



Malta

Highlights in 2008

A number of waste treatment facilities became operational in Malta in 2008 and there are plans to use the waste

heat, gas and other by-products from these sites to generate power. One such proposed project is in the process of being registered as the island’s first Clean Development Mechanism project.

The success of Malta’s rebate on more energy-efficient domestic appliances in 2007 prompted the government to extend the life of the scheme into 2008, paying out an additional €580,000 in grants.

Climate change and energy

	Malta				EU-27 total	rank in EU-27
	2000	2005	2006	target		
Total Kyoto GHG emissions						
– million tonnes (Mt) CO ₂ eq.	2.7	3.2	3.2	No Kyoto target	5142.8	
– from energy supply and use, including transport (Mt CO ₂ eq.)	2.3	2.7	2.6		4098.7	
– from transport (Mt CO ₂ eq.)	na	na	na		992.3	
					EU-27 average	rank in EU-27
– per capita (tonnes CO ₂ eq.)	7.1	7.9	7.8		10.4	6
– per GDP (tonnes CO ₂ eq. per 1000€ GDP)	637.5	717.7	693.4		495.7	15
– trend (% change compared to base year*)	+22.7%	+45.5%	+45.0%	No Kyoto target	-10.8%	25

* No base year under the Kyoto protocol so figures reflect 1990 values.

		target	EU-27 average
– Projected 2010 emissions trend compared to base year*			
– with existing measures, Kyoto mechanisms and carbon sinks	+61.8%	No Kyoto	-13.4%
– with existing and additional measures, Kyoto mechanisms and carbon sinks	+61.8%	target	-16.3%

* No base year under the Kyoto protocol so figures reflect 1990 values.

	Malta			target	EU-27 average	rank in EU-27
	2000	2005	2006			
Average CO ₂ emissions from new passenger cars sold (grams CO ₂ /km)	147.8 (2004)	144.9 (2006)	146.7 (2007)	130 by 2012-15 for EU-27	157.5	3
Electricity produced from renewable energy sources (% gross electricity consumption)	0%	(2006) 0%	(2007) 0%	5.0% (by 2010)	15.6%	27
Combined heat and power generation (% gross electricity generation)	0%	0%	0%	18% by 2010 for EU-15	10.9%	27
Energy consumption per capita (kg oil eq.)	2 004	2 372	2 207		3 694	3
Energy intensity - Energy consumption per 1000€ GDP (kg oil eq.)	223	265	240		202	15

Malta has no quantitative emission reduction commitments under the Kyoto Protocol, but as an EU Member State, it is bound by the obligations set out in the Emissions Trading Directive. Nevertheless, Malta's greenhouse gas emissions have risen by 45% compared to 1990 levels. According to the latest projections, Malta's emissions are likely to increase further and could reach 62% above 1990 emissions for the period 2008-2012. Following the adoption of the

climate and energy package in December 2008, Malta agreed to a maximum increase of its greenhouse gas emissions of 5% by 2020 (compared to 2005 levels) in non-ETS sectors (e.g. buildings, road transport and farming). Furthermore, the Maltese government has committed to achieving by 2020 a share of energy from renewable sources in gross final energy consumption of 10% (up from 0% in 2005).

In its corporate responsibility report for 2008, WasteServ Malta Ltd., a government-owned company responsible for waste management, indicated that it is in the process of registering the recovery and utilisation of landfill gases from the Ta' Zwejra site as the country's first Clean Development Mechanism (CDM) project. The extent to which the gas will be used to generate

electricity (as opposed to just flaring it) depends on its methane content. The project will provide the impetus for the establishment of the necessary regulatory framework for CDMs on Malta and is considered as something of a pilot for future projects.

Nature and biodiversity

	2000	2006	Malta 2007	2008	target	EU-27 average	rank in EU-27
Natura 2000 area (sites designated under Habitats and Birds Directives) as % of terrestrial area		12.2%	12.1%	13.0%		17.0%	
Sufficiency of site designation under the Habitats Directive			92.6%	92.6%	100%		
Area occupied by organic farming (% of Utilised Agricultural Area)	n.a.	0.2%	0.1%			4.2%	27
Freight transport (billion tkm)	n.a.	n.a.	n.a.			EU total 2505.0	
– % road	100%	100%	100%			76.9%	
– % rail*	—	—	—			17.4%	

* The railway system is missing due to the geography of the country.

Malta has continued to increase the sufficiency of areas protected by the Habitats Directive. In October 2008, Malta's government announced that the country's Natura 2000 network would be extended with the designation of the 'Wied Moqbol to Il-Ponta ta' Benghisa' area (a coastal region in the south-west of the country) as a Special Protection Area (SPA) to protect local seabirds. Protection of the Ta' Cenc site, an existing SPA, has been extended and also designated as a Special Area of Conservation.

A long-running issue is spring hunting, a practice that is still permitted in Malta but not permitted under the Birds Directive. The case was referred to the European Court of Justice at the start of 2008 and the Commission also applied for interim measures to stop the 2008 hunt. The interim measures were passed, preventing the 2008 spring hunt, but the future status of the spring hunt is still to be adjudicated.

Environment and health

	Malta				EU-27 average	rank in EU-27
	2000	2005	2006	Ceiling		
Urban population exposure to air pollution by particles (annual mean concentration, $\mu\text{g}/\text{m}^3$)	n.a.	n.a.	n.a.	30.0	30.0	
Urban population exposure to air pollution by ozone (SOMO35 level, $\mu\text{g}/\text{m}^3 \cdot \text{day}$)	n.a.	n.a.	n.a.		4.417	
Air pollutant emissions (thousand tonnes)				(by 2010)	EU27 total	
– sulphur dioxides (SO_2)	24	12	12	9	7946	
– nitrogen oxides (NO_x)	9	9	9	8	11198	
– non-methane volatile organic compounds (NMVOCs)	3	4	4	12	9391	
– ammonia (NH_3)	1	1	1	3	4006	
	1990	Latest available year (2005)				
Water exploitation index	31.8%	20.9%			n.a.	21

The amount of water extracted from Malta's reserves of groundwater far exceeds sustainable levels and a substantial amount of this abstraction is known to occur illegally. In an effort to control and help protect these reserves, the government instituted the 'Notification of Groundwater Sources Regulations, 2008' in October 2008. The legislation requires that all boreholes, including private ones, be registered with the government. Registration of the boreholes is intended to be a first step towards fully regulating groundwater abstraction on the islands.

Also in 2008, the 'Management of Bathing Water Quality Regulations, 2008' came into effect. This legislation relates to the implementation of the Water Framework Directive and the transposition of EU Directives regarding the management of bathing water quality. Water quality must be monitored and regularly reported and limit values have been specified on a range of contaminants; non-compliance can result in the closure of a site.

Natural resources and waste

	Malta			Target	EU-27 average	rank in EU-27
	2000	2006	2007			
Municipal waste generated (kg per capita)	535	652	646		522	23
– % landfilled	90.3%	86.2%	87.2%		41.0%	27
– % incinerated	0%	0%	0%		19.9%	
	2004	2005	2006			
Recycling of packaging waste (as % total packaging waste)	n.a.	n.a.	10.8%	55%-80% (by 2013)	56.5 %	27

The Thermal Treatment Facility at Marsa, an incineration plant, was inaugurated at the end of 2007 and replaces the old incinerators, which fell short of the EU's emissions standards. The new facility generates substantial amounts of heat as a by-product and funding is being sought to install a turbine and generator that will be used to generate enough electricity to make the plant self-sufficient. It seems likely that there will also be surplus electricity that can be fed back into the grid.

Razzett tal-Hbiberija, the site for a planned recreational park will also benefit from the power generated by Malta's first mechanical biological treatment (MBT) plant at Sant'Antnin. Much of the work has been completed and Sant'Antnin will treat biological waste and generate power in 2009. Two further MBT plants are planned.

Malta's Green Public Procurement action plan for 2007-09 has been finalised and is due to be submitted for approval. A second Workshop on Innovative Public Procurement took place in May 2008 to disseminate knowledge more widely across the public sector. The government is also trying to 'lead by example' by fitting some small-scale renewables installations to its buildings.

Better regulation and implementation

	Malta			EU-27 total
	31/12/2006	31/12/2007	31/12/2008	
Infringements of EU environmental legislation	13	26	12	481

At the end of 2008, there were 12 infringements of European environmental legislation that concerned Malta.

At the end of 2007 the European Commission approved the trans-national 'Mediterranean' programme, of which Malta is a member. The programme will help to finance projects that will assist in the implementation of environmental protection measures and in the promotion of sustainable development practices.

Use of market-based instruments

	Malta			EU-27 average
	2000	2005	2006	
Share of environmental taxes in total tax revenue	13.1%	9.9%	10.1%	6.4%

Malta's Energy Efficient Appliances Rebate was launched in 2007 to encourage the purchase of more energy-efficient domestic appliances. A 20% rebate was offered on the majority of appliances up to a maximum of €58 while for the most energy-efficient classes of refrigerators and freezers (and combinations) the maximum was €116. The scheme was originally intended to last for one year only, but its success led the government to vote in favour of extending the scheme to July 2008. A total of €580 000 was paid out in 2008.

Environmental technologies

From the start of 2008, under the EU's Seventh Framework Programme for Research, Technological Development and Demonstration for the period 2007-13, a number of bodies in Malta are setting aside 0.25% of their budgets for research and innovation. These bodies include waste and utilities companies, the Department for Health and the Malta Transport Authority.

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. Malta reported that by April 2008 none of the authorisations had been issued or reconsidered and, where necessary, updated out of a total of 9 expected.

Outlook for 2009

In its 2009 pre-Budget report, the Maltese government announced that it would earmark some €33m of structural funds for the period 2007-13 to assist in the take-up of renewable sources in the domestic and commercial sectors. It will undertake the necessary studies and carry out discussions to determine the best course of action to increase the penetration of wind power. The government is also proposing to invest in the construction of a 95 MW near-shore wind farm. Sikka I-Bajda, a reef 2 km off the Maltese coast has been identified as a possible site for the farm and a Dutch company has expressed an interest in developing project, which will cost an estimated €130m.

The Maltese government is seeking to increase application of the polluter pays principle and, to this end, will apply an eco-contribution tax to the sale of incandescent and fluorescent bulbs to encourage greater energy efficiency. Eco-contributions will also be levied on plastic bags and printed materials to reduce waste. Also, vehicle taxes will be more closely linked to carbon emissions in an effort to promote a modal shift towards public transport.

