Lithuania

Highlights in 2008

Environment policy in Lithuania in 2008 focused on energy, climate change and waste management. At the national level, the year started with the government resolution on a national five-year strategy on implementation of the Kyoto Protocol in the period up to 2012. The strategic document outlines the goals to be met in order to tackle climate change and specifies the measures to be taken for reaching these goals. In the international context, the main priority was negotiations on the EU climate and energy legislative package in the period up to 2020, where the government was keen to ensure that the Lithuanian energy supply situation after closure of the Ignalina nuclear plant in 2009 was taken into account. In addition, the National Energy Strategy implementation plan for 2008-2012 came into effect. It specifies all the measures necessary to achieve the Strategy's targets and defines the institutions responsible and the resources required. The Lithuanian government has voted for some changes in the Energy Efficiency Action Plan approved in the previous year.

A number of measures have been launched within the framework of the National Waste Management Plan 2007-2013 (in effect since 2007): the implementation phase of legal regulations on waste recovery and disposal, enforcement of waste producers' responsibility and further development of a modern municipal waste management system.

Climate change and energy

	Lithuania				*EU-27 total*	*rank in EU-27*
	2000	**2005**	**2006**	**target**		
Total Kyoto GHG emissions						
– million tonnes (Mt) CO_2 eq.	19.3	22.7	23.2	45.4 (by 2008-2012)	*5142.8*	
– from energy supply and use, including transport (Mt CO_2 eq.)	11.1	13.2	13.4		*4098.7*	
– from transport (Mt CO_2 eq.)	3.2	4.2	4.5		*992.3*	
					EU-27 average	***rank in EU-27***
– per capita (tonnes CO_2 eq.)	5.5	6.6	6.8		*10.4*	*2*
– per GDP (tonnes CO_2 eq. per 1000€ GDP)	1 562.5	1 259.2	1 195.5		*495.7*	*21*
– trend (% change compared to base year*)	-60.8%	-54.1%	-53.0%	-8.0% (by 2008-12)	*-10.8%*	*3*

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

		target	*EU-27 average*
– Projected 2010 emissions trend compared to base year*			
– with existing measures, Kyoto mechanisms and carbon sinks	-30.4%	-8.0%	*-13.4%*
– with existing and additional measures, Kyoto mechanisms and carbon sinks	-30.4%	(by 2008-12)	*-16.3%*

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

	Lithuania				*EU-27 average*	*rank in EU-27*
	2000	**2005**	**2006**	**target**		
Average CO_2 emissions from new passenger cars sold (grams CO_2/km)	186.1 (2004)	162.2 (2006)	175.3 (2007)	130 by 2012-15 for EU-27	*157.5*	*22*
Electricity produced from renewable energy sources		(2006)	(2007)			
(% gross electricity consumption)	3.4%	3.6%	4.6%	7.0%	*15.6%*	*21*
– from hydropower	3.4%	3.3%	3.3%	(by 2010)	*9.2%*	
– from wind		0.1%	0.8%		*3.1%*	
– from biomass		0.2%	0.4%		*3.0%*	
Combined heat and power generation (% gross electricity generation)	n.a.	15.5%	14.3%	18% by 2010 for EU-15	*10.9%*	*11*
Energy consumption per capita (kg oil eq.)	2 020	2 524	2 484		*3 694*	*5*
Energy intensity - Energy consumption per 1000€ GDP (kg oil eq.)	1134	948	862		*202*	*25*

In 2006, Lithuania's greenhouse gas emissions were 53% lower than the base year level, compared to its Kyoto target of -8% for the period 2008-2012. According to the latest data, Lithuania is projected to significantly overachieve its target. Following the adoption of the climate and energy package in December 2008, Lithuania agreed not to increase its greenhouse gas emissions in non-ETS sectors (e.g. buildings, road transport, farming) by more than 15% by 2020 compared to 2005 levels. Furthermore, Lithuania has committed to achieving by 2020 a share of energy from renewable sources in gross final energy consumption of 23% (up from 15% in 2005).

The initiatives directed towards implementation of the Kyoto Protocol in the period to 2012 are listed in the National Strategy, adopted in January 2008. Among the main actions planned are: more effective monitoring of climate change and assessment of vulnerability of the landscape, ecosystems and biological diversity; measures to reduce the impact on climate of energy, industry, transport, agriculture and forestry; measures to improve waste management with a view to reducing the generation of greenhouse gases; developing research; and nation-wide awareness raising campaigns on combating climate change.

The Lithuanian government has also taken a long-term approach by approving the National Energy Strategy for 2008-2025 and by defining its main targets and directions for their implementation up until 2025. It reflects aspects of efficiency, energy security, and environmental and management improvement. A key point is the comprehensive integration of Lithuania's energy systems, especially the electricity and gas supply sectors, into EU systems and the EU energy market. Diversifying the sources of primary energy and rapidly increasing the relative weight of renewable energy resources are other major points. The government is seeking to ensure that the share of the natural gas supplied from by any single country does not exceed 30% of Lithuania's annual fuel balance.

The five-year National Energy Strategy implementation plan came into effect in 2008. Its main features include modernization and development of energy supply systems, development of renewable energy sources, enhancement of energy efficiency, and improvement of energy sector management. The Strategy will also cover the development of new energy production potential, enhancing energy production efficiency, and energy sector security.

The Energy Efficiency Action Plan (approved in 2007) was amended and published in a new version. The Plan reviews current consumption of energy, evaluates energy saving potential, sets national energy savings targets and describes how to achieve these targets. The national indicative energy savings target for the period 2008–2016 is 327 ktoe (3 797 GWh). The official national energy savings target set in the National Energy Strategy is 9% of the final energy consumption level for 2005, or 404 ktoe (4 700 GWh).

The Lithuanian government adopted a Resolution on public procurement supply contracts, imposing energy efficiency requirements. Government institutions and other public bodies will have to include energy efficiency requirements in the technical specifications when launching public procurement procedures. The government still has to set minimum efficiency requirements in the technical specifications.

Nature and biodiversity

	Lithuania						
	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		13.7%	13.9%	13.9%		*17.0%*	
Sufficiency of site designation under the Habitats Directive			61.2%	61.2%	100%		
Area occupied by organic farming (% of Utilised Agricultural Area)	n.a.	3.5%	4.5%			*4.2%*	*14*
Freight transport (billion tkm)	16.7	31.0	34.7			*EU total 2505.0*	
– % road	46.6%	58.4%	58.5%			*76.9%*	*3 of 26*
– % rail	53.4%	41.6%	41.5%			*17.4%*	*3 of 26*

Lithuania has 77 Special Protection Areas and 267 Sites of Community Importance under the Natura 2000 network. In total it covers 13.9% of its land area. There are no Natura 2000 sites with completed or agreed management plans; however 61 plans are under development.

In order to support ecological connectivity and coherence in Lithuania, work continued on implementing an interrelated territorial system called the Nature Framework in 2008. The Nature Framework is designed to maintain and improve the natural ecological system in the country; to ensure connections between protected natural areas; and to conserve natural landscape, biodiversity and natural recreational resources. The Nature Frame consists of zones with important ecological functions, such as groundwater filtration, conservation of biodiversity, recreational resource protection and aesthetic qualities. It is based on a geo-ecological approach and on managing areas at the level of watersheds and catchments.

From EU resources, € 79 million has been allocated for the "Promotion of natural assets" and € 79 million for the "Natural heritage".

The government launched a programme for the period 2008-2012 on Lithuanian coastal management, with the conservation or regeneration of the coastline's features at its main objectives. The programme consists mainly of "soft" coastal protection measures, e.g. projects related to sand nourishment, which are sometimes co-financed by EU funds.

Environment and health

	Lithuania				*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)	23.3 (2004)	22.9	20.2	30.0	*30.0*	*3 out of 23*
Urban population exposure to air pollution by ozone (SOMO35 level, µg/m^3. day)	n.a.	5 048	4 621	3 456	*4 417*	*13 out of 23*
Air pollutant emissions (thousand tonnes)				(by 2010)	*EU27 total*	
– sulphur dioxides (SO_2)	42	44	43	145	*7946*	
– nitrogen oxides (NO_x)	46	58	61	110	*11198*	
– non-methane volatile organic compounds (NMVOCs)	70	84	78	92	*9391*	
– ammonia (NH_3)	25	39	35	84	*4006*	
	1990		**Latest available year (2005)**			
Water exploitation index	17.6%		9.7%		*n.a.*	*13*

One of the key environment policy instruments for 2008 is a three-year national programme on air emissions prior to the year 2010, adopted by the Lithuanian government in January 2008. The programme forecasts emission trends and sets up goals and measures in order to ensure that national emission ceiling targets for SO_2, NOx, VOC and NH_3 are not exceeded by 2010. The programme makes references to forthcoming emissions reduction legislation in the energy, transport, industry and agriculture sectors.

In August 2008, the government adopted the National Children Health Promotion Programme, including measures aimed at maintaining a healthy environment for children. The measures cover a five-year period, 2008-2012, and include for example activities to promote health in schools.

Natural resources and waste

	Lithuania				*EU-27 average*	*rank in EU-27*
	2000	**2006**	**2007**	**Target**		
Municipal waste generated (kg per capita)	363	390	400		*522*	*6*
– % landfilled	94.8%	91.3%	92.0%		*41.0%*	*26*
– % incinerated	0%	0%	0%		*19.9%*	
	2004	**2005**	**2006**			
Recycling of packaging waste (as % total packaging waste)	32.7%	32.5%	37.0%	55%-80% (by 2012)	*56.5 %*	*22*

In April 2008, the government introduced procedures for analysis of areas contaminated with chemicals, limit values for soil and ground water contamination, and requirements for the management of contaminated areas.

In November 2008, the Lithuanian government finalised transposition of the Directive on waste batteries and accumulators, with amendments to the Administrative Law Offence Code. The legislation introduced collection targets for waste portable batteries and accumulators and established rules for the collection, treatment, recycling and disposal of waste batteries and accumulators.

The National Strategic Waste Management Plan, adopted in October 2007 seeks to ensure municipal waste management quality and accessibility by the year 2009. No later than by the middle of 2009, non-hazardous waste will have to be disposed of only in the regional non-hazardous waste landfills which meet EU requirements. By the end of 2011 all landfills which do not satisfy environmental protection and public health requirements have to be closed and by 2013 the required sewage sludge waste treatment facilities need to be built.

Better regulation and implementation

	Lithuania			*EU-27 total*
	31/12/2006	**31/12/2007**	**31/12/2008**	
Infringements of EU environmental legislation	5	10	14	*481*

With the purpose of establishing a 'better regulation' policy and reducing administrative burdens and disproportionate expense, the Lithuanian government approved the Programme on Better Regulation and the related Action Plan in February 2008. As part of the programme, a large number of legal documents are being reviewed.

Use of market-based instruments

	Lithuania			*EU-27 average*
	2000	**2005**	**2006**	
Share of environmental taxes in total tax revenue	6%	6.7%	6.1%	*6.4%*

Incentives to invest in pollution reduction equipment are provided through subsidies and loans from the Lithuanian Environmental Investment Fund. The maximum amount of the subsidy for one beneficiary for a three-year period is 70% of total investment in environmental measures and amounts to €101 000 until July 2008. Starting from July 2008 this amount increased to €200 000. 46 projects were approved for financing in 2008, of which 10 are waste management projects, 25 are on reduction of air pollution, and 11 are on reduction of water pollution.

Outlook for 2009

The year 2009 will be important for Lithuania from an energy and economic perspective. Once the Ignalina Nuclear Power Plant is decommissioned in 2009, annual greenhouse gas emissions from electricity generating facilities are expected to increase from 5 to 7 million tonnes. It will also make Lithuania more dependent on external sources.

A programme for the efficient use of energy in transport is expected to be ready by the end of 2009. Furthermore, a new Law on Climate Change will be adopted and a Green Investment Scheme will be created for projects which aim at reducing greenhouse gas emissions.

In 2009 more attention will be paid to the development of renewable energy sources. The Government programme plans to set up a separate Ministry of Energy, including a Department of renewable energy resources. A sum of €63 million has been allocated from EU Structural Funds for implementation of projects intended to stimulate the use of renewable energy resources.

The new EC Regulation on classification and labelling of chemicals will enter into force at the beginning of 2009 and its implementation will create more work for the national authorities and challenges for industries. The appropriate national legislation has to be changed and dangerous substances and mixtures will have to be gradually reclassified and relabelled up until 2015. Information campaigns directed at stakeholders are underway in order to ensure smooth implementation during the transitional period.

In 2007, the government approved the National Green Procurement implementation programme and set a goal that by 2011 environmental criteria are to be applied to at least 25% of public procurement tenders. In 2009, the green procurement capacity of contracting authorities will be strengthened, partly through new training sessions.