

2009 ENVIRONMENT POLICY REVIEW

GREECE

HIGHLIGHTS IN 2009

In 2009, an important reorganisation affecting Greek environmental policy took place: following elections in October a new Ministry of Environment, Energy and Climate Change was created, taking up duties on environment, energy, spatial planning and forestry policy.

In the context of the Greek National Spatial Plan, approved in 2008, a Special Spatial Plan for Tourism was approved in July 2009. It covers the period until 2024 and will seek to identify and protect the natural and cultural heritage of the country. Also, a Spatial Plan for Industry was adopted in April, focusing on the integration of the environmental dimension into industrial activities, while Spatial Plans for Mountainous, Coastal and Insular areas were prepared for public consultation in 2010.

In order to achieve the targets set in its Energy Efficiency National Action Plan 2008-2016, in 2009 the Greek government implemented specific measures mainly targeting households, the building sector and municipalities. These measures also qualify for funding under the “EXIKONOMO” program, which addresses a broad range of energy saving issues.

In 2009, new policy initiatives were launched as part of the Action Plan to reduce air pollution, such as a reform in car taxation based on environmental criteria, a car scrapping scheme, and the establishment of specific urban zones in which only low emission vehicles are permitted. However, the new government, formed in October 2009, reformed or stopped these measures. It announced it will further examine possible measures as part of a longer term strategic plan on the promotion of environmentally friendly transport.

On biodiversity, Greece prepared a draft National Strategy for Biodiversity for the period 2009-2013 and made it available for public consultation. In July, the Commission launched legal action against Greece for failing to put in place adequate measures to protect one of Europe's most important wetlands, lake Koronia, which is threatened by pollution and degradation and for which the legal protection framework is not implemented.

CLIMATE CHANGE AND ENERGY

	Greece				EU-27 total	rank in EU-27
	2000	2007	2008	target		
Total Kyoto GHG emissions	124.9	131.9	126.9	133.8	4939.7	
- million tonnes (Mt) CO ₂ eq.				(by 2008-2012)		
- from energy supply and use, including transport (Mt CO ₂ eq.)	97.1	108.0	104.0		3907.0	
- from transport (Mt CO ₂ eq.)	19.6	23.7	22.7		961.8	
					EU-27 average	rank in EU-27
- per capita (tonnes CO ₂ eq.)	11.5	11.8	11.3		9.9	17
- per GDP (tonnes CO ₂ eq. Per 1000€ GDP)	905.2	716.9	676.1		458.8	16
- trend (% change compared to base year*)	+16.7%	+23.3%	+18.6%	+25.0% (by 2008-12)	-14.3%	22
Projected 2008-2012 emissions for non-ETS sectors compared to base year**:						
- with existing measures, Kyoto mechanisms and carbon sinks	23.3%				-15.0%	
- with existing and additional measures, Kyoto mechanisms and carbon sinks	21.0%			+25.0% (by 2008-12)	-16.5%	
Average CO ₂ emissions from new passenger cars sold (grams CO ₂ /km)	180.3	165.3	160.8	130 (by 2012-15) for EU-27	153.5	19
Electricity produced from renewable energy sources (% gross electricity consumption)	7.7%	6.8%	7.6%	20.1% (by 2010)	16.7%	16
- from hydropower	6.9%	3.8%	4.8%		9.7%	
- from wind	0.8%	2.7%	2.5%		3.5%	
- from biomass	0%	0.3%	0.3%		3.2%	
Energy from renewable energy sources (% gross final energy consumption)	7.2% (2006)	8.1%	8.0%	18.0% (by 2020)	10.3%	16
Combined heat and power generation (% gross electricity generation)	2.1%	1.6%	1.9%	18% (by 2010) for EU-15	11.0%	25
Energy consumption per capita (kg oil eq.)	2 588	2 823	2 844		3 616	9
Energy intensity – Energy consumption per 1000€ GDP (kg oil eq.)	205	171	170		167	10

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

** The target and EU-27 projections refer to the total greenhouse gas emissions. The projections for Greece only refer to GHG emissions from the non-ETS sectors. As all Member States participate in the EU ETS, they are obliged to meet their National Allocation Plan cap for the EU ETS sectors. Therefore projections for non-ETS sectors have a key role as regards tracking the progress towards Kyoto commitment.

In 2008 Greece's greenhouse gas emissions were 18.6% higher than the base year level, slightly below its Kyoto target of +25% for the period 2008-2012. Part of the Kyoto compliance will be achieved through operators in the EU emission trading scheme. According to the latest data, Greece is projected to achieve its non-ETS part

of the target using existing measures, Kyoto mechanisms and carbon sinks. Following adoption of the climate and energy package in April 2009, Greece agreed to reduce, by 2020, greenhouse gas emissions by 4% compared to 2005 levels for sectors like buildings, road transport and agriculture (i.e. sectors not covered by the Emissions Trading System). Furthermore, Greece has committed to achieving a share of energy from renewable sources in gross final energy consumption of 18% by 2020

The “EXOIKONOMO” programme started in March 2009 and originates in the National Energy Efficiency Action Plan for 2008-2016. The programme promotes improvements in energy efficiency for example via public awareness campaigns and various initiatives targeting energy savings at municipal buildings and public areas, transport sector and households. In this context, a programme was launched in June 2009 which provided subsidies for the replacement of old energy-intensive air conditioning installations. The initial budget for this action amounted to 15 million euro, but reached 40 million euro because of its success. The program ended in August 2009 because even the additional budget had run out. According to the available information, it had led to the replacement of 134 000 air conditioning installations.

A programme promoting renewable energies was also launched in 2009. It is a special program for installing photovoltaic systems up to 10 kWp on rooftop. It concerns photovoltaic systems from which some of the produced energy is used for self consumption and the rest is injected in the mainland electricity distribution network. The guaranteed feed-in tariff of the produced energy from the photovoltaic system is 0.55 Euro/kWh for the contracts that will be signed until 2011. While all contracts last 25 years, the tariff will be 5% lower for contracts signed between 2012 and 2019. The energy produced from photovoltaic installations is counted together with the consumed one and the consumer will be charged for electricity according to the difference between the energy produced and consumed.

NATURE AND BIODIVERSITY

	Greece					EU-27 average	rank in EU-27
	2000	2007	2008	2009	target		
Natura 2000 area (sites designated under Habitats and Birds Directives) as % of terrestrial area		19.0%	20.9%	21.0%		17.6%	
Sufficiency of site designation under the Habitats Directive	98.6%	99.1%	99.1%	n.a	100%		
Area occupied by organic farming (% of Utilised Agricultural Area)	n.a.	6.9%	7.8%			4.5%	6
Freight transport (billion tkm)	19.3 (2003)	28.6	29.6			EU total 2469.6	
- % road	97.7%	97.1%	97.5%			76.7%	24 of 26
- % rail	2.3%	2.9%	2.5%			17.4%	23 of 26

* The railway system is not much developed due to the geography of the country.

In February 2009 the draft National Strategy for Biodiversity covering the period 2009 - 2013 was sent for public consultation to the relevant stakeholders. It sets 23 general targets that aim at maintaining diversity at the genetic, species and ecosystem level. The structure of the strategy takes into account the specific threats that biodiversity faces in Greece as well as the existing institutional and administrative framework and the policies and programmes which already exist. Once the strategy is

adopted, its implementation will be monitored by an inter-ministerial committee composed of the relevant Ministers. By the end of 2009 the strategy was not yet finalized.

In February, the government also issued two joint ministerial decisions setting up the legal framework for the protection of the Prespes National Park and of the Protected Area of Kastoria Lake. In March, a Joint ministerial decision was signed designating the terrestrial and wider sea area of islands Karpathos and Saria as “Olympus of S. Karpathos Eco-development Area”. This area is characterised by high biodiversity including species such as the endangered seal species *Monachus Monachus*. In September, two Joint Ministerial decisions created two more National Parks. In particular, the terrestrial area of the mountain Helmos and the Canyon of Vouraikos River were designated as the “Helmos-Vouraikos National Park”. The goal of this legal status is to protect, retain and manage the nature and the landscape, and to retain and manage rare and threatened ecosystems and flora and fauna in the protected area. A previous Joint Ministerial decision establishing the “E. Macedonia-Thrace National Park” has been challenged at national courts on the grounds that a Presidential Decree would have been required for the designation of this area.

As a whole, the vast majority of Natura 2000 areas in Greece are lacking an appropriate protection regime and many of them, including major Ramsar wetlands, are subject to significant pressures and degradation. Greece is currently elaborating a legal framework to afford effective protection to SPAs. In addition, management structures for the sites are insufficient; in particular the 27 Management Bodies set up are lacking the necessary administrative, financial and technical support. The lack of knowledge on the conservation status of habitats and species in Greece as a result of lack of monitoring schemes remains a big problem, as demonstrated at the recent "health check" under Art. 17 of the Habitats Directive where the status of about 50% of habitats and species were reported as "unknown". In July 2009, the Commission launched legal action against Greece for failing to put in place adequate measures to protect one of Europe's most important wetlands. The case relates to the pollution and degradation of Lake Koronia in the region of Thessaloniki. Greece is being sent a first written warning for failing to implement the legal protection and conservation framework necessary for the site.

ENVIRONMENT AND HEALTH

	Greece				EU-27 average	rank in EU-27
	2000	2007	2008	target		
Urban population exposure to air pollution by particles (annual mean concentration, $\mu\text{g}/\text{m}^3$)	40.9 (2001)	32.3	36.8	30.0	26.8	22 out of 24
Urban population exposure to air pollution by ozone (SOMO35 level, $\mu\text{g}/\text{m}^3 \cdot \text{day}$)	7 052	9 006	11 973	6 140	3 884	25 out of 25
Air pollutant emissions (thousand tonnes)				(by 2010)	EU27 total	
- sulphur dioxides (SO ₂)	493	543	448	523	5 867	
- nitrogen oxides (NO _x)	330	374	357	344	10 397	
- non-methane volatile organic compounds(NMVOCs)	299	204	219	261	8 296	
- ammonia (NH ₃)	74	65	63	73	3 799	
	1990	2005	2007			
Water exploitation index	10.9%	12.1%	13.2%			17

In 2009, new policy initiatives were launched as part of the Action Plan to reduce air pollution, such as a reform in car taxation based on environmental criteria, a car scrapping scheme, and the installation of urban zones in which only low emission vehicles are permitted. The new government, formed in October 2009, further reformed or stopped these measures. The car scrapping scheme was implemented for a short period until early November, during which time 73 000 cars were replaced. The car taxation scheme was changed from its initial form by increasing the automobile levies on old cars with high engine power. The “green” urban zone scheme was cancelled as it could not, according to the new government, achieve its main goal of improving air quality in large urban areas. The government announced that it will further examine possible measures as part of a longer term strategic plan on the promotion of environmentally friendly transport.

In July the government approved the budget of 4 million euro for the elaboration of noise mapping studies and action plans for Greek cities, in accordance with the requirements of the Environmental Noise Directive. In addition, the government decided to upgrade the existing national air monitoring network for a budget of 1.5 million euro.

Also in July, as part of the implementation of the EU Bathing Water Directive, the Ministry of Environment has announced a call for tender for implementing a program to monitor along the swimming coasts of the country. The targets of this program are to protect the marine environment, the swimmer’s health, to detect any areas where the sea water quality limits are exceeded and to apply all the necessary measures for its improvement.

Greece did not start the consultations on draft River Basin Management Plans, which should have started in December 2008 at the latest as required by the Water Framework Directive, and has not yet established final River Basin Management Plans.

NATURAL RESOURCES AND WASTE

	Greece				EU-27 average	rank in EU-27
	2004	2006		target		
Total waste generated (kg per capita)	3 166	4 613			5 987	13
- % hazardous	1.2%	0.5%			3%	
- % landfilled on total waste treated*	86.5%	79.8%			51.6%	24
- % incinerated on total waste treated*	0.2%	0.1%			4.9%	
- % recycled , on total waste treated*	13.3%	20.2%			43.5%	24
	2000	2007	2008			
Municipal waste generated (kg per capita)	408	448	453		524	7
- % landfilled	91.2%	77.0%	76.6%		39.5%	22
- % incinerated	0%	0%	0%		19.5%	
	2004	2006				
Households waste (kg per capita)	382	371			436	10
	2000	2006	2007			
Packaging waste recycled (as % total packaging waste)	33%	42.8%	48.0%	55%-80% (by 2011)	58.0%	20 of 26

* see Note to the reader

In January, a new collective recycling system for packaging waste was approved. It is based on recycling centres which receive, screen and separate waste materials, being compressed immediately afterwards. The whole process stems from the legal obligation imposed on producers, importers, and distributors of packages to collect and recycle product packaging. Other steps were undertaken to set up a national system for recycling lighting equipment and light-bulbs.

In August, two ministerial decisions were signed. The first one has a budget of 25 million euro and will be implemented through the Operational Plan Environment (2007-2013) which is linked to EU Cohesion Funds. It also relates to a program for the rehabilitation of polluted soils in public access areas. The second one, budgeting 30 million euro, initiates a program for the reduction of water losses from drinking water distribution networks.

BETTER REGULATION AND IMPLEMENTATION

	Greece			<i>EU-27 total</i>
	31/12/2007	31/12/2008	31/12/2009	
Infringements of EU environmental legislation	26	27	24	451

During 2009, four EU Directives have been transposed into Greek legislation with some delay in comparison with the EU transposition deadlines. Those are the Directive on the energy performance of buildings, the Directive on the promotion of cogeneration based on a useful heat demand in the internal energy market, the Directive concerning the management of bathing water quality and the Directive on environmental liability with regard to the prevention and remedying of environmental damage.

USE OF MARKET-BASED INSTRUMENTS

	Greece			<i>EU-27 average</i>
	2000	2007	2008	
Share of environmental taxes in total tax revenue	6.8%	6.3%	6.0%	6.1%

ENVIRONMENTAL TECHNOLOGIES

In December 2008, the Ministry of Development launched the Energy Action Park. This is the first park in Greece dedicated to environmentally friendly technologies.

GREEN ECONOMY INITIATIVES IN THE ECONOMIC RECOVERY PLAN

The unfavourable international financial situation in 2008 and 2009 also had a negative impact on the Greek economy. As a response, the Greek government updated the “Stability and Growth Plan 2008-2011” in January 2009. As part of this plan Greece also intends to provide training programmes for jobs in areas such as renewable energy, sustainable production of energy, and waste management.

OUTLOOK FOR 2010

When taking office in October 2009, the new government announced that its main environmental priorities for the coming period would be in the fields of climate change, renewable energy, energy savings, protection of forest and protected areas,

urban planning and waste management. A new legislative framework for the promotion of renewable energy will be prepared in 2010. Further initiatives in 2010 relate to the field of forest protection: forest maps will be created and this is expected to be finalized for the whole country within the next three years; changes to the current legislative framework for the protection of forests are also expected to be introduced in 2010.