</sub> )	411	406	424	353	4006	
	1991	Latest available year (2004)				
Water exploitation index	33.2%	34.3%		n.a.	25	

In October 2007, the Royal Decree on the re-use of purified water under the National Water Law was approved. This Decree establishes a legal mechanism whereby waste water can be purified and used as an alternative source, promoting the reuse or more efficient use of water resources. It seeks to enhance sustainable development by providing water while at the same time limiting human health risks and environmental damage. In early 2008, the

government started public consultation on the hydrological planning processes required by both the Water Framework Directive and the National Law of Water.

In November 2008, the European Commission started legal action against Spain for failure to meet obligations for the treatment of waste water. More than 400 towns and cities do not have water treated up to EU standards.

## Natural resources and waste

	Spain			Target	EU-27 average	rank in EU-27
	2000	2006	2007			
Municipal waste generated (kg per capita)	662	599	588		522	20
– % landfilled	51.2%	59.8%	59.5%		41.0%	14
– % incinerated	5.6%	9.0%	9.9%		19.9%	
	2000	2005	2006			
Recycling of packaging waste (as % total packaging waste)	40%	50.4%	54%	55%-80% (by 2008)	56.5 %	13

In November 2008, the draft of the National Waste Plan was presented by the Ministry of the Environment. It covers household and similar wastes, waste covered by legislation, contaminated soils, and agrarian and non-dangerous industrial wastes, which are relevant because of their quantity and their impact on the environment. This Plan also includes a Strategy on the Reduction of Biodegradable Waste Spills.

The Law on Environmental Impact Assessment (EIA) was approved in January 2008 leading to an improvement in the quality of all environmental initiatives. This Law harmonises all the previously existing guidelines under one framework for conducting EIAs. Its value lies in synthesising all the relevant legislation that had been approved before into one law, thereby avoiding fragmentation of legislation.

## Better regulation and implementation

	Spain			EU-27 total
	31/12/2006	31/12/2007	31/12/2008	
Infringements of EU environmental legislation	40	42	37	481

At the end of 2008, Spain had the second highest number of ongoing infringements of EU environmental legislation of all Member States. Most of the infringements relate to water and nature.

## Use of market-based instruments

	Spain			EU-27 average
	2000	2005	2006	
Share of environmental taxes in total tax revenue	6.4%	5.4%	5.1%	6.4%

In January 2008, the taxation of purchased vehicles was restructured around environmental criteria. Regulation of the new tax was included in the Spanish Law on Air Quality and Atmospheric Protection. The law now stipulates four

tax rates based on carbon dioxide emissions, one of the main drivers of climate change.

The Local Estates Act adopted in March 2008 establishes a discretionary subsidy of up to 50% of the corporate income tax reimbursable, as long as municipal dues are paid and the energy produced or consumed is sourced from renewable energy or cogeneration systems.

## Environmental technologies

In 2008 a call for eco-innovation projects was launched by the Ministry of Environment under the framework of the R&D&I Plan. The Programme on environment and eco-innovation finances three thematic areas: pollution prevention, sustainable management and use of natural resources, and National Parks.

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. Spain reported that by April 2008, 4499 permits had been issued or reconsidered and, where necessary, updated out of a total of 5351.

## Outlook for 2009

The Spanish Waste Plan 2008–2015 is to be approved in 2009. It is one of the most important environmental initiatives for 2009. Also the Urban Environment Strategy is planned for adoption in 2009.

The government plans to approve the “Tourism Plan”, which is designed to increase the quality of tourism infrastructure and to improve the added value of the overall tourism product. The projects financed will promote sustainable resorts and tourism infrastructure that pay particular attention to energy efficiency and energy savings, nature conservation and improvement, quality systems and using new technologies. The total budget allocated for 2009 is € 400 million.

Construction of the solar thermal complex Manchazol-1 is to be finalised in 2009 in Ciudad Real. The capacity of Machasol-1 will be 20 MW, and it will supply 30 000 houses, thus avoiding the emission of 149 000 tonnes of CO<sub>2</sub> per year.

In 2009, the National Observatory for Climate Change and Health will be created. It will be a diagnostic instrument for assessing climate change impacts on health, prioritizing problems and proposing actions for improvement.

