

# 7

## ENVIRONMENTAL-SOCIAL INTERFACE\*

### Features

- Environmental health: state, objectives, actions
- Environmental democracy
- Environmental awareness and education
- Ombudsman for future generations

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\* The present chapter reviews progress in the last ten years, and particularly since the previous OECD Environmental Performance Review of 2000. It also reviews progress with respect to the objectives of the 2001 OECD Environmental Strategy.

### Recommendations

The following recommendations are part of the overall conclusions and recommendations of the environmental performance review of Hungary:

- set higher priority on *poverty and income distribution* issues, including child poverty, in environmental management;
- pursue efforts towards meeting NEHAP II objectives and quantitative targets for *public health and the environment*;
- promote *active employment policies* in eco-industries and environmental services, and the role of the not-for-profit sector in environmental employment, especially in environmentally sensitive areas;
- further promote *citizen participation* in environmental decision-making and access to justice concerning environmental issues;
- continue to develop, use and disseminate *environmental indicators*, and promote access to environmental information;
- pursue *environmental education* efforts; further develop the *environmental training* of elected officials, civil servants and teachers, and establish training for justice officials; develop closer and more sustained relations with local authorities, business and NGOs, as well as with the media, with a view to *raising environmental awareness*.

### Conclusions

Hungary adopted its second National *Environmental Health Action Programme* (NEHAP-II 2004-10) during the review period as well as a Children's Environmental Health Action Plan (CEHAP). The latter followed Europe's Fourth Ministerial Conference on Environment and Health (Budapest, 2004). Hungary has several positive indicators of environmental health: dioxin levels in human breast milk are among the lowest in Europe and mortality from respiratory diseases is lower than the EU-15 average. A national climate and health strategy, recently adopted, widens the scope of environmental health issues addressed in government policy. Hungary has also taken steps to promote *environmental democracy*, by developing a system to provide environmental information to the public, offering environmental education, and developing closer ties to local authorities, companies, NGOs and the media, with a view to raising environmental awareness. An innovative ombudsman's position has been established concerning future generations. A 2004 Supreme Court Decision (the so-called "Uniform Decision") has opened wider possibilities for non-governmental organisations to appeal decisions on a range of topics including the construction

permit procedure. Despite limited resources, *environmental education* has progressed. For example, 272 elementary schools now participate in an eco-school network.

Important problems remain, however, aggravated by the *increase in both poverty and income disparities* that occurred over the review period. The life expectancy remains among the lowest in OECD countries. Rates of mortality from diseases of the circulatory system and malignancies are among the highest in the OECD. Greater attention needs to be given to the *health effects* of air pollution (fine particulate matter) and prevention of health problems related to drinking water quality. Although 93% of the population is supplied with drinking water from central distribution systems, the water does not always meet health standards. Exposure to *asbestos* is still a problem: so far 20% of the asbestos in monitored residential buildings has been removed. Certain trends in environmental democracy have also been unfavourable. Less than 10% of the municipalities have prepared a *Local Agenda 21*. Although steps were taken to facilitate public participation in environmental decision-making and appeal, the system is still not well understood or effectively used by civil society.



## 1. Environmental Health

Hungary gives high priority to environmental health and has set out objectives in its successive National Environmental Programmes (NEPs) and *National Environmental Health Action Programmes (NEHAPs)*. Hungary also has a Children's Environmental Health Action Plan (CEHAP), adopted following Europe's Fourth Ministerial Conference on Environment and Health in 2004. Scientific, technical and administrative support is provided in part by Hungary's National Institute for Environmental Health (NIEH), created in 1998 as a government service and made independent in January 2007.

*NEP-I*, covering 1997-2002, set 120 targets, primarily for reducing emissions of "traditional" air and water pollutants, but did not define the country's environmental health problems or set priorities. Because the objectives are long term, it is difficult to monitor progress and evaluate achievement, but the experience of EU member states suggests the objectives could eventually be achieved. Hungary's progress has been facilitated by EU pre-accession funds for environmental protection (e.g. PHARE, ISPA, SAPARD, LIFE), which increased during the NEP-I years. Since EU accession, Hungary has had access to other EU resources such as the Cohesion and Structural Funds.

*NEP-II*, covering 2003-08, sets several quantitative targets related to health which are supplemented by *NEHAP-II*, covering 2004-10 (*NEHAP-II* was published as a chapter in Hungary's principal public health policy document, National Programme – Decade of Health 2003-2010) (Table 7.1). *NEHAP-II* sets out four main policy directions: i) integrate the environmental and health information systems; ii) investigate and reduce the incidence of disease linked to environmental exposures; iii) reduce exposure to pollution; and iv) raise general awareness about environmental health by providing information, education and training (Table 7.2).

The *state of health* of the Hungarian population shows contrasted performance. Life expectancy at birth is six years below the EU average (Figure 7.1). Mortality rates due to malignant diseases of the lung and trachea and diseases of the circulatory system, Hungary's two leading causes of death, are the highest in Europe. Heat waves associated with climate change have had significant health impacts (Box 7.1). By contrast, the rate of mortality due to respiratory diseases is lower than the EU-15 average, and dioxin levels in human milk are among the lowest in Europe. Mortality due to respiratory diseases potentially linked to air pollution (bronchitis, emphysema and asthma) declined slightly between 1996 and 2000, and then rose. Allergic rhinitis has increased tenfold in the past 12 years, although the trend slowed in the early 2000s and then levelled off in 2003-06.

### Box 7.1 Health impacts of climate change

The growing incidence of heat waves caused by global warming is presenting a new challenge in Hungary. The results of a 31-year time series *analysis of mortality and meteorological data* (Paldy et al., 2006) suggest that a 5°C increase in the mean daily temperature significantly increases the risk of daily mortality, with:

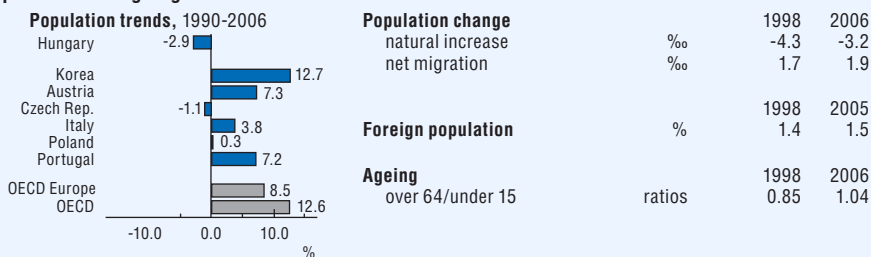
- a 10% increase in all causes of mortality;
- a 12% increase in mortality due to diseases of circulation; and
- a 15% increase in emergency ambulance calls due to general complaints and heart problems.

Hungary experienced many *heat waves* between 2001 and 2006, during which there were more than 377 premature deaths compared to mortality rates on cooler days.

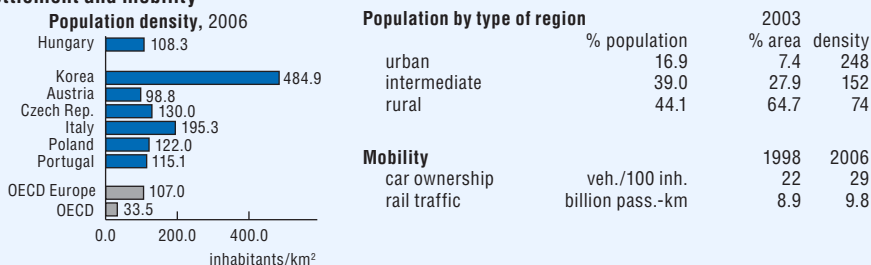
Hungary initiated a “heat and health” public outreach effort in 2004, distributing leaflets and providing information through the media about the *health effects of heat*. Information is also provided to the health care system to help them prepare. In 2007 a national climate and health study was carried out within the context of the preparation of the National Climate Change Strategy.

Figure 7.1 Social indicators

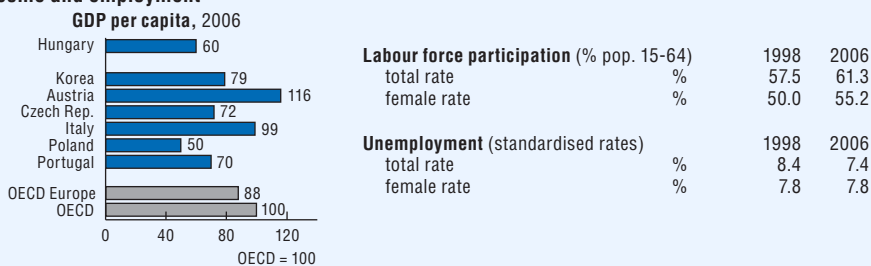
**Population and ageing**



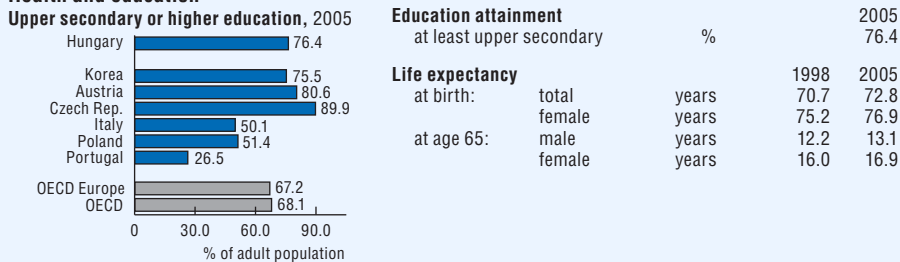
**Settlement and mobility**



**Income and employment**



**Health and education**



Source: OECD, Environment Directorate.

Table 7.1 Health-related objectives of the NEP II

Objective	Indicator	Reference status (1999/2000)	Target (2008, or indicated when different)
Reducing chemical risk	Reduced application of toxic, bio-accumulating and water polluting chemical substances and pesticides	100%	Reducing current application by 20%
	Reduced emissions of persistent organic pollutants (POPs)	100%	Reducing current application by 20%
Preserving good health	Reduced incidence of hay fever/pollenosis and asthmatic illnesses (number of new patients per year/total number of patients with the above illnesses)	10%	5%
	Reduced frequency of occurrence of goitre related to iodine supply	Changing county by county 4-10%	Max. 5%
	Reduced number of illnesses with Methemo-globin	10 cases	Should not occur
Increasing food safety	Size of qualified area cultivated by organic farming	85 000 ha	300 000 ha
Dissemination of environmentally friendly life style and consumption habits	Proportion of municipal waste collected separately compared to the total volume of collected waste	3%	35-40%
	Proportion of waste reuse, recovery and recycling compared to the total volume of collected waste	30%	50%
Improving urban environmental quality	Number of certification conditions for environmentally friendly products (product groups)	34	50
	Size of public green areas per city/town inhabitant	38.7 m <sup>2</sup> /person	45 m <sup>2</sup> /person
	Number of individuals affected by noise load exceeding 75dB(A) during daytime	20 000 people	No one should be affected by load exceeding 65dB(A)

Table 7.1 **Health-related objectives of the NEP II** (*cont.*)

Objective	Indicator	Reference status (1999/2000)	Target (2008, or indicated when different)
	Number of individuals affected by noise	1.7 million people	(0 person) 1.4 million people
	Proportion of inhabitants supplied with water that is not in compliance with the drinking water quality limit values	27.4%	0% (2009)
	Proportion of municipal waste water treated at the appropriate rate		
	– on sensitive areas (4.1% of the total waste water generated by settlements having a collection system)	68%	100%
	– on non-sensitive areas (95.6% of the total waste water generated by settlements having a collection system)	46%	90% (2015)
	Collection of waste water at settlements or parts of settlements not having a collection system	12%	100% (2015)

Source: MEW.

Table 7.2 National Environmental Health Action Programme – NEHAP II (2004-10)

Goal	Tasks and actions	Related programme
Integrate environmental and health information system		
Encourage better sharing of data and information on the environment and health	Develop the environmental health information system Develop the environmental health Geography Information System (GIS) Establish a connection to the international environmental health information and reporting systems Monitor the POP compounds (e.g. dioxin), metals and endocrine disruptors in human biological samples	EU EHAP <sup>a</sup> WHO/Euro project NEPP-II <sup>b</sup> EU EHAP, PHP <sup>c</sup>
Investigate and reduce diseases caused by exposure to pollution		
Environmental health research	Carry out bio-monitoring of environmental genotoxic exposure (environmental tobacco smoke, contamination containing PAHs), by DNA adduct examination	PHP <sup>c</sup>
Reduce environmentally-related burden of disease; Prevent and reduce respiratory diseases in children, with special emphasis on asthma	Survey respiratory diseases in young children (aged 0 to 14) in areas of industrial air pollution	HUN CEHAP <sup>d</sup>
Decrease the burden of neurological diseases caused by malformation	Reduce the inequities by molecular genetic screening	HUN CEHAP <sup>d</sup>
Decrease exposure		
Reduce exposure to outdoor and indoor air pollution	Evaluate the human effects of air polluting chemicals and dust contamination Analyse, evaluate and reduce the harmful effects of buildings on the human organism, including examination of the impacts of indoor air quality and heating methods, as well as introduction of the health and environmental qualification of building materials Determine the indoor air quality and environmental air-contamination status of different public institutions (health, educational, sport, cultural) and other establishments with large numbers of people	EU EHAP, <sup>a</sup> HUN CEHAP <sup>d</sup>
Protect against and decrease occurrence of water-borne diseases and adverse health impacts	Establish and run the national drinking water safety programme and surveillance system	HUN CEHAP <sup>d</sup>



Table 7.2 **National Environmental Health Action Programme – NEHAP II (2004-10)** (*cont.*)

Goal	Tasks and actions	Related programme
Decrease soil contamination and increase the safety of waste management	Establish healthy and safe playgrounds	PHP <sup>c</sup>
Reduce the risks of exposure to chemicals	Determine the role of different types of environmental exposure on pregnancy outcome	PHP <sup>c</sup>
Raise public awareness and provide risk information, education and training		
Raise awareness, provide risk and other information	Shape the approaches	NEPP-II, <sup>b</sup> HUN CEHAP <sup>d</sup>
Prevent children's accidents and injuries		
Provide environmental health education, training and continuing education		EU EHAP <sup>a</sup>

a) EU EHAP, European Environment and Health Action Plan for 2004-2010.

b) NEPP-II, National Environment Protection Programme (NEPP-II) for 2004-2008.

c) PHP, The environmental health sub-programme of the public health programmes.

d) HUN CEHAP, Hungarian National Children, Health, Environment Action Plan.

Source: MEW.

### *Ambient air pollution*

Ambient air quality generally improved during the review period. The population weighted average of PM<sub>10</sub> concentration in Hungary was 32.6 µg/m<sup>3</sup> in 2004. A 2004 government study, which looked at the *long- and short-term impacts of exposure to PM<sub>10</sub>* throughout Hungary, concluded that the long-term effects contributed to 170 deaths out of 100 000. Another study<sup>1</sup> concluded that reducing PM<sub>10</sub> levels from the current yearly mean of 29.9 µg/m<sup>3</sup> to 20 µg/m<sup>3</sup> (the limit value set in EU Directive 1999/30/EC) would prevent six post-neonatal deaths and one respiratory death per year in Budapest.

*Ragweed pollen* potentially affects Hungarians who suffer from respiratory diseases or allergies, most of whom are sensitised to ragweed.<sup>2</sup> The country's ragweed cover decreased between 2004 and 2005 and airborne pollen levels generally dropped between 2000 and 2005; but the ragweed cover and airborne pollen levels both increased again in 2006. That year, the suggested limit value of 30 pollen grains/m<sup>3</sup> was exceeded on more than 40 days in several areas, and the number of days with pollen counts above 100 pollen grains/m<sup>3</sup> was high (the maximum was 27 days in Zalaegerszeg, in Western Hungary). Law XXXV, adopted in 2000 and modified in 2005, aims to reduce ragweed pollen levels by requiring landowners to prevent the blossoming of ragweed until the 30th of June, and prescribing fines if they fail to do so. Country-wide ragweed eradication campaigns are also in place.

### *Drinking water quality*

*Little progress was made in improving drinking water quality* over the review period. More than 900 settlements with 2.5 million people (spread across the country) are still supplied with drinking water of unsatisfactory quality from a health perspective (Chapter 3).

*Arsenic of natural origin* is present in the waters in a significant part of the country although an assessment done under CEHAP showed that fewer than 5% of Hungarian children live in the predominantly small settlements where piped drinking water contains arsenic above the national limit value of 10 µg/l.<sup>3</sup> In the first phase of the National Drinking Water Quality Improvement Programme, covering the period 2002-05, the limit value was to be achieved at six settlements supplied with drinking water with an arsenic content above 50 µg/l, and at 64 settlements whose water had an arsenic content between 30 and 35 µg/l. Implementation has been delayed (Chapter 3). In the second phase, covering 2006-09, another 345 settlements, where the arsenic content of the drinking water is between 10 and 30 µg/l, are to be included in the programme.

*Iodine deficiency* is more widespread, with large variations of iodine supply across the country. Approximately 80% of the population lives in areas where the drinking water has low iodine levels, and surveys carried out in 1994-99 found that goitre frequency among school children was about 20%. Use of iodized salt is voluntary, except in the areas surrounding the nuclear power station (Paks), where the supply of iodized salt is compulsory. Effective measures and repeated monitoring will be necessary to comply with World Health Organisation goals (in “Health for All for 2000”) to reduce the rate of goitre to no more than 5% country-wide.

Another problem is *bacterial contamination*.<sup>4</sup> Although 92.8% of the population is supplied with drinking water from central distribution systems, bacteria levels sometimes exceed the legal limits. In the last several years, however, cases of microbiological contamination have steadily dropped. The number of outbreaks of water-borne disease infections is low, affecting up to 200 persons. Food-borne infections have been more common, except during 2006 which saw an outbreak in Miskolc with 3 673 reported cases of which 161 were admitted to hospital with gastroenteritis (Campylobacterium species were isolated).<sup>5</sup> The number of bathing water samples with microbiological contamination above the limits generally declined, and in 2005 the rate was as low as 4.5%. The ratio of non-compliance reflects the pollution of bathing waters visited by a high number of people during the bathing season.

## 2. Environmental Democracy

Hungary signed the *Aarhus Convention* on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters in 1998, and ratified it in 2001.

### *Access to information*

Hungarian law has supported the public’s right of access to environmental information, public or private, since 1992.<sup>6</sup> Anyone can request access without having to state a reason. The 1995 Environment Act defines environmental information as “public information”. An important aspect of Hungary’s procedure for handling information requests (and possible refusals and resulting court reviews) is that it is overseen by an *independent data protection ombudsman*. Over the years, the ombudsman’s recommendations have contributed to the steady improvement of access to information in Hungary, including environmental information. In addition, in 2005 a government decree (No. 311/2005) further enhanced access to environmental information, pursuant to EU Directive 2003/4/EC. Importantly, the public has access to information on *risks associated with industrial activities*

involving hazardous substances (for facilities classified as upper-tier hazardous), including access to external emergency plans (protection measures for residents).<sup>7</sup>

Hungary has a wide range of *environmental data collection* and processing schemes, and a project is underway to combine them into one integrated system. A government decree defining the terms of use of such a system is under preparation. The development of environmental statistics, which began in 1986, has been accelerating since the mid-1990s when Hungary began publishing the Environmental Statistical Yearbook of Hungary, covering a growing number of substances (Hungarian Central Statistical Office, 2006).

Hungary has also developed and used *environmental indicators*, especially since joining the OECD. It now publishes several reports with environmental indicators; these include: i) Environmental Indicators of Hungary by the Ministry of Environment and Water (MEW), a comprehensive report following the OECD pressure-state-response model, published for the first time in 2000; ii) Main Environmental Indicators of Hungary, an annual booklet containing sectoral, socio-economic and regional indicators and international data; iii) Key Environmental Indicators of Hungary; iv) Environmental Pressure Indicators of Hungary; v) Environmental Headline Indicators of Hungary; and vi) Sectoral Environmental Indicators of Hungary.

A number of initiatives have been taken to *bring environmental information closer to citizens*. First, environmental information and statistics have also been posted on the *Internet*, including data and information related to particular programmes (e.g. PRTR, EMAS, waste management, ecolabelling, the air quality monitoring network, and the Lake Balaton and Tisza Basin information systems). Secondly, a *network of Green-Point Offices* covers the entire country (Box 7.2). Thirdly, a computerised and Internet accessible information system permits any citizen to identify environmental information associated with sites located close to a specific location (e.g. home or employment location).

### *Participation in decision-making*

The main channel for public participation in decision-making is through the *Environmental Impact Assessment (EIA)* procedure, which follows Government Decree No. 314/2005. Commencement of the EIA procedure must be announced in public notices and newspaper advertisements by the clerk of the municipalities concerned; 30 days must be allowed for public review and comment; and a public hearing, also announced in notices and newspapers, must be held by the environmental authority (e.g. the regional environmental, nature conservation and water inspectorate). Public comments must be taken into consideration in the

### Box 7.2 National Network of Green-Point Offices

In 2004, 42 “Green-Point” Offices operated under the auspices of the MEW and its subsidiary bodies, to provide both *environmental information* and *environmental administrative services* to the public. From 1 March 2005, these offices were integrated into a single non-profit organisation called the National Network of Green-Point Offices.

This network covers the *entire country*, providing information on environmental and nature protection and water management in a uniform format and content. The information is made available to all citizens through a user-friendly access method.

The responsibilities of the National Network of Green-Point Offices include: to receive and solve *public complaints* and reports without delay and, if official action is required, to forward the problem to the relevant authorities; to establish and implement conditions of *simplified administration*; to provide *information* about environmental data and to collect and manage the data and make them available; to ensure *access to relevant laws*; to organise *public events* related to “green days” that are in the public interest and are suitable for disseminating information; and to participate actively at these events.

environmental authority’s decision, and minutes of hearings must be taken and distributed. Decisions ending the different phases of the procedure must be publicised and made available for inspection by the authorities and municipalities concerned.

A second Government Decree issued in 2005 (No. 2/2005) provides for public participation in the environmental assessment of plans and programmes in line with the EU *Strategic Environmental Assessment (SEA)* Directive. The decree requires that the public be given early information on plans and programmes subject to strategic environmental assessment and the opportunity to comment in writing; and it requires authorities to take public comments into account and to publicise final plans and programmes.

Hungary has recently created (by unanimous vote of its Parliament) a position of Ombudsman for future generations with a capacity to intervene in judicial procedures (Box 7.3). The Ombudsman was elected in spring 2008.

#### *Environmental justice*

Hungarian law provides for *public access to justice* in the case of refusal of environmental information as well as environmental decision-making. Act CXL of

### Box 7.3 The Ombudsman for future generations

The *ombudsmen's role* is to guarantee fair and equitable treatment of citizens under the law, acting on behalf of those whose rights are violated. In Hungary, three such ombudsmen were created in the early 1990s: the general Ombudsman (acting as a commissioner for human rights), the Ombudsman for the protection of the national and ethnic minority rights, and the Ombudsman for data protection and freedom of information.

Given that *future generations cannot vote* or take part in today's elections and decision-making processes, although they are directly affected by the consequences of today's activity, the Hungarian Parliament unanimously decided in November 2007 to establish a new ombudsman whose aim shall be to *protect the rights of future generations*. This green ombudsman will have to implement fairness amongst generations, preventing people not yet born from harmful economic, social and environmental impacts of current policies. The green ombudsman will be entitled to suspend environmental permits and operating licenses, as well as to intervene in ongoing judicial procedures.

Similar initiatives in other OECD countries (e.g. Canada, Finland, France, Germany, Poland, Switzerland, United Kingdom) have shown that ombudsmen cannot fully accomplish their missions without legislative and executive powers. The Hungarian green ombudsman is a step forward, as it entails *extended jurisdiction*.

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Source: Javor (2006), Balla (2007).

2004 on the General Rules of Administrative Procedures and Services allows any person who can demonstrate connection to and harm from decisions affecting the environment (*locus standi*) to appeal to the second instance administrative authority. If no such second instance authority exists (which applies to a limited number of cases) the law provides for recourse to direct judicial review. Any person who has appealed the first instance administrative decision has a right to a maximum three-stage judicial review. The scope of review is limited to the legality of the administrative decision.

Given the inherent conflict between large-scale infrastructure projects and environmental protection, Hungary's courts have dealt with public participation issues extensively. An important milestone in the development of the national jurisprudence was the so-called *Uniformity Decision No. 1/2004 of the Hungarian Supreme Court*, which provides that environmental NGOs may appeal the decisions made (e.g. permits granted) by any authority which has sought expert advice from the

environmental authorities (such consultation is required by law). Such uniformity decisions are issued in the form of normative texts (rather than precedent cases) and are binding on all courts in the Hungarian judicial system.

The Hungarian Constitution states that citizens have the *right to a healthy environment* but does not specify what this means. The Constitutional Court has interpreted the right on several occasions but in doing so has not addressed the right to certain public services, such as the provision of drinking water. To date, low-income households who fail to pay their water bills have not been disconnected from public water supply, but neither have populations affected by pollution been granted financial compensation. Perhaps the latter will change in the future, as Hungary is now developing an environmental liability regime following the EU liability directive.

Hungarian law does not expressly provide for the *right to water and sanitation*. However, Hungarian regulations specify that national water management must be implemented in such a way that social needs are met (Law LVII/1995). Additionally, the law stipulates that the government must draw up a “national environmental plan” with separate programmes to improve drinking water quality and to expand sewerage networks and sewage treatment. These programmes are specified in government decrees and contain specific timelines, whose implementation is supervised by the MEW through a system of indicators.

An important aspect of the right to water and sanitation in Hungary is the *contractual relationship between households and the water company*. The exact content of the contracts, including the rights and responsibilities of both sides, is specified by the 38/1995 Government Decree and the Law on Consumer Protection. The arrangement obliges consumers (including households) to pay their water bills in accordance with their consumption. Compliance with the contracts is monitored by the Inspectorate of Consumer Protection, which has conducted several general enquiries on the service providers’ practices based on consumer complaints. The State Auditor examines the operation of the service companies and owner municipalities from a financial perspective, considering how they set fees, what the fees include, the financial structure of the companies’ investments, and so forth.

### *Environmental NGOs*

The *number of environmental NGOs* in Hungary has approximately doubled since the early 1990s, rising to more than 1 200. Between 1991 and 2000, an average of 84 groups was created annually. Some 40% of Hungary’s NGOs operate as a private or public foundation, and the remaining 60% operate as non-profit entities.

While two-thirds of the former are located in Budapest, more than 80% of the latter were located in towns and villages.

Environmental NGOs receive *preferential treatment under the Hungarian EIA regime*, which gives them the right: to register with the environmental authorities for automatic inclusion in environmental licensing procedures; to challenge the environmental authorities' decisions at all phases of licensing; and to appeal in court in all environmental licensing procedures.<sup>8</sup> Similar rights are also granted NGOs under the "uniform environmental permitting" (IPPC) procedure even when it is not preceded by an EIA.

The MEW has for several years funded programmes for environmental and nature conservation organisations, and in 2002 it invited applications for assistance in implementing the Aarhus Convention. This "civil appropriation" for non-profit green organisations increased steadily over the years, from HUF 25 million in 1995 to HUF 175 million in 1997 and HUF 600 million in 2004. In 2005, due to changes to the Central Budget's chapter numbers, only HUF 300 million was earmarked for NGOs, but further funds were provided as a result of the establishment of the National Civil Fund, which had been created in 2003 specifically to provide *governmental support to registered NGOs*. In 2004, HUF 6 108 million was available, and individual NGOs were able to apply for up to HUF 18 million. A similar amount was available in 2005.

Another important source of funding for environmental NGOs is *tax redistribution*. Taxpayers have the possibility of diverting 1% of their personal income tax to a particular NGO. NGOs have appealed widely to citizens for such support and have succeeded in gathering substantial sums of money.

### 3. Environmental Education and Awareness

In 1999 the Ministry for Environment (now MEW) and the Ministry of Education together established the Environmental Education and Communication Programme Office (EECPO). The office worked until its termination in 2005 to fulfil its mission to increase citizens' "knowledge, awareness and responsibility for their environment with a view to promoting proactive interest in environmental sustainability". EECPO also worked to accelerate the flow of information between institutions and organisations who are working in the field. It led to creation of the (still existing) *Environmental Educational and Communication Database*, which contains the data, publications and programmes of organisations that carry out environmental education activities.



### *Forest School Programme*

A national six-year programme to support *field environmental education*, initiated by the Ministry of Education, the MEW, the Ministry for Children, Youth and Sports, and the Hungarian Prime Minister's Office, included a "Forest School Programme 2003-06", but the programme was suspended in 2005 due to lack of funds. The long-term objective is to ensure that every child has an opportunity to attend forest school at least once during their primary school years.

## 4. Environment and Employment

The issue of environmental and employment policy forms part of Hungary's National Sustainable Development Strategy. A recent survey conducted by the Hungarian Central Statistical Office shows a *growing number of employees in the environmental industry*: between 2002 and 2005, the total number grew by approximately 16% (Table 7.3).

*Green public procurement* is at an early stage of development in Hungary. To promote it, an inter-ministerial working group has been set up to establish an action

**Table 7.3 Number of employees in environmental protection**

	2002	2003	2004	2005
Agriculture, hunting and forestry	64	50	53	48
Manufacturing	2 247	2 052	2 480	2 263
Electricity, gas and water supply	4 379	4 557	4 657	4 525
Construction	670	689	520	571
Wholesale and retail trade <sup>a</sup>	576	594	598	646
Transport, storage and communication	98	135	104	81
Real estate, renting and business activities	605	609	634	657
Public administration, defence; social security	149	251	556	407
Education	17	8	128	342
Other community, social and personal services	7 526	6 721	8 105	8 494
Other	28	97	222	916
<b>Total</b>	<b>16 359</b>	<b>15 763</b>	<b>18 056</b>	<b>18 950</b>

a) Includes repair of motor vehicles, motorcycles and personal and household goods.

Source: Hungarian Central Statistical Office.

plan in line with the EC recommendations. The plan will determine targets and deadlines for five product groups and services: IT and office equipment, stationary, cleaning services, construction and vehicles. In July 2006 the General Assembly of Budapest approved a “green public procurement regulation”, the first local authority green procurement regulation in Hungary. It is based on the Green Procurement Manual for Local Authorities 2002 by the Centre for Environmental Studies, an environmental NGO. The Procurement Department of Budapest Municipality expects at least 40% of the calls for tender – the share recommended by the EU – to include environmental criteria. To achieve this, environmental aspects must as a rule be incorporated in all procurement deals, except for cases when the urgency of the project or the excessive (more than 20% higher) price of environmentally friendly alternatives make it impossible. In all other cases, a waiver must be obtained from the Environmental Department.

## Notes

1. The study was carried out in the context of the EU APHEIS (Air Pollution and Health: A European Information System) Programme.
2. Ragweed pollution is an emerging problem in several European countries. Information from monitoring stations indicates that the ragweed pollen load has been expanding in both *Southern and Northern* Europe.
3. Specified in Government Decree No. 21/2001 (X.25.)
4. The most important pathogens in Hungary include: *E. coli*, *Salmonella*, *Shigella*, *Campylobacter*; viruses such as *Norovirus*, *Enteroviruses*, *Rotavirus* and *Adenovirus*; protozoons such as *Giardiasis* and *Cryptosporidiosis*.
5. The number of food-borne outbreaks by year is: in 2001, 674; in 2002, 674; in 2003, 164; in 2004, 183. The affected population: in 2001, 4 628; in 2002, 2 959; in 2003, 2 838; in 2004, 2 281.
6. Act LXIII of 1992 on the Protection of Personal Data and the Disclosure of Information of Public Interest.
7. Act LXXIV of 1999 on the Management and Organisation of Disaster Protection and the Prevention of Major Accidents Involving Dangerous Substances.
8. In this case the authority sends notices to NGOs about the main documents and steps of the proceedings.

## Selected Sources

The government documents, OECD documents and other documents used as sources for this chapter include the following. Also see list of Web sites at the end of this report.

Balla, Z (2007), “New Ombudsman Gets Green Light”, [www.budapestsun.com](http://www.budapestsun.com).

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## **REFERENCES**

- I.A Selected environmental data
- I.B Selected economic data
- I.C Selected social data
- II.A Selected multilateral agreements (worldwide)
- II.B Selected multilateral agreements (regional)
- III. Abbreviations
- IV. Physical context
- V. Selected environmental websites

## I.A: SELECTED ENVIRONMENTAL DATA (1)

		CAN	MEX	USA	JPN	KOR	AUS	NZL	AUT	BEL	CZE	DNK	FIN
<b>LAND</b>													
Total area (1000 km <sup>2</sup> )		9971	1958	9629	378	100	7713	270	84	31	79	43	338
Major protected areas (% of total area)	2	8.7	9.2	25.1	17.0	9.6	18.5	32.4	28.0	3.4	15.8	11.1	9.1
Nitrogenous fertiliser use (t/km <sup>2</sup> of agricultural land)		2.5	1.2	2.7	9.0	20.1	0.2	2.6	2.9	10.7	6.9	7.8	5.9
Pesticide use (t/km <sup>2</sup> of agricultural land)		0.06	0.04	0.08	1.24	1.20	-	0.02	0.09	0.69	0.10	0.11	0.06
Livestock densities (head of sheep eq./km <sup>2</sup> of agr. land)		192	256	191	1011	1560	62	685	492	1790	287	912	290
<b>FOREST</b>													
Forest area (% of land area)		45.3	33.9	32.6	68.9	63.8	21.4	34.7	41.6	22.4	34.1	12.7	75.5
Use of forest resources (harvest/growth)		0.4	0.2	0.6	0.4	0.1	0.6	..	0.7	0.9	0.7	0.7	0.7
Tropical wood imports (USD/cap.)	3	1.6	0.2	2.1	10.7	6.1	4.0	3.4	0.4	24.2	0.3	3.8	1.4
<b>THREATENED SPECIES</b>													
Mammals (% of species known)		20.3	31.8	16.8	23.3	11.4	23.8	18.0	22.0	30.5	20.0	22.0	10.8
Birds (% of species known)		9.8	16.2	11.7	13.1	6.3	13.0	21.0	27.7	28.1	50.0	16.3	13.3
Fish (% of species known)		29.6	27.6	31.7	36.0	8.9	1.0	10.0	50.6	23.8	41.5	15.8	11.8
<b>WATER</b>													
Water withdrawal (% of gross annual availability)		1.5	15.9	19.2	20.4	36.2	4.8	1.7	5.0	32.5	12.7	4.1	2.1
Public waste water treatment (% of population served)		72	35	71	67	79	..	80	86	46	71	88	81
Fish catches (% of world catches)		1.2	1.4	5.3	4.7	1.7	0.2	0.6	-	-	-	1.1	0.1
<b>AIR</b>													
Emissions of sulphur oxides (kg/cap.)		64.0	25.9	44.8	5.9	8.5	123.6	20.4	3.2	13.8	21.4	4.0	13.0
(kg/1000 USD GDP)	4	2.1	2.9	1.2	0.2	0.4	4.2	0.9	0.1	0.5	1.2	0.1	0.4
% change (1990-2005)		-34	-3	-37	-24	-50	58	54	-64	-60	-88	-88	-73
Emissions of nitrogen oxides (kg/cap.)		73.6	14.0	57.3	15.0	27.1	78.0	39.6	27.3	25.6	27.2	34.3	33.5
(kg/1000 USD GDP)	4	2.4	1.6	1.5	0.6	1.4	2.7	1.7	0.9	0.9	1.5	1.1	1.1
% change (1990-2005)		-1	14	-26	-6	50	25	58	7	-26	-63	-32	-40
Emissions of carbon dioxide (t./cap.)	5	17.0	3.7	19.6	9.5	9.3	18.5	8.5	9.4	10.7	11.6	8.8	10.6
(t./1000 USD GDP)	4	0.55	0.40	0.53	0.35	0.47	0.63	0.37	0.31	0.38	0.64	0.29	0.36
% change (1990-2005)		28	33	20	15	98	45	63	34	3	-23	-6	1
<b>WASTE GENERATED</b>													
Industrial waste (kg/1000 USD GDP)	4, 6	..	..	..	40	40	20	10	..	50	30	10	110
Municipal waste (kg/cap.)	7	420	340	750	400	380	690	400	560	460	290	740	470
Nuclear waste (t./Mtoe of TPES)	8	6.2	0.1	1.0	1.5	3.2	-	-	-	2.2	1.7	-	1.9

.. not available. - nil or negligible.

1) Data refer to the latest available year. They include provisional figures and Secretariat estimates.

Partial totals are underlined. Varying definitions can limit comparability across countries.

2) IUCN management categories I-VI and protected areas without IUCN category assignment; national classifications may differ.

3) Total imports of cork and wood from non-OECD tropical countries.

4) GDP at 2000 prices and purchasing power parities.

Source: OECD Environmental Data Compendium.

## OECD EPR / SECOND CYCLE

FRA	DEU	GRC	HUN	ISL	IRL	ITA	LUX	NLD	NOR	POL	PRT	SLO	ESP	SWE	CHE	TUR	UKD*	OECD*
549	357	132	<b>93</b>	103	70	301	3	42	324	313	92	49	506	450	41	779	245	35042
13.3	31.5	5.2	<b>8.9</b>	9.5	1.2	19.0	17.1	18.9	6.4	29.0	8.5	25.2	9.5	9.5	28.7	4.3	30.1	16.4
7.6	10.4	2.9	<b>5.8</b>	0.7	7.9	5.2	-	13.8	10.1	4.8	2.3	3.7	3.5	5.2	3.6	3.6	6.3	2.2
0.27	0.17	0.12	<b>0.17</b>	-	0.05	0.58	0.33	0.41	0.08	0.06	0.40	0.16	0.14	0.05	0.10	0.06	<i>0.21</i>	<i>0.07</i>
514	689	245	<b>207</b>	65	1139	488	4351	2142	845	315	498	226	339	409	794	290	674	208
31.6	30.2	22.8	<b>19.5</b>	1.3	9.4	23.3	34.5	9.5	39.2	30.0	36.9	41.6	33.3	73.5	30.8	27.0	11.6	34.4
0.6	0.5	0.6	<b>0.5</b>	-	0.7	0.5	0.5	0.6	0.5	0.6	0.8	0.5	0.5	0.7	0.8	0.5	0.6	<u>0.6</u>
6.8	1.8	2.7	<b>0.1</b>	2.8	11.2	7.2	-	15.6	3.6	0.3	17.6	0.1	6.2	2.2	0.6	0.5	2.7	4.0
19.0	37.9	37.8	<b>37.8</b>	-	1.8	40.7	51.6	18.6	13.7	13.5	26.2	21.7	13.3	18.3	32.9	14.3	<i>15.8</i>	..
19.2	27.3	1.9	<b>14.5</b>	44.0	5.4	18.4	23.1	21.6	16.1	7.8	38.1	14.0	26.9	17.5	36.4	3.7	<i>16.2</i>	..
36.1	68.2	26.2	<b>43.2</b>	-	23.1	35.1	27.9	22.1	9.4	21.0	62.9	24.1	51.4	10.9	38.9	11.1	<i>11.1</i>	..
17.5	18.9	12.1	<b>4.8</b>	0.1	2.3	44.0	3.3	10.0	0.9	18.3	12.0	1.3	33.3	1.5	4.7	19.1	22.4	11.5
79	93	56	<b>60</b>	50	70	69	95	99	76	59	60	52	55	85	97	42	<i>98</i>	<u>68</u>
0.7	0.3	0.1	-	1.9	0.3	0.3	-	0.6	2.7	0.2	0.2	-	0.9	0.3	-	0.5	0.7	26.2
7.6	6.8	49.1	<b>12.8</b>	27.5	17.0	7.1	6.3	3.8	5.2	33.2	20.7	16.5	28.9	4.4	2.3	26.9	11.8	25.7
0.3	0.3	2.2	<b>0.8</b>	0.8	0.5	0.3	0.1	0.1	0.1	2.7	1.1	1.2	1.3	0.1	0.1	3.4	0.4	1.0
-65	-90	16	<b>-87</b>	12	-62	-77	-80	-67	-54	-61	-31	-84	-42	-63	-59	28	-81	-45
19.8	17.5	29.9	<b>20.1</b>	94.0	28.0	19.0	30.3	21.1	42.6	21.3	24.6	18.1	35.1	22.7	11.5	15.0	27.1	32.1
0.7	0.7	1.3	<b>1.3</b>	2.8	0.8	0.7	0.5	0.7	1.1	1.7	1.3	1.3	1.5	0.8	0.4	1.9	1.0	1.2
-34	-50	19	<b>-15</b>	1	-5	-43	-39	-38	-7	-49	4	-55	22	-35	-47	66	-45	-22
6.4	9.9	8.6	<b>5.7</b>	7.5	10.6	7.7	24.9	11.2	8.0	7.8	6.0	7.1	7.9	5.6	6.0	3.0	8.8	11.0
0.23	0.38	0.39	<b>0.37</b>	0.22	0.31	0.30	0.42	0.38	0.20	0.62	0.32	0.52	0.34	0.19	0.19	0.39	0.31	0.43
9	-16	36	<b>-18</b>	16	42	14	8	16	29	-15	59	-33	65	-4	9	70	-5	16
50	20	..	<b>30</b>	10	40	20	30	40	20	120	50	130	30	110	-	30	30	50
540	600	440	<b>470</b>	520	740	540	710	620	760	250	470	270	650	480	650	430	580	560
4.2	1.2	-	<b>1.7</b>	-	-	-	-	0.1	-	-	-	3.0	1.2	4.1	1.9	-	1.0	1.5

UKD: pesticides and threatened species: Great Britain; water withdrawal and public waste water treatment plants: England and Wales.

5) CO<sub>2</sub> from energy use only; sectoral approach; international marine and aviation bunkers are excluded.

6) Waste from manufacturing industries.

7) CAN, NZL: household waste only.

8) Waste from spent fuel arising in nuclear power plants, in tonnes of heavy metal, per million tonnes of oil equivalent of total primary energy supply.

**I.B: SELECTED ECONOMIC DATA (1)**

	CAN	MEX	USA	JPN	KOR	AUS	NZL	AUT	BEL	CZE	DNK
<b>GROSS DOMESTIC PRODUCT</b>											
GDP, 2006 (billion USD at 2000 prices and PPPs)	1017	1028	11319	3537	1008	611	96	255	304	195	170
% change (1990-2006)	55.4	60.9	59.1	23.3	136.7	68.4	62.4	42.6	37.6	31.5	43.0
per capita, 2006 (1000 USD/cap.)	31.2	9.8	37.8	27.7	20.9	29.7	23.3	30.8	29.0	19.1	31.3
Exports, 2006 (% of GDP)	36.3	31.9	11.1	16.1	43.2	20.9	29.3	56.3	87.5	76.3	52.0
<b>INDUSTRY</b> 2											
Value added in industry (% of GDP)	32	27	23	31	43	26	25	32	27	40	27
Industrial production: % change (1990-2005)	46.7	51.3	55.9	3.2	210.9	30.5	29.5	70.1	21.0	11.8	38.3
<b>AGRICULTURE</b>											
Value added in agriculture (% of GDP)	3	3	4	2	1	4	4	7	2	1	4
Agricultural production: % change (1990-2005)	25.6	41.5	27.6	-12.3	19.3	25.4	47.9	9.9	13.0	..	0.7
Livestock population, 2005 (million head of sheep eq.)	118	275	787	53	30	283	99	17	25	12	24
<b>ENERGY</b>											
Total supply, 2005 (Mtoe)	272	177	2340	530	214	122	17	34	57	45	20
% change (1990-2005)	29.9	42.0	21.4	19.3	128.9	39.3	22.9	37.1	15.2	-7.7	9.6
Energy intensity, 2005 (toe/1000 USD GDP)	0.27	0.18	0.21	0.15	0.22	0.20	0.18	0.14	0.19	0.25	0.12
% change (1990-2005)	-14.1	-7.5	-21.5	-1.2	1.5	-15.3	-22.9	-0.8	-13.8	-25.3	-20.7
Structure of energy supply, 2005 (%)	4										
Solid fuels	10.2	4.9	23.8	21.1	23.1	44.5	11.9	11.9	9.1	43.6	19.1
Oil	35.5	58.8	40.8	47.4	45.0	31.1	40.4	42.5	40.7	21.6	42.1
Gas	29.4	25.0	21.8	13.3	12.8	18.9	18.9	24.2	25.2	16.6	22.6
Nuclear	8.8	1.6	9.0	15.0	17.9	-	-	-	22.1	14.0	-
Hydro, etc.	16.1	9.7	4.7	3.2	1.2	5.5	28.9	21.4	2.9	4.2	16.3
<b>ROAD TRANSPORT</b> 5											
Road traffic volumes per capita, 2004 (1000 veh.-km/cap.)	9.8	0.7	16.2	6.5	3.2	9.8	12.3	9.3	9.0	4.6	7.8
Road vehicle stock, 2005 (10 000 vehicles)	1883	2205	24119	7404	1540	1348	271	502	559	439	245
% change (1990-2005)	13.8	129.3	27.8	31.1	353.5	37.9	47.0	36.0	31.2	69.4	29.5
per capita (veh./100 inh.)	58	21	81	58	32	66	66	61	54	43	45

.. not available. - nil or negligible.

1) Data may include provisional figures and Secretariat estimates. Partial totals are underlined.

2) Value added: includes mining and quarrying, manufacturing, gas, electricity and water and construction;  
production: excludes construction.

Source: OECD Environmental Data Compendium.



## OECD EPR / SECOND CYCLE

FIN	FRA	DEU	GRC	HUN	ISL	IRL	ITA	LUX	NLD	NOR	POL	PRT	SLO	ESP	SWE	CHE	TUR	UKD	OECD
161	1743	2225	257	<b>162</b>	11	151	1556	28	494	188	505	198	79	1036	282	245	603	1760	31225
44.5	34.9	30.1	62.5	<b>38.6</b>	64.7	174.6	23.5	108.2	49.4	65.0	79.2	40.2	46.5	60.7	42.1	22.2	86.3	47.7	48.7
30.5	28.5	27.0	23.1	<b>16.1</b>	34.6	35.6	26.4	61.7	30.2	40.4	13.3	18.7	14.7	23.5	31.1	32.7	8.2	29.2	26.6
44.5	26.9	45.1	18.6	<b>77.8</b>	32.2	79.8	27.9	166.4	73.2	46.6	40.3	31.1	85.7	26.0	51.3	52.5	28.2	28.4	26.0
32	25	30	23	<b>31</b>	27	42	29	20	26	38	30	29	32	30	28	27	31	26	29
75.6	18.2	16.9	19.5	<b>92.2</b>	..	312.8	10.5	57.6	20.8	35.5	113.0	15.1	19.5	27.0	55.3	27.6	78.3	8.6	<u>34.6</u>
4	3	1	7	<b>4</b>	9	3	3	1	3	2	3	4	5	3	2	1	12	1	3
-3.9	0.9	-4.7	10.1	<b>-10.5</b>	5.4	2.6	10.7	13	-9.2	-9.4	-15.8	1.1	..	7.4	-10.2	-4.3	18.2	-8.0	..
8	156	117	21	<b>12</b>	1	50	64	6	42	9	58	19	6	100	13	12	111	113	2639
35	276	345	31	<b>28</b>	4	15	185	5	82	32	93	27	19	145	52	27	85	234	5548
19.8	21.1	-3.2	39.7	<b>-2.8</b>	66.9	47.5	25.2	33.7	22.6	49.3	-6.9	53.1	-11.7	59.4	9.7	8.6	60.9	10.3	22.6
0.23	0.16	0.16	0.13	<b>0.18</b>	0.36	0.11	0.12	0.18	0.17	0.18	0.20	0.14	0.26	0.15	0.19	0.11	0.15	0.14	0.18
-13.0	-8.2	-23.3	-10.4	<b>-27.1</b>	5.7	-43.2	3.3	-31.9	-15.5	-6.9	-44.8	10.6	-34.7	3.0	-19.3	-8.2	-8.4	-23.2	-15.1
14.8	5.1	23.7	29.2	<b>11.3</b>	2.7	17.8	9.1	1.8	10.2	2.3	58.1	12.6	22.2	14.1	5.0	0.6	26.3	16.2	20.4
32.0	32.5	35.8	57.7	<b>26.5</b>	24.5	56.7	45.2	70.3	41.0	42.8	23.6	59.8	18.1	49.1	28.3	48.1	35.0	36.3	40.6
10.8	14.6	23.4	7.7	<b>44.4</b>	-	23.0	39.0	26.2	44.0	15.6	13.0	14.1	30.8	20.5	1.6	10.5	26.7	36.4	21.8
18.1	41.9	12.3	-	<b>13.3</b>	-	-	-	-	1.3	-	-	-	24.4	10.3	35.9	23.0	-	9.1	11.0
24.3	5.9	4.8	5.4	<b>4.5</b>	72.7	2.6	6.7	1.7	3.6	39.3	5.3	13.5	4.5	6.0	29.2	17.9	11.9	2.0	6.2
9.7	8.6	7.1	8.7	<b>2.3</b>	10.2	9.5	8.9	8.9	8.0	7.8	3.9	7.4	2.7	4.8	8.2	8.0	0.8	8.2	8.4
282	3617	4803	552	<b>333</b>	21	198	3894	34	806	252	1472	552	150	2516	463	419	843	3217	64939
26.2	27.1	28.8	118.7	<b>49.4</b>	59.8	108.5	30.2	68.0	40.7	29.9	126.8	151.3	44.4	74.2	17.9	28.9	257.1	35.0	38.7
54	59	58	50	<b>33</b>	72	48	66	74	49	55	39	52	28	58	51	56	12	54	56

3) Agriculture, forestry, hunting, fishery, etc.

4) Breakdown excludes electricity trade.

5) Refers to motor vehicles with four or more wheels, except for Italy, which include three-wheeled goods vehicles.

**I.C: SELECTED SOCIAL DATA (1)**

	CAN	MEX	USA	JPN	KOR	AUS	NZL	AUT	BEL	CZE	DNK
<b>POPULATION</b>											
Total population, 2006 (100 000 inh.)	326	1049	2994	1278	483	206	41	83	105	103	54
% change (1990-2006)	17.8	24.9	19.9	3.5	12.7	20.7	23.1	7.3	5.5	-1.1	5.7
Population density, 2006 (inh./km <sup>2</sup> )	3.3	53.6	31.1	338.2	484.9	2.7	15.3	98.8	344.3	130.0	126.1
Ageing index, 2006 (over 64/under 15)	76.4	17.4	61.3	152.6	51.0	68.6	58.6	106.0	100.5	97.0	81.8
<b>HEALTH</b>											
Women life expectancy at birth, 2005 (years)	82.6	77.9	80.4	85.5	81.9	83.3	81.7	82.2	81.6	79.1	80.2
Infant mortality, 2005 (deaths /1 000 live births)	5.3	18.8	6.8	2.8	5.3	5.0	5.1	4.2	3.7	3.4	4.4
Expenditure, 2005 (% of GDP)	9.8	6.4	15.3	8.0	6.0	9.5	9.0	10.2	10.3	7.2	9.1
<b>INCOME AND POVERTY</b>											
GDP per capita, 2006 (1000 USD/cap.)	31.2	9.8	37.8	27.7	20.9	29.7	23.3	30.8	29.0	19.1	31.3
Poverty (% pop. < 50% median income)	10.3	20.3	17.0	15.3	..	11.2	10.4	9.3	7.8	4.4	4.3
Inequality (Gini levels)	2	30.1	48.0	35.7	31.4	..	30.5	33.7	26.0	26.0	24.0
Minimum to median wages, 2000	3	42.5	21.1	36.4	32.7	25.2	57.7	46.3	x	49.2	32.3
<b>EMPLOYMENT</b>											
Unemployment rate, 2006 (% of civilian labour force)	4	6.3	3.2	4.6	4.1	3.5	4.8	3.8	4.7	8.2	7.1
Labour force participation rate, 2006 (% 15-64 years)	79.4	64.4	75.2	79.5	69.1	77.2	80.3	79.1	67.8	71.1	81.7
Employment in agriculture, 2006 (%)	5	2.6	14.1	1.5	4.3	7.7	3.5	7.1	5.5	2.0	3.8
<b>EDUCATION</b>											
Education, 2005 (% 25-64 years)	6	85.2	21.3	87.8	84.0	75.5	65.0	78.7	80.6	66.1	89.9
Expenditure, 2004 (% of GDP)	7	6.1	6.4	7.4	4.8	7.2	5.9	6.9	5.4	6.1	4.9
<b>OFFICIAL DEVELOPMENT ASSISTANCE</b>											
ODA, 2006 (% of GNI)	8	0.29	..	0.18	0.25	..	0.30	0.27	0.47	0.50	..
ODA, 2006 (USD/cap.)	113	..	79	88	..	103	62	181	188	..	411

.. not available. - nil or negligible. x not applicable.

1) Data may include provisional figures and Secretariat estimates. Partial totals are underlined.

2) Ranging from 0 (equal) to 100 (inequal) income distribution; figures relate to total disposable income (including all incomes, taxes and benefits) for the entire population.

3) Minimum wage as a percentage of median earnings including overtime pay and bonuses.

Source: OECD.

## OECD EPR / SECOND CYCLE

FIN	FRA	DEU	GRC	HUN	ISL	IRL	ITA	LUX	NLD	NOR	POL	PRT	SLO	ESP	SWE	CHE	TUR	UKD	OECD
53	612	824	111	<b>101</b>	3	42	589	5	163	47	381	106	54	441	91	75	731	603	11753
5.6	8.0	3.8	10.2	<b>-2.9</b>	19.2	20.9	3.8	19.8	9.3	10.1	0.3	7.2	1.7	13.4	6.1	11.5	30.2	5.4	12.6
15.6	111.5	230.7	84.3	<b>108.3</b>	2.9	60.3	195.3	177.9	393.6	14.4	122.0	115.1	109.9	87.1	20.2	181.3	93.8	246.3	33.5
94.7	89.5	144.5	129.6	<b>103.6</b>	53.9	54.4	138.3	77.3	79.0	75.5	83.4	111.5	72.3	115.0	101.2	101.4	21.3	90.2	73.5
82.3	83.8	81.8	81.7	<b>76.9</b>	83.1	81.8	83.2	82.3	81.6	82.5	79.4	81.4	77.9	83.9	82.8	83.9	74.0	81.1	..
3.0	3.6	3.9	3.8	<b>6.2</b>	2.3	4.0	4.7	2.6	4.9	3.1	6.4	3.5	7.2	4.1	2.4	4.2	22.6	5.1	..
7.5	11.1	10.7	10.1	<b>8.1</b>	9.3	7.5	9.0	7.4	9.2	8.7	6.2	10.2	7.1	8.3	9.1	11.3	7.6	8.3	..
30.5	28.5	27.0	23.1	<b>16.1</b>	34.6	35.6	26.4	61.7	30.2	40.4	13.3	18.7	14.7	23.5	31.1	32.7	8.2	29.2	26.6
6.4	7.0	9.8	13.5	<b>8.2</b>	..	15.4	12.9	5.5	6.0	6.3	9.8	13.7	..	11.5	5.3	6.7	15.9	11.4	10.2
25.0	28.0	28.0	33.0	<b>27.0</b>	35.0	32.0	33.0	26.0	27.0	25.0	31.0	38.0	33.0	31.0	23.0	26.7	45.0	34.0	30.7
x	60.8	x	51.3	<b>37.2</b>	x	55.8	x	48.9	47.1	x	35.5	38.2	..	31.8	x	x	..	41.7	..
7.7	9.2	9.8	8.9	<b>7.4</b>	2.9	4.4	6.8	4.7	3.9	3.5	13.8	7.7	13.3	8.5	7.0	4.1	9.7	5.3	6.1
75.2	68.8	77.7	65.4	<b>60.7</b>	85.7	73.5	63.2	67.5	79.1	79.7	62.9	78.1	68.7	72.4	78.7	87.6	52.5	76.4	71.8
4.7	3.4	2.3	12.0	<b>4.9</b>	6.3	5.7	4.3	1.3	3.0	3.3	15.8	11.8	4.4	4.8	2.0	3.7	27.3	1.3	5.5
78.8	66.3	83.1	57.1	<b>76.4</b>	62.9	64.5	50.1	65.9	71.8	77.2	51.4	26.5	85.7	48.8	83.6	83.0	27.2	66.7	68.1
6.1	6.1	5.2	3.4	<b>5.6</b>	8.0	4.6	4.9	3.6	5.1	6.6	6.0	5.4	4.8	4.7	6.7	6.5	4.1	5.9	5.7
0.40	0.47	0.36	0.17	..	..	0.54	0.20	0.89	0.81	0.89	..	0.21	..	0.32	1.02	0.39	..	0.51	0.31
158	173	127	38	..	..	241	62	632	334	633	..	37	..	87	436	220	..	207	63

4) Standardised unemployment rates; MEX, ISL, TUR: commonly used definitions.

5) Civil employment in agriculture, forestry and fishing.

6) Upper secondary or higher education; OECD: average of rates.

7) Public and private expenditure on educational institutions; OECD: average of rates.

8) Official Development Assistance by Member countries of the OECD Development Assistance Committee.

## II.A: SELECTED MULTILATERAL AGREEMENTS (WORLDWIDE)

Y = in force S = signed R = ratified D = denounced

		CAN	MEX	USA
1946	Washington	Conv. - Regulation of whaling	Y D	R R
1956	Washington	Protocol	Y D	R R
1949	Geneva	Conv. - Road traffic	Y R	R
1957	Brussels	Conv. - Limitation of the liability of owners of sea-going ships	Y S	
1979	Brussels	Protocol	Y	
1958	Geneva	Conv. - Fishing and conservation of the living resources of the high seas	Y S	R R
1959	Washington	Treaty - Antarctic	Y R	R
1991	Madrid	Protocol to the Antarctic treaty (environmental protection)	Y R	R
1960	Geneva	Conv. - Protection of workers against ionising radiations (ILO 115)	Y	R
1962	Brussels	Conv. - Liability of operators of nuclear ships		
1963	Vienna	Conv. - Civil liability for nuclear damage	Y	R
1988	Vienna	Joint protocol relating to the application of the Vienna Convention and the Paris Convention	Y	
1997	Vienna	Protocol to amend the Vienna convention	Y	
1963	Moscow	Treaty - Banning nuclear weapon tests in the atmosphere, in outer space and under water	Y R	R R
1964	Copenhagen	Conv. - International council for the exploration of the sea	Y R	R
1970	Copenhagen	Protocol	Y R	R
1969	Brussels	Conv. - Intervention on the high seas in cases of oil pollution casualties (INTERVENTION)	Y	R R
1973	London	Protocol (pollution by substances other than oil)	Y	R R
1969	Brussels	Conv. - Civil liability for oil pollution damage (CLC)	Y D	D S
1976	London	Protocol	Y R	R
1992	London	Protocol	Y R	R
1970	Bern	Conv. - Transport of goods by rail (CIM)	Y	
1971	Brussels	Conv. - International fund for compensation for oil pollution damage (FUND)	D	D S
1976	London	Protocol	Y R	R
1992	London	Protocol (replaces the 1971 Convention)	Y R	R
2000	London	Amendment to protocol (limits of compensation)	Y R	R
2003	London	Protocol (supplementary fund)	Y	
1971	Brussels	Conv. - Civil liability in maritime carriage of nuclear material	Y	
1971	London, Moscow, Washington	Conv. - Prohib. emplacement of nuclear and mass destruct. weapons on sea-bed, ocean floor and subsoil	Y R	R R
1971	Ramsar	Conv. - Wetlands of international importance especially as waterfowl habitat	Y R	R R
1982	Paris	Protocol	Y R	R R
1987	Regina	Regina amendment	Y R	R
1971	Geneva	Conv. - Protection against hazards of poisoning arising from benzene (ILO 136)	Y	
1972	London, Mexico, Moscow,	Conv. - Prevention of marine pollution by dumping of wastes and other matter (LC)	Y R	R R
1996	London	Protocol to the Conv. - Prevention of marine poll. by dumping of wastes and other matter	Y R	R S
1972	Geneva	Conv. - Protection of new varieties of plants (revised)	Y R	R R

OECD EPR / SECOND CYCLE

Y = in force S = signed R = ratified D = denounced

JPN	KOR	AUS	NZL	AUT	BEL	CZE	DNK	FIN	FRA	DEU	GRC	HUN	ISL	IRL	ITA	LUX	NLD	NOR	POL	PRT	SVK	ESP	SWE	CHE	TUR	UKD	EU	
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		R	R		R	R	R	R	R	R		R	
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		R	R		R	R	R	R	R	R		R	
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		R	R	R	R	R	R	R	R	S	R	R	
D	D			D		D	D	D	D				R		S		D	D	R	R		R	D	R		D		
		R			R			S		S						R			R	R		R		R		D		
		R	S		R		R	R	R				S	S			R			R	R		R		R		R	
R	R	R	R	R	R	R	R	R	R	R	R	R	R		R		R	R	R		R	R	R	R	R	R	R	
R	R	R	R	S	R	R	R	S	R	R	R	R	S		R		R	R	R		S	R	R	R	S	R	R	
R					R	R	R	R	R	R	R	R			R		R	R	R	R	R	R	R	R	R	R	R	
		S			S				S					S			R			R		R						
					R							R							R		R	S				S		
					S	R	R	R	S	R	R	R			R		R	R	R	S	R	S	R	S	R	S	R	S
					S							S			S				S									
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R
					R		R	R	R	R			R	R			R	R	R	R		R	R		R		R	
					R		R	R	R	R			R	R			R	R	R	R		R	R		R		R	
R	S	R	R		R		R	R	R	R	S			R	R		R	R		R	R	R	R	R	R	R	R	
		R	S		R		R	R	R	R				R	R		R	R	R	R		R	R	R	R	R	R	
D	D	D	D		D		D	D	D	D			D	D	D	D	D	D	D	D		D	D	D	D	D	D	
R	R	R			R		R	R	R	R	R	R	R	D	R	R	R	R	R	R	R	R	R	R	R	R	D	
R	R	R	R		R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
				R	R	R	R	R	R	R	R	R			R	R	R	R	R	R	R	R	R	R	R	R	R	
D	D	D	D		D		D	D	D	D			D	D	D		D	D	D	D		D	D	D	D	D	D	
R		R			R		R	R	R	R	R	R	R	D	R		R	R	R	R		R	R		R		D	
R	R	R	R		R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
R	R	R	R		R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
R					R		R	R	R	R	R	R			R		R	R		S		R	R			S		
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
					R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
					R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
					R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	

**II.A: SELECTED MULTILATERAL AGREEMENTS (WORLDWIDE) (cont.)**

Y = in force S = signed R = ratified D = denounced

		CAN	MEX	USA
1978	Geneva Amendments	Y	R	R R
1991	Geneva Amendments	Y		R
1972	Geneva Conv. - Safe container (CSC)	Y	R	R R
1972	London, Moscow, Washington Conv. - International liability for damage caused by space objects	Y	R	R R
1972	Paris Conv. - Protection of the world cultural and natural heritage	Y	R	R R
1973	Washington Conv. - International trade in endangered species of wild fauna and flora (CITES)	Y	R	R R
1974	Geneva Conv. - Prev. and control of occup. hazards caused by carcinog. subst. and agents (ILO 139)	Y		
1976	London Conv. - Limitation of liability for maritime claims (LLMC)	Y		R
1996	London Amendment to convention	Y		S
1977	Geneva Conv. - Protection of workers against occupational hazards in the working environment due to air pollution, noise and vibration (ILO 148)	Y		
1978	London Protocol - Prevention of pollution from ships (MARPOL PROT)	Y	R	R R
1978	London Annex III	Y	R	R
1978	London Annex IV	Y		
1978	London Annex V	Y	R	R
1997	London Annex VI	Y		S
1979	Bonn Conv. - Conservation of migratory species of wild animals	Y		
1991	London Agreem. - Conservation of bats in Europe	Y		
1992	New York Agreem. - Conservation of small cetaceans of the Baltic and the North Seas (ASCOBANS)	Y		
1996	Monaco Agreem. - Conservation of cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area	Y		
1996	The Hague Agreem. - Conservation of African-Eurasian migratory waterbirds	Y		
2001	Canberra Agreem. - Conservation of albatrosses and petrels (ACAP)	Y		
1982	Montego Bay Conv. - Law of the sea	Y	R	R
1994	New York Agreem. - relating to the implementation of part XI of the convention	Y	R	R S
1995	New York Agreem. - Implementation of the provisions of the convention relating to the conservation and management of straddling fish stocks and highly migratory fish stocks	Y	R	R
1983	Geneva Agreem. - Tropical timber	Y	R	R
1994	New York Revised agreem. - Tropical timber	Y	R	R R
2006	Geneva Revised agreem. - Tropical timber		S	R
1985	Vienna Conv. - Protection of the ozone layer	Y	R	R R
1987	Montreal Protocol (substances that deplete the ozone layer)	Y	R	R R
1990	London Amendment to protocol	Y	R	R R
1992	Copenhagen Amendment to protocol	Y	R	R R
1997	Montreal Amendment to protocol	Y	R	R R
1999	Beijing Amendment to protocol	Y	R	R R
1986	Vienna Conv. - Early notification of a nuclear accident	Y	R	R R
1986	Vienna Conv. - Assistance in the case of a nuclear accident or radiological emergency	Y	R	R R



**II.A: SELECTED MULTILATERAL AGREEMENTS (WORLDWIDE) (cont.)**

Y = in force S = signed R = ratified D = denounced

		CAN	MEX	USA
1989 Basel	Conv. - Control of transboundary movements of hazardous wastes and their disposal	Y	R	R S
1995 Geneva	Amendment			
1999 Basel	Prot. - Liability and compensation for damage			
1989 London	Conv. - Salvage	Y	R	R R
1990 Geneva	Conv. - Safety in the use of chemicals at work (ILO 170)	Y		R
1990 London	Conv. - Oil pollution preparedness, response and co-operation (OPRC)	Y	R	R R
2000 London	Protocol - Pollution incidents by hazardous and noxious substances (OPRC-HNS)	Y		
1992 Rio de Janeiro	Conv. - Biological diversity	Y	R	R S
2000 Montreal	Prot. - Biosafety (Cartagena)	Y	S	R
1992 New York	Conv. - Framework convention on climate change	Y	R	R R
1997 Kyoto	Protocol	Y	R	R S
1993 Paris	Conv. - Prohibition of the development, production, stockpiling and use of chemical weapons and their destruction	Y	R	R R
1993 Geneva	Conv. - Prevention of major industrial accidents (ILO 174)	Y		
1993	Agreem. - Promote compliance with international conservation and management measures by fishing vessels on the high seas	Y	R	R R
1994 Vienna	Conv. - Nuclear safety	Y	R	R R
1994 Paris	Conv. - Combat desertification in those countries experiencing serious drought and/or desertification, particularly in Africa	Y	R	R R
1996 London	Conv. - Liability and compensation for damage in connection with the carriage of hazardous and noxious substances by sea (HNS)			S
1997 Vienna	Conv. - Supplementary compensation for nuclear damage			S
1997 Vienna	Conv. - Joint convention on the safety of spent fuel management and on the safety of radioactive waste management	Y	R	R
1997 New York	Conv. - Law of the non-navigational uses of international watercourses			
1998 Rotterdam	Conv. - Prior informed consent procedure for hazardous chemicals and pesticides (PIC)	Y	R	R S
2001 London	Conv. - Civil liability for bunker oil pollution damage			
2001 London	Conv. - Control of harmful anti-fouling systems on ships			R S
2001 Stockholm	Conv. - Persistent organic pollutants	Y	R	R S

Source: IUCN; OECD.





## II.B: SELECTED MULTILATERAL AGREEMENTS (REGIONAL)

		CAN MEX USA		
1950 Paris	Conv. - Protection of birds	Y		
1957 Geneva	Agreem. - International carriage of dangerous goods by road (ADR)	Y		
1975 New York	Protocol	Y		
1958 Geneva	Agreem. - Adoption of uniform conditions of approval and reciprocal recognition of approval for motor vehicle equipments and parts	Y		
1958 Bucharest	Conv. - Fishing in the waters of the Danube	Y		
1960 Paris	Conv. - Third party liability in the field of nuclear energy	Y		
1963 Brussels	Supplementary convention	Y		
1964 Paris	Additional protocol to the convention	Y		
1964 Paris	Additional protocol to the supplementary convention	Y		
1982 Brussels	Protocol amending the convention	Y		
1982 Brussels	Protocol amending the supplementary convention	Y		
1988 Vienna	Joint protocol relating to the application of the Vienna Convention and the Paris Convention	Y		
1968 Strasbourg	Agreem. - Restriction of the use of certain detergents in washing and cleaning products	Y		
1983 Strasbourg	Protocol	Y		
1968 Paris	Conv. - Protection of animals during international transport	Y		
1979 Strasbourg	Protocol	Y		
1969 London	Conv. - Protection of the archaeological heritage	Y		
1979 Bern	Conv. - Conservation of European wildlife and natural habitats	Y		
1979 Geneva	Conv. - Long-range transboundary air pollution (CLRTAP)	Y	R	R
1984 Geneva	Protocol (financing of EMEP)	Y	R	R
1985 Helsinki	Protocol (reduction of sulphur emissions or their transboundary fluxes by at least 30%)	Y	R	
1988 Sofia	Protocol (control of emissions of nitrogen oxides or their transboundary fluxes)	Y	R	R
1991 Geneva	Protocol (control of emissions of volatile organic compounds or their transboundary fluxes)	Y	S	S
1994 Oslo	Protocol (further reduction of sulphur emissions)	Y	R	
1998 Aarhus	Protocol (heavy metals)	Y	R	R
1998 Aarhus	Protocol (persistent organic pollutants)	Y	R	R
1999 Gothenburg	Protocol (abate acidification, eutrophication and ground-level ozone)	Y	S	R
1980 Madrid	Conv. - Transfrontier co-operation between territorial communities or authorities	Y		
1995 Strasbourg	Additional protocol	Y		
1998 Strasbourg	Second protocol	Y		
1980 Bern	Conv. - International carriage of dangerous goods by train (COTIF)	Y		
1989 Geneva	Conv. - Civil liab. for damage caused during carriage of dang. goods by road, rail, and inland navig. (CRTD)			
1991 Espoo	Conv. - Environmental impact assessment in a transboundary context	Y	R	S
2001 Sofia	Amendment			
2003 Kiev	Prot. - Strategic environmental assessment			
1992 Helsinki	Conv. - Transboundary effects of industrial accidents	Y	S	S
2003 Kiev	Prot. - Civil liability and compensation for damage caused by the transboundary effects of industrial accidents on transboundary waters			
1992 Helsinki	Conv. - Protection and use of transboundary water courses and international lakes	Y		
1999 London	Prot. - Water and health	Y		
2003 Kiev	Prot. - Civil liability and compensation for damage caused by the transboundary effects of industrial accidents on transboundary waters			



**II.B: SELECTED MULTILATERAL AGREEMENTS (REGIONAL) (cont.)**

		CAN MEX USA
1992 La Valette	European Conv. - Protection of the archaeological heritage (revised)	Y
1992 Vienna	Agreem. - Forecast, prevention and mitigation of natural and technological disasters	
1993 Lugano	Conv. - Civil liability for damage resulting from activities dangerous to the environment	
1994 Lisbon	Treaty - Energy Charter	Y
1994 Lisbon	Protocol (energy efficiency and related environmental aspects)	Y
1994 Sofia	Conv. - Co-operation for the protection and sust. use of the Danube river	Y
1998 Aarhus	Conv. - Access to env. information and public participation in env. decision-making	Y
2003 Kiev	Prot. - Pollutant Release and Transfer Registers (PRTR)	
1998 Strasbourg	Conv. - Protection of the environment through criminal law	
2000 Florence	Conv. - European landscape convention	Y
2000 Geneva	Agreem. - International carriage of dangerous goods by inland waterways (AND)	
2003 Kiev	Conv. - Framework Convention on the Protection and Sustainable Development of the Carpathians	Y

Source: IUCN; OECD.

OECD EPR / SECOND CYCLE

JPN	KOR	AUS	NZL	AUT	BEL	CZE	DNK	FIN	FRA	DEU	GRCH	HUN	ISL	IRL	ITA	LUX	NLD	NOR	POL	PRT	SVK	ESP	SWE	CHE	TUR	UK	DEU	
				S	R	R	R	R	R	R	R	R	R	R	S	S	R	R	R	R	R	S	R	R	R	R		
				R								R			R				R			R						
							S				S		S		S	S	S				S							
R	S	R	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	S	R	R	R	R	R	R	R	R
R	S	R	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	S	R	R	R	R	R	R	R	R
				R	R				R		R											R					R	
				R	R	R	R	R	R	R	R	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	S	R
				S	S	S	S	S	S	R	S	S	S	S	S	R	R	S	S	S		S	S	R		S	R	
				S	S		S	S	S	S	S		S		S	S							S					
				R	R	R	R	R		S	R		R	R	R	R	R	R	R	R	R	R	R	R	S	S	R	R
				R	S			S	S		R			S	R	R						S						
					R						R										R		R				R	

## Reference III

### ABBREVIATIONS

AEP	Agri-environmental payment
ARDOP	Agricultural and Rural Development Operational Programme
CAP	Common Agricultural Policy (EU)
CEHAP	Children's Environmental Health Action Plan
CHP	combined heat and power
CITES	Convention on International Trade in Endangered Species
CLRTAP	Convention on Long-Range Transboundary Air Pollution
CNG	Compressed natural gas
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
COD	Chemical oxygen demand
DWIP	Drinking Water Quality Improvement Programme
EAFRD	European Agricultural Fund for Rural Development
EAGGF	European Agricultural Guidance and Guarantee Fund
EEOP	Environment and Energy Operational Programme
EIA	Environmental Impact Assessment
ESA	Environmentally Sensitive Area
EU	European Union
FDI	Foreign direct investment
GDP	Gross domestic product
GEF	Global Environment Facility
GHG	Greenhouse Gas
ha	hectare
HCSO	Hungarian Central Statistic Office (KSH)
IPM	Integrated pest management
IPPC	Integrated Pollution Prevention and Control
ISPA	Instrument for Structural Policies for Pre-Accession (to the EU)
IWRM	Integrated Water Resource Management
LIFE	EU financial instrument supporting environmental and nature conservation projects
LPG	Liquefied petroleum gas
MEW	Ministry of Environment and Water

Mtoe	Million tonnes of oil equivalent
NAEP	National Agri-Environmental Programme
NAP	National allocation plan (for GHG emissions trading)
NDP	National Development Plan
NDPC	National Development Policy Concept
NEAP	National Environmental Action Programme
NEC	National Emissions Ceiling (EU Directive)
NEHAP	National Environmental Health Action Programme
NEP	National Environmental Programme
NGO	Non-governmental organisation
NHDP	New Hungary Development Plan
NIEH	National Institute for Environmental Health
NIP	National Implementation Programme (urban waste water collection and treatment)
NO <sub>x</sub>	Nitrogen oxides
NPDs	National Park Directorates
NRDP	National Rural Development Plan
NRDSP	National Rural Development Strategy
NSDC	National Spatial Development Concept
ODA	Official development assistance
PHARE	Polish and Hungarian Assistance for Economic Reconstruction
PAC	Pollution abatement and control
PAH	Polycyclic aromatic hydrocarbons
Phare	Poland and Hungary Assistance for Restructuring of the Economy (European Commission)
PM	Particulate matter
POP	Persistent organic pollutant
PPP	Polluter Pays Principle
PPPs	Purchasing power parities
PRTR	Pollutant Release and Transfer Register
SAPARD	Special Accession Programme for Agriculture and Rural Development
SCI	Site of Community Importance (EU Habitats Directive)
SEA	Strategic environmental assessment
SMEs	Small and medium-sized enterprises
SO <sub>2</sub>	Sulphur dioxide
SPA	Special Protection Area (EU Birds Directive)
TAP	Thematic Action Programme (under NEP II)
toe	tonnes of oil equivalent
TFC	Total final energy consumption

TPES	Total primary energy supply
VAT	Value-added tax
VOCs	Volatile organic compounds
VTT	Vásárhelyi Plan (for flood prevention)
WFD	Water Framework Directive



## Reference IV

### PHYSICAL CONTEXT

Located in Central Europe, *the Republic of Hungary* shares borders with Austria, Croatia Romania, Serbia, Slovakia, Slovenia and Ukraine. This landlocked country of 93 030 km<sup>2</sup> lies between the Carpathian Mountains and the Alps. Its widest extensions are 268 kilometres north-south and 526 kilometres east-west. Hungary can be broadly divided into *four geographical regions*: the Great Plain (nearly half its territory) and the Northern Mountains, both east of the Danube; and Transdanubia (a third of its territory) and the Small Plain, both west of the Danube.

Hungary is a *lowland country*: 84% of its territory lies less than 200 metres above sea level. A chain of mountains of medium height runs across it. The Transdanubian Mountains west of the Danube are 400 to 700 metres high, while the Northern Mountains to the east rise from 500 to 1 000 metres. The country's highest point is Mount Kékes (1 015 metres). Transdanubia is a hilly region. The *climate* is temperate continental, with cold winter and warm summer. Annual average rainfall is 500 to 550 mm on the plains, and 600 to 800 mm at higher altitudes.

Scarcely 5% of Hungary's surface waters have their origins in the country itself. The two most important *rivers*, the Danube (with a 417 kilometre stretch within Hungary) and the Tisza (598 kilometres), cross the country from north to south. The Danube, flowing through Budapest, links Hungary to the Black Sea; it joins the North Sea via the Rhine-Main-Danube canal. There are 1 200 natural and artificial *lakes* in Hungary. Lake Balaton is the largest freshwater lake in Central Europe and an important international tourist attraction. Hungary has long been known for its abundance of thermal waters.

*Arable and permanent cropland* covers nearly 52% of the total land area, permanent grassland 13% and forest and other wooded land 19%. The main crops are wheat and maize; pig meat is the main livestock product. About 320 000 hectares are irrigable. Over the last three decades there has been a 10% decrease in the amount of agricultural land (including grassland) and a 20% increase in forested area.

Hungary is not well endowed with *natural resources*. Its fertile soil is the most important asset. Around half its primary energy requirements must be imported, mainly oil and gas from Russia. There are brown coal and open-cast lignite mines in the Northern and Transdanubian ranges. Natural gas is exploited in the southern part of the Great Plain.

## Reference V

### SELECTED ENVIRONMENTAL WEBSITES

<b>Website</b>	<b>Host institution</b>
<i>Government</i>	
<a href="http://www.keh.hu/keh">www.keh.hu/keh</a>	Office of the President of the Republic of Hungary
<a href="http://www.meh.hu/english">www.meh.hu/english</a>	Prime Minister's Office
<a href="http://www.kulugyminiszterium.hu">www.kulugyminiszterium.hu</a>	Ministry of Foreign Affairs
<a href="http://www.fvm.gov.hu">www.fvm.gov.hu</a>	Ministry of Agriculture and Rural Development
<a href="http://www.kvvm.hu">www.kvvm.hu</a>	Ministry of Environment and Water
<a href="http://www.bm.hu">www.bm.hu</a>	Ministry of Local Government and Regional Development
<a href="http://www.mkogy.hu/parl_en.htm">www.mkogy.hu/parl_en.htm</a>	Hungarian National Assembly
<a href="http://portal.ksh.hu">http://portal.ksh.hu</a>	Hungarian Central Statistics Office
<a href="http://www.met.hu">www.met.hu</a>	Hungarian Meteorological Service
<a href="http://www.oktt.hu">www.oktt.hu</a>	National Environmental Council
<a href="http://www.orszagoszoldhatosag.gov.hu">www.orszagoszoldhatosag.gov.hu</a>	National Inspectorate for Environment, Nature and Water
<a href="http://www.antsz.hu">www.antsz.hu</a>	National Public Health and Medical Officer Service

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## Signs

The following signs are used in Figures and Tables:

- .. : not available
- : nil or negligible
- . : decimal point
- \* : indicates that not all countries are included.

## Country Aggregates

OECD Europe: All European member countries of the OECD (Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey and United Kingdom).

OECD: The countries of OECD Europe plus Australia, Canada, Japan, the Republic of Korea, Mexico, New Zealand and the United States.

Country aggregates may include Secretariat estimates.

## Currency

Monetary unit: forint (HUF)

In 2007 HUF 183.75 = USD 1.

In 2007 HUF 251.32 = EUR 1.

## Cut-off Date

This report is based on information available up to 30 April 2008.

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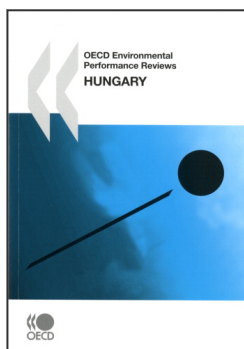
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### Map of Hungary



Source: OECD.





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