Ireland

Highlights in 2008

In line with what is done in several other European countries, the Irish government has decided to improve accountability for its environmental impact. New initiatives in 2008 included the establishment of an offsetting scheme, covering official travel. Further, changes to Vehicle Registration Tax and Motor Tax were introduced in July 2008 to encourage consumers to become more environmentally-conscious when purchasing new cars. Both taxes are now levied on carbon emissions, with seven emissions bands. In the coming years, further efforts are needed to protect nature areas and on waste water treatment. Also continued efforts on climate change are needed in order to ensure that Ireland achieves its commitments in this area.

Climate change and energy

	Ireland				*EU-27 total*	*rank in EU-27*
	2000	**2005**	**2006**	**target**		
Total Kyoto GHG emissions – million tonnes (Mt) CO_2 eq.	69.0	70.3	69.8	62.8 (by 2008-2012)	*5142.8*	
– from energy supply and use, including transport (Mt CO_2 eq.)	43.5	46.6	46.1		*4098.7*	
– from transport (Mt CO_2 eq.)	10.8	13.0	13.7		*992.3*	
					EU-27 average	***rank in EU-27***
– per capita (tonnes CO_2 eq.)	18.3	17.1	16.6		*10.4*	*26*
– per GDP (tonnes CO_2 eq. per 1000€ GDP)	658.4	511.9	480.3		*495.7*	*10*
– trend (% change compared to base year*)	+24.1%	+26.5%	+25.5%	+13.0% (by 2008-12)	*-10.8%*	*23*

* Base year for CO_2, N_2O and CH_4 is 1990 and for F-gases is 1995.

	Ireland				*EU-27 average*	*rank in EU-27*
	2000	**2005**	**2006**	**target**		
– Projected 2010 emissions trend compared to base year* – with existing measures, Kyoto mechanisms and carbon sinks – with existing and additional measures, Kyoto mechanisms and carbon sinks		+12.6% +12.4%		+13.0% (by 2008-12)	*-13.4%* *-16.3%*	
Average CO_2 emissions from new passenger cars sold (grams CO_2/km)	160.2	165.2 (2006)	160.5 (2007)	130 by 2012-15 for EU-27	*157.5*	*14*
Electricity produced from renewable energy sources (% gross electricity consumption) – from hydropower – from wind – from biomass	 4.9% 3.5% 1.0% 0.4%	(2006) 8.5% 2.5% 5.5% 0.4%	(2007) 9.3% 2.3% 6.6% 0.4%	 13.2% (by 2010)	 *15.6%* *9.2%* *3.1%* *3.0%*	 *14*
Combined heat and power generation (% gross electricity generation)	2.4%	2.4%	5.6%	18% by 2010 for EU-15	*10.9%*	*23*
Energy consumption per capita (kg oil eq.)	3 765	3 636	3 641		*3 694*	*14*
Energy intensity - Energy consumption per 1000€ GDP (kg oil eq.)	178	143	139		*202*	*2*

* Base year for CO_2, N_2O and CH_4 is 1990 and for F-gases is 1995.

Ireland's rapid economic growth over the last decade has resulted in a substantial increase in demand for energy. Concerning the Kyoto target, Ireland has committed to a maximum increase of its greenhouse gas emissions by 13% above the 1990 level for the period 2008-2012. In 2006, greenhouse gas emissions in Ireland were 25.5% above 1990. However, according to the latest data, Ireland is projected to achieve its target using existing measures, Kyoto mechanisms, carbon sinks and additional measures.

In 2007, the government introduced a National Climate Change Strategy with the aim of reaching the Kyoto target. In Ireland only around 100 installations participated in Phase I of the EU Emissions Trading System, although this number increased to 155 in Phase II which began in 2008. Inclusion of these additional installations will contribute about a third of the extra reductions in CO_2 emissions required to meet the Kyoto target. Ireland also has a biofuels target of 5.75% and a 15% renewables target for electricity by 2010, although the biofuels target has now been brought forward to 2009. In 2007, the Carbon

Fund Act was passed, establishing a carbon fund for acquiring Kyoto units in order to fulfil Ireland's carbon emissions reduction requirements. It has been proposed that the 2010 5.75% biofuels target be revised downwards to 4% and the proposal was in 2008 under public consultation.

November 2007 saw a landmark change for the energy sector in Ireland, with completion of a Single Electricity Market covering the whole island. This will reduce the inefficiencies, both economic and environmental, that derive from having parallel industries north and south of the border that separates Ireland from Northern Ireland, which is part of the UK.

In December 2008, Ireland agreed by 2020 to reduce greenhouse gas emissions by 20% compared to 2005 levels in non-ETS sectors (e.g. buildings, road transport and farming). Furthermore, Ireland has committed to achieving by 2020 a share of energy from renewable sources in gross final energy consumption of 16% (up from 3% in 2005).

Nature and biodiversity

	Ireland						
	2000	**2006**	**2007**	**2008**	**target**	***EU-27 average***	***rank in EU-27***
Natura 2000 area (sites designated under Habitats and Birds Directives) as % of terrestrial area		10.0%	10.5%	11.1%		*17.0%*	
Sufficiency of site designation under the Habitats Directive	86% (2004)		86%	86%	100%		
Area occupied by organic farming (% of Utilised Agricultural Area)	0.6%	0.9%	1.0%		5% * by 2012	*4.2%*	*24*
Freight transport (billion tkm)	12.8	17.7	19.1			*EU total 2505.0*	
– % road	96.2%	98.8%	99.3%			*76.9%*	*25 of 26*
– % rail	3.8%	1.2%	0.7%			*17.4%*	*25 of 26*

* Indicative target according to the Organic Farming Action Plan 2008-2012.

The EU Court of Justice ruled in December 2007 that Ireland had failed to designate a sufficient number of Special Protection Areas under the Birds Directive and had also only partially designated others. No designations were made in 2008.

In 2008, the government released a cost-benefit analysis of biodiversity in Ireland. The aim of the report was to identify the extent to which biodiversity benefits the country, and whether the benefits of related policy are at least commensurate with the costs. The research valued biodiversity in Ireland, in terms of its contribution to productive output and human utility, at €2.6 billion a year, while biodiversity policy costs amount to around €370 million a year, although only a portion of this is spent on biodiversity directly.

In 2008, the government started developing Ireland's 2nd National Biodiversity Plan to replace the existing Plan from 2002. The forthcoming plan will consider the work programmes of the Convention on Biological Diversity and the EU Biodiversity Action Plan.

Environment and health

	Ireland				*EU-27 average*	*rank in EU-27*
	2000	**2005**	**2006**	**Ceiling**		
Urban population exposure to air pollution by particles (annual mean concentration, µg/m^3)	20.4 (2001)	13.8	15.4	30.0	*30.0*	*1 out of 23*
Urban population exposure to air pollution by ozone (SOMO35 level, µg/m^3. day)	n.a.	n.a.	n.a.		*4 417*	
Air pollutant emissions (thousand tonnes)				(by 2010)	*EU27 total*	
– sulphur dioxides (SO_2)	137	71	60	42	*7946*	
– nitrogen oxides (NO_x)	136	124	119	65	*11198*	
– non-methane volatile organic compounds (NMVOCs)	81	62	60	55	*9391*	
– ammonia (NH_3)	121	110	110	116	*4006*	
	1994		**Latest available year (2005)**			
Water exploitation index	2.6%		1.7%		*n.a.*	*5*

A consultation paper on noise was launched in August 2008, in line with the requirement set out in the programme for government to 'Publish comprehensive legislation on noise pollution'. The points for discussion include: an integrated approach to noise pollution; improving the powers of local authorities; drafting codes of practice for industry, construction, commerce and households for the reduction of noise; a higher profile for noise through an annual reporting mechanism; and a new information website.

Following administrative reforms made in 2007 under which Ireland's Environmental Protection Agency (EPA) gained a greater oversight role of Irish local authorities, there was increased focus on the installation and upgrading of disinfection equipment for drinking water. During 2008, further progress was made in tackling a previous chronic problem of micro-biological contamination of many drinking water supplies by *E.coli* which had led to a European Court of Justice (ECJ) ruling against Ireland in 2002.

The ECJ ruled in September 2008 that Ireland had failed to comply with the Urban Waste Water Treatment Directive for six settlements which should have had secondary waste water treatment by December 2000. Significant investment in urban waste water treatment appears to be necessary. In 2008, the Irish authorities started to implement a new system of authorising waste water discharges: the absence of such a system had resulted in an ECJ ruling against Ireland in 2005.

Natural resources and waste

	Ireland				*EU-27 average*	*rank in EU-27*
	2000	**2006**	**2007**	**Target**		
Municipal waste generated (kg per capita)	603	804	786		*522*	*26*
– % landfilled	91.9%	58.6%	59.4%		*41.0%*	*13*
– % incinerated	0%	0%	0%		*19.9%*	
	2000	**2005**	**2006**			
Recycling of packaging waste (as % total packaging waste)	19.0%	55.6%	54.5%	55%-80% (by 2011)	*56.5 %*	*12*

In September 2008, the Environmental Protection Agency published a new National Hazardous Waste Management Plan, covering the period 2008-12. The Plan makes 29 recommendations that will: help reduce the generation of waste; demonstrate alternatives to waste generation; ensure appropriate collection and management; increase Ireland's self-sufficiency in disposing of hazardous waste; and counter the effects of previous contamination. Specific measures in the Plan include: establishing a network of drop-off points for waste; investigating domestic solutions to hazardous waste treatment; identifying the scale of port and harbour residues and subjecting them to planned decontamination; and, significantly, proposing a cross-border hazardous waste disposal infrastructure with Northern Ireland.

A new 'Hotel and Hospitality Project' was announced by the EPA in April 2008. Between 2008 and 2012, the EPA's National Waste Prevention Programme (NWPP) will work with individual establishments to improve environmental management practices, prevent waste and encourage resource efficiency, whilst also reducing costs in the sector. It is intended that 150 of Ireland's largest hotels will be involved in the programme, which offers grants to improve environmental practices. The EPA estimates that even though the project provides only €1.6m, €80m pa could be saved by making these improvements, which is a substantial return.

There was a 33% increase in spending (bringing the total to €1 245 million a year) on grants to local authorities for public education and awareness initiatives in 2008, relating to both litter and graffiti.

Better regulation and implementation

	Ireland			*EU-27 total*
	31/12/2006	31/12/2007	31/12/2008	
Infringements of EU environmental legislation	38	34	35	*481*

At the end of 2008, Ireland had the 3rd highest number of ongoing infringements of EU environmental legislation of all Member States.

In order to demonstrate greater accountability, the government announced that it would establish an 'Irish Government Offsetting Scheme' to offset the emissions associated with air travel by ministers and civil servants. Introduced in July 2008, this has been retrospectively applied to all travel since the current government was formed in 2007.

Use of market-based instruments

	Ireland			*EU-27 average*
	2000	2005	2006	
Share of environmental taxes in total tax revenue	9.1%	8%	7.6%	*6.4%*

The government introduced changes to Vehicle Registration Tax (VRT) in July 2008, which is now based on CO_2 emissions, with seven bands according to the level of emissions from new registered vehicles. VRT is a tax levied as a percentage of the open market selling price of the vehicle, ranging from 14% (0-120g CO2/km) to 36% (>225g CO2/km). In addition, there is a Motor Tax based on CO2 emissions, payable annually and ranging from €100 for the least polluting, to €2000 for the most. To complement these changes, a new vehicle labelling system was introduced, in a similar style to the EU standard for electrical appliances. The label gives additional details, including the rate of VRT, the annual Motor Tax payable, and the amount of fuel required to run for 18 000km.

In addition, the landfill tax was increased by a third in 2008, to €20 per tonne landfilled.

Environmental Technologies

The Irish Energy Research Council has prepared a comprehensive Energy Research Strategy 2008-2013, pointing out that investment in the energy sector is at historically low levels (€6m in 2005). The strategy recommends that this recent trend be reversed, with a substantial increase in funding for research.

The actions commencing in 2008 included: identifying and mapping Ireland's energy resources; developing research programmes; and encouraging research groups to dedicate more resources to research in sustainable energy. The three main areas of focus in the new strategy are sustainable bioenergy, buildings and transport. It was recognised that the main energy challenges facing Ireland in 2008 were those of reducing energy demand, switching away from fossil fuels and harnessing the potential benefits of carbon capture and storage.

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. Ireland reported that by April 2008 360 authorisations had been issued or reconsidered and, where necessary, updated out of a total of 461.

Outlook for 2009

The government of Ireland intends to publish its new Sustainable Development Strategy in 2009. This will replace the existing strategy of 2002 and will relate strongly to the social partnership agreement 'Towards 2016' that was published in 2006. It is expected that this new Strategy will have an increased focus on community involvement in environment policy, together with future initiatives relating to biofuels.

In addition, under the Agreed Programme for Government, a biofuels obligation scheme will be introduced in 2009, whereby producers will be required to meet a certain proportion of sales with biofuels. This will help achieve the target of 10% by 2020, as announced in the Irish Green Paper on Sustainable Energy.