



Italy

Highlights in 2008

The severe waste crisis in Naples and Campania triggered several urgent measures and actions in 2008. As a temporary emergency measure, the government, with the support of military forces, reopened various landfills in the region. While the

situation has been partially addressed, there is a further need to develop and implement waste management strategies in many regions.

However, waste management is only a problem for some Italian regions. Others are performing quite well, e.g. in terms of recycling.

Air pollution and climate change policies remain a challenge in Italy. Despite increasing efforts on renewable energy and energy saving, Italy remains one of the three EU Member States projected not to achieve its Kyoto target. The contribution from industrial installations to total greenhouse gas emissions is still very significant, although efforts have been made.

Initiatives on nature and biodiversity have progressed well over the past year. Key actions included stricter control and projects to restore the original conditions of protected areas, the launch of the National Forestry Inventory exercise, and progress on the implementation of the Mediterranean Action Plan for the conservation of marine turtles, monk seals, seabirds, cartilaginous fish and cetaceans.

Climate change and energy

	2000	Italy			EU-27 total	rank in EU-27
		2005	2006	target		
Total Kyoto GHG emissions						
– million tonnes (Mt) CO ₂ eq.	552.3	577.9	567.9	483.2 (by 2008-2012)	5142.8	
– from energy supply and use, including transport (Mt CO ₂ eq.)	453.4	478.0	473.7		4098.7	
– from transport (Mt CO ₂ eq.)	124.5	131.6	133.2		992.3	
					EU-27 average	rank in EU-27
– per capita (tonnes CO ₂ eq.)	9.7	9.9	9.7		10.4	11
– per GDP (tonnes CO ₂ eq. per 1000€ GDP)	463.7	464.8	448.4		495.7	6
– trend (% change compared to base year*)	+6.9%	+11.8%	+9.9%	-6.5% (by 2008-12)	-10.8%	19

* Base year is 1990.

		target	EU-27 average
– Projected 2010 emissions trend compared to base year*			
– with existing measures, Kyoto mechanisms and carbon sinks	-1.4%	-6.5%	-13.4%
– with existing and additional measures, Kyoto mechanisms and carbon sinks	-4.6%	(by 2008-12)	-16.3%

* Base year is 1990.

	Italy			target	EU-27 average	rank in EU-27
	2000	2005	2006			
Average CO ₂ emissions from new passenger cars sold (grams CO ₂ /km)	154.0	148.1 (2006)	145.5 (2007)	130 by 2012-15 for EU-27	157.5	2
Electricity produced from renewable energy sources (% gross electricity consumption)	16%	(2006) 14.5%	(2007) 13.7%	22.55%	15.6%	12
– from hydropower	13.8%	10.3%	9.1%	(by 2010)	9.2%	
– from wind	0.2%	0.8%	1.1%		3.1%	
– from biomass	0.5%	1.8%	1.9%		3.0%	
Combined heat and power generation (% gross electricity generation)	8.3%	9%	9.8%	18% by 2010 for EU-15	10.9%	16
Energy consumption per capita (kg oil eq.)	3 037	3 196	3 158		3 694	10
Energy intensity - Energy consumption per 1000€ GDP (kg oil eq.)	183	190	185		202	7

Italy, together with Denmark and Spain, is one of the three Member States projected not to achieve their Kyoto target. With greenhouse gas emissions almost 10% above 1990 levels in 2006, Italy is a long way from meeting its target (-6.5% by 2008-2012). Following the adoption of the climate and energy package in December 2008, Italy agreed to reduce greenhouse gas emissions in non-ETS sectors (e.g. buildings, road transport and farming) by 13% by 2020 compared to 2005 levels. Furthermore, Italy has committed to achieve by 2020 a share of energy from renewable sources in gross final energy consumption of 17% (up from 5% in 2005). The government targets for production of electricity from renewable energy sources for the coming years (2007-2012) will increase by 0.75% per year. New growth rates for the years after 2012 will be set in the near future.

Italy's latest National Allocation Plan for greenhouse gas emissions (2008-2012) was approved at the end of 2007 and entered into force in January 2008. The new plan is in line with a more general sectoral policy to address the final restructuring of the entire Italian energy sector. The fact that liberalisation of this sector has not been completed has delayed for several years wider application of all the measures to promote energy efficiency and the use of renewable alternatives.

A system of tradable green certificates for renewable electricity generated has been introduced. These certificates are issued by the Italian Power Services Administrator (GSE) and are used by producers and importers to fulfil their obligations regarding renewable energy. The 2008 Budget Law established that new installations will be granted green certificates valid for 15 years. The same Law envisages that small plants (up to 1 MW) will have the choice

between being granted green certificates or receiving a feed-in tariff for 15 years. Tariffs differ according to the type of renewable energy.

A pilot project, *Archimede*, to boost the renewable energy potential of the southern regions is being developed in Sicily by the Italian National Agency for New Technologies, Energy and the Environment (ENEA). It involves constructing a solar power plant with a capacity of 5 MW.

Energy efficiency has been given increased attention in order to meet the energy savings targets set for the period 2005-2009. In 2008, Energy Efficiency Certificates or "white certificates" were introduced as a new mechanism to promote energy efficiency. These certificates can be traded by energy distributors, who are obliged to meet energy efficiency goals. Whereas end-users do not have direct access to the white certificate market, distributors or Energy Service Companies (ESCOs) installing the systems can create and sell the energy efficiency certificates.

In 2008, the government paid particular attention to the buildings sector by confirming fiscal incentives up to 55% of the cost of reducing energy losses in buildings. They promote wider use of renewable energy, such as installation of solar panels for hot water production, and other similar initiatives. However, the 2009 Financial Act did not renew these incentives for future years.

Italy is receiving a large contribution from cohesion policy funds for the co-financing of sustainable energy investment. It has the highest budget in the EU-27 for clean energies and energy efficiency with €1.84 billion allocated for the period 2007-2013. This represents 7% of the total cohesion policy funds allocated to the country.

Nature and biodiversity

	2000	2006	Italy 2007	2008	target	EU-27 average	rank in EU-27
Natura 2000 area (sites designated under Habitats and Birds Directives) as % of terrestrial area		17.5%	19.0%	19.0%		17.0%	
Sufficiency of site designation under the Habitats Directive	98%		99.8%	99.8%	100%		
Area occupied by organic farming (% of Utilised Agricultural Area)	8%	9%	9.1%			4.2%	3
Freight transport (billion tkm)	207.6	212.9	213.2			EU total 2505.0	
– % road*	89%	90.1%	90.0%			76.9%	19 of 26
– % rail*	11%	9.8%	9.9%			17.4%	18 of 26

* 2006 and 2007 are estimates

Italy was considered, by June 2008, to have achieved 99.8 % site selection sufficiency for the species and habitat types under the Habitats Directive in its territory. A total of 132 Natura 2000 sites now have completed and agreed management plans, while work on another 597 is ongoing.

In December 2007, Italy published a national plan on agricultural biodiversity. This includes several initiatives, such as a programme for the collection, cataloguing and conservation of animal breeds. Particular emphasis has been put on organic agriculture via the National Plan for Organic Farming and Organic Products. The Plan's funding for the years 2007 and 2008 was increased by €10 million, compared to the 2006 budget, and is to be increased further in the 2009 budget. Most recent data shows that in 2007 organic farming represented 9.1% of total agricultural area, which makes Italy one of the top performers in the EU.

The 2007 Financial Act allocated funds for stricter control and the restoration of protected areas to their original conditions. Under this umbrella, for example, the environmental restoration of the polluted Piombino national site started in December 2008. Piombino has been declared a national polluted site due to the severe soil and sea pollution it had suffered from local industry.

For the updating of the Italian forestry plans (dating from the 1980s) expenditure of €50 million has been authorised for the years 2008 and 2009, mainly for implementation of the National Forestry Inventory that will be the basis for the elaboration of a new Forestry Plan.

Italy participates in the Regional Activity Centre of the Mediterranean Action Plan for the conservation of marine turtles, monk seals, seabirds, cartilaginous fish and cetaceans. In 2008, a first triennial action plan for the conservation of cetaceans (whales and dolphins) was approved by the Central Institute for Scientific and Technological Research applied to the Marine Ecosystem. The

implementation of three further plans for the conservation of monk seals, marine turtles and selachians (sharks, rays and skates) has progressed well since 2001, while two plans concerning cephalopods (octopus, squid, cuttlefish and nautilus) and marine birds were still under consideration at the end of 2008.

Environment and health

	Italy				EU-27 average	rank in EU-27
	2000	2005	2006	Ceiling		
Urban population exposure to air pollution by particles (annual mean concentration, $\mu\text{g}/\text{m}^3$)	52	43.2	41.6	30.0	30.0	20 out of 23
Urban population exposure to air pollution by ozone (SOMO35 level, $\mu\text{g}/\text{m}^3 \cdot \text{day}$)	6 609	7 319	7 643	5 462	4 417	23 out of 23
Air pollutant emissions (thousand tonnes)				(by 2010)	EU27 total	
– sulphur dioxides (SO_2)	755	408	389	475	7946	
– nitrogen oxides (NOx)	1373	1112	1061	990	11198	
– non-methane volatile organic compounds (NMVOCs)	1496	1212	1174	1159	9391	
– ammonia (NH_3)	441	411	408	419	4006	
	Latest available year (1998)					
Water exploitation index	n.a.		24.0%		n.a.	23

In 2007, the Italian government formulated a Plan to transpose the Directive on environmental liability. Following a review process in 2008, the Plan will be revised and finalised during 2009.

At local level many sustainable mobility policies have been implemented by municipalities to fight air pollution. For example, the “ECOPASS” measure introduced in January 2008 in Milan is a tax for private cars entering the city

centre, similar to the London congestion charge. As the data show and despite efforts from the national and local governments in 2008 to improve air quality, including funding to implement air quality programmes in urban areas and to reduce particulate matter (PM_{10}) emissions, serious problems remain. In the winter various regions of Italy, including all the regions in the Po valley, suffered from high concentrations of air pollutants. In 2008, Italy requested an extension of the derogation from compliance with air quality standards.

Natural resources and waste

	Italy			Target	EU-27 average	rank in EU-27
	2000	2006	2007			
Municipal waste generated (kg per capita)	509	553	550		522	17
– % landfilled	75.6%	53.9%	52.0%		41.0%	9
– % incinerated	8.1%	12.1%	12.2%		19.9%	
	2000	2005	2006			
Recycling of packaging waste (as % total packaging waste)	38%	53.7%	54.9%	55%-80% (by 2008)	56.5 %	10

The 2008 waste crisis in Naples and Campania forced the government to adopt several emergency measures, and a strategic waste planning approach, in order to start tackling this severe environmental problem. As a temporary measure, the government reopened various landfills in the Campania region. Under the new strategic waste planning approach, there are plans to implement the collection of waste for recycling, to develop incinerators and to better control the illegal dumping of waste.

In 2008, soil protection measures focused on improving monitoring activities. In this respect, to ensure full integration with the single information system and the national information network, expenditure of €750 000 per year was authorised by the 2007 Financial Act for the 2007-2009 period.

The Green Public Procurement (GPP) Decree was finalised in 2007. This Decree supports the introduction of environmental and social criteria into public procurement procedures. Many public administrations have been actively promoting the application of green public procurement. Moreover, in April 2008, the National Action Plan for GPP was approved and will start to be implemented in 2009. On sustainable consumption and production, the latest

2008 data show that Italy has 212 companies with products awarded the European Eco-label, the largest number in the EU.

Better regulation and implementation

	Italy			EU-27 total
	31/12/2006	31/12/2007	31/12/2008	
Infringements of EU environmental legislation	61	60	45	481

In 2006, the government took the initiative to renew environmental legislation by adopting the “Environmental Code”. In 2008, significant amendments to the Environmental Code were adopted, including revised legislation on general environmental principles, detailed guidelines for Environmental Impact Assessments and Strategic Environmental Assessment, and more stringent legislation on water resources, water protection and waste.

In 2008, the government restructured the Ministry of the Environment and the Italian Environment Agency. This process created several new agencies as well as a new division of responsibilities. For example, the Agency for Environment Protection and Technical Services (APAT) was converted into the Institute for Environment Protection and Research (ISPRA), taking over some responsibilities from other institutions.

Use of market-based instruments

	2000	Italy 2005	2006	EU-27 average
Share of environmental taxes in total tax revenue	7.6%	6.9%	6.5%	6.4%

Environmental technologies

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. Italy reported that by April 2008 989 permits had been issued out of a total of 5577.

Outlook for 2009

The 2009 Financial Act, approved in December 2008, suggests a continued policy focus on tackling climate change and improving energy efficiency, as well as the use of renewable energy sources. The government has confirmed an annual budget of € 200 million for the fund to support implementation of the Kyoto Protocol. Additionally, the “Fund for the promotion and spread of energy efficiency and energy savings and the promotion of renewable energy sources” will receive € 40 million for its operations in 2009. But at the same time, the 2009 Financial Act will reduce the budget for other environment policy initiatives. Of the overall budget of the 2009 Financial Act, 2.4%, or € 819 million, is earmarked for the environment compared with € 1.5 billion in previous years.

