# **CZECH REPUBLIC**

# CONCLUSIONS AND RECOMMENDATIONS

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#### CONCLUSIONS AND RECOMMENDATIONS

The Czech Republic is undergoing two <u>major transitions</u>: a major economic transition while returning to democracy and preparation for entry into the European Union. In the wake of the collapse of its traditional export markets, Czech Gross Domestic Product fell by more than 20 per cent before recovery began in 1993. Inflation and unemployment remained much lower than in most other European countries in transition. Many industrial enterprises were privatised and land ownership changed significantly.

During this period, the Czech Republic has substantially reduced environmental pressures and achieved tangible environmental results, in addition to those attributable to the decline of economic activities such as industry and agriculture. It has also implemented major legislative and institutional changes concerning the environment. Notwithstanding these successes, much of the accumulated contamination of the past is still in place and current emissions and discharges remain high compared to OECD average levels. The <u>road towards environmental convergence</u> with other European OECD countries will be a long one.

The <u>challenge</u> is therefore to: i) maintain a high level of effort to implement environmental policies and strengthen environmental infrastructure; ii) better integrate environmental concerns in economic decisions; and iii) meet the country's international environmental commitments.

This OECD report establishes a baseline for assessing future environmental progress and examines the Czech Republic's environmental performance, i.e. the extent to which its <u>domestic objectives and international commitments</u> are being met, based on environmental effectiveness and economic efficiency criteria. A number of recommendations are put forward that could contribute to strengthening the country's environmental performance.

# 1. Implementing Environmental Policies

# Environmental governance and democracy

A <u>set of new environmental laws</u> was adopted immediately after the Velvet Revolution of 1989. The Ministry of the Environment was created in 1991. It has wide-ranging competencies and is in charge of preparing and implementing policies aimed at correcting many of the mistakes of the past and providing a healthier environment for citizens who used to live in some of the worst European "black spots". The Ministry of the Environment is co-ordinating institutes, agencies and regional administrations; in addition, other ministries such as the Ministry of Agriculture (for water) and the Ministry of Interior play significant roles in environmental protection. The <u>environmental legal framework is now under revision</u>. Draft text or bills are under discussion on polluted water standards, water management, waste, packaging, chemicals, genetically modified organisms (GMOs), environmental impact assessment (EIA), industrial accidents, air, integrated pollution prevention and control (IPPC), environmental management systems (EMAS), landscape protection areas, national parks, etc. Enactment of new environmental laws and the approximation of EU legislation are taking place at a slower pace than initially announced.

The environmental protection policies adopted and implemented in 1990 (Rainbow Programme) and 1995 (State Environmental Policy) have contributed to tangible results, such as large reductions in pollutant emissions and improvements in air and water quality. These policies were largely based on the effective use of regulatory instruments, associated to economic instruments and to sizeable environmental investment. The Czech Republic also uses a powerful system of EIA that applies to a range of projects, plans (e.g. territorial or transport plans) and policies (e.g. energy policies). Emissions and discharges from polluting installations must now satisfy national standards. A strong Czech Environmental Inspection is in place to improve further compliance with national laws. To make further progress, the new environmental policy under preparation should include more precise targets, concerning a large number of issues, than the earlier ones.

The quality of <u>public information</u> has very much improved: economic and environmental data are now obtainable, state of the environment reports are being published regularly, international environmental definitions and standards are increasingly used. Nevertheless, there remain serious information weaknesses (e.g. waste generation, environmental expenditure). Citizens' <u>right of access to environmental information</u> was recognised in 1990, but it was necessary to enact a law in 1998 to reinforce this right, and its implementation will require overcoming remaining inertia and continuing secretiveness inherited from past administrative practices. Formal implementation

of the OECD Recommendation on pollutant release and transfer registers is under consideration. <u>Education</u> on environmental topics, as well as awareness-raising, will be essential elements of a long-term policy.

#### It is therefore recommended to:

- strengthen monitoring and <u>enforcement of laws and regulations</u> at national, regional and local levels, and further ensure that polluters are effectively sanctioned;
- finalise as soon as possible the preparation of a <u>new national environmental policy</u> with goals, quantitative <u>targets and deadlines</u>, taking into account EU environmental standards and the steps in the accession process to EU membership;
- strengthen the <u>capacity of the Ministry of the Environment</u>, especially for economic analysis for developing the laws and regulations necessary for transposition of EU legislation;
- develop closer and more sustained relations with key stakeholders such as Members of Parliament, local authorities, industry and NGOs, with a view to raising environmental awareness and building stronger environmental constituencies;
- continue to develop the system for providing <u>environmental information</u> and implement the principles
  of free and easy access to this type of information, citizen participation in environmental decision
  making and access to justice on environmental issues.

#### From environmental effectiveness to economic efficiency

Very large efforts were needed to <u>remove visible scars</u> inherited from a period of disregard for the environment: highly polluted air and water bodies, derelict land and contaminated soil. The government which came to power just after the Velvet Revolution demonstrated a strong interest in protecting the environment. Huge environmental investments were decided in the early 1990s and made subsequently, mostly in air pollution abatement, but also in water pollution abatement and clean-up of contaminated soils, including clean-up of former Soviet Army bases and uranium mining waste dumps.

As a result, expenditure on environmental protection has risen steadily over the period 1990-96, reaching the level of 3 per cent of GDP; this included pollution abatement and control expenditure of about 2 per cent of GDP, which is sizeable compared to other OECD countries. Most of this amount is financed by the private sector with relatively little support by the State. Very large expenditure was made for controlling air pollution from power stations. The overall level of environmental expenditure is not likely to decrease in the future owing to new requirements related to approximation of EU legislation.

Economic incentives have been implemented, in particular charges on water abstraction, water pollution, air pollution, noise and waste. Economic sanctions can be applied when standards are exceeded. Charges and fines are collected by the State Environmental Fund (SEF), which uses the revenue to finance pollution abatement measures. The economic instruments in use are well-developed, and contribute to the financing of environmental investment but the rates of charges have mostly been set too low to induce polluters to reduce their emissions. Charges are also used to conserve natural resources and protect the landscape.

In a transition period it is customary to make use of subsidies to improve environmental protection more rapidly. In the Czech Republic, "crash" programmes were put into place to respond to unacceptable situations; industry and privatised public bodies have received subsidies or soft loans to enable them to control pollution. Although the level of overall subsidisation of environmental investment is now around only 14 per cent, greater implementation of the <u>polluter-pays principle</u> in all areas of environmental protection would be warranted. As large investment will be needed to better protect water, remove soil contamination and restore land, it will also be necessary to perform cost-benefit analyses to ensure that money is spent efficiently.

# It is therefore recommended to:

- promote greater use of the <u>polluter-pays principle</u> and of internalisation of environmental costs, especially concerning water resources;
- increase rates of <u>charges</u> on polluting activities; make greater use of fines and increase their rates so
  that they function as a disincentive;

 develop a <u>financing strategy</u> for implementing environmental policies, especially in the areas of urban water supply, waste water treatment and waste management, through broadening sources of funding, the use of a mix of instruments and the greater implementation of the user-pays principle.

#### Air

Considerable progress was made in reducing emissions of conventional air pollutants with, for instance, a 68 per cent decrease in  $SO_2$  emissions and a 50 per cent decrease in  $NO_x$  emissions between 1987 and 1997. Apart from the effects of the sharp drop in economic output at the beginning of the 1990s, these emission reductions have mainly resulted from: i) some fuel switching from lignite and heavy fuel oil to natural gas; ii) massive investment in the retrofitting of large coal/lignite-fired power plants with desulphurisation equipment. Revenue from emission charges has helped finance the reduction of emissions from smaller emission sources. The Czech Republic has met, or is likely to meet, all its commitments to reduce emissions of conventional pollutants. More than 98 per cent of major, and more than 90 per cent of medium-sized, stationary pollution sources will be able to comply with the 1991 Clean Air Act, which requires existing plants to meet emission standards by the end of 1998. Local air quality has improved significantly, especially in terms of  $SO_2$  and particulate matter. The country's monitoring system is comprehensive and well-established.

The success of the Czech Republic in meeting its main emission reduction targets should not obscure the fact that emissions of traditional pollutants remain among the highest in the OECD and that much work remains to be done. Estimates suggest that 23 per cent of the Czech population is exposed to air which does not meet quality standards for more than one parameter. Epidemiological studies have shown that air pollution is affecting human health and that acid deposition, although much reduced, still causes episodic forest damage. Energy intensity has fallen but remains high. It is difficult to promote energy efficiency improvements and renewable energy sources when energy prices are relatively low. Expected traffic growth will make it difficult to reduce NO<sub>x</sub> emissions and to control NO<sub>y</sub> and ozone concentrations.

#### It is therefore recommended to:

- review air quality priorities and make <u>cost-effective choices</u> of quantitative targets, including:
   i) further reducing emissions from small stationary sources;
   ii) tightening NO<sub>x</sub> emission standards for large combustion plants;
   iii) reducing emissions of NO<sub>x</sub> and VOCs from mobile sources;
   iv) focusing on emissions of VOCs in the fuel distribution chain;
- use a more cost-effective <u>mix of policy instruments</u>, including increasing the incentive function of emission charges;
- further integrate environmental concerns into <u>energy policies</u>, including through accelerating the reduction of energy price distortions that discourage energy saving and renewable energy use;
- develop, assess the environmental impacts of, and implement a comprehensive <u>sustainable transport</u> <u>strategy</u> incorporating land use and transport planning, as well as regulatory measures and pricing mechanisms that discourage car use, especially in urban areas;
- improve <u>data collection and reporting</u> on heavy metals and other toxic substances.

# Water

Water resources in the Czech Republic are subject to moderately high pressures and need to be managed carefully. The approach to <u>water management has changed radically</u> over the past ten years; Czech water managers now take a more <u>integrated approach</u> and use a <u>range of policy instruments</u>. Among other reforms, the <u>ownership</u> of water supply and waste water disposal companies has been transferred to the regional/local level; <u>service charges</u> have been raised steadily and now cover the operational (but not the capital) cost of the services provided. These price rises contributed to a 30-35 per cent fall in water use from public supplies in 1989-96. Effluent discharges, particularly from larger municipal and industrial point sources, have been reduced markedly: overall, decreases have been 70 per cent for BOD<sub>5</sub>, 54 per cent for suspended solids, 77 per cent for oil substances, 27 per cent for dissolved solids and 87 per cent for acidity/alkalinity. In the 1990s, the population connected to a sewage treatment station increased from 50.3 to 59.2 per cent and now equals the OECD average. The share of the volume of treated waste water to secondary and higher standard rose from 84 to 90 per cent. All these efforts have already begun to yield

results, and water quality in many rivers has improved, particularly in terms of organic pollution. With a sharp decline in output and in its use of commercial fertilisers and pesticides, pressures from agriculture on Czech waters have decreased markedly.

Yet the state of Czech water resources remains serious. Water quality in many parts of the country, particularly small watercourses, is still poor in terms of a number of pollutants, for instance microbial contamination. Groundwater quality standards (organic pollution, petroleum products and nitrates) are exceeded at a large proportion of measuring stations, and improvements are expected to occur slowly. Contaminated sediments will continue releasing toxic substances to aquatic ecosystems for a long time to come. The connection rate for both drinking water and sewerage networks needs to be increased and the monitoring of drinking water extended. Almost 5 000 small municipalities still lack waste water treatment facilities. There is slippage of various deadlines announced in the State Environment Policy (SEP) for the further evolution of the country's policy framework. Although a revised law on waste water charges announced for 1996 was adopted in March 1998, the revision of effluent limits (to meet targets of EU directives) and a substantial review of water management legislation had not been tabled in Parliament as of June 1998. Large parts of the country suffered very high flood damages in 1997 (3 per cent of GDP) and remain vulnerable to flood hazards.

# It is therefore recommended to:

- prepare and enact a <u>new water legislation</u> with adequate effluent limits;
- set quantified <u>water management objectives</u> based on EU directives and on the agreements reached with respect to the protection of the Elbe, Morava-Danube and Oder;
- connect more households to <u>water supply</u> networks; extend the monitoring of and reporting on drinking water quality to all public systems;
- increase the number of people connected to sewerage systems and invest in <u>waste water treatment</u> plants;
- continue measures to establish a <u>water pricing</u> structure which encourages water conservation and takes account of social factors;
- continue to strengthen the <u>ecosystem approach</u>;
- reduce vulnerability to <u>flood hazards</u> by strengthening the integration of water management considerations in land use planning; further pursue physical measures to prevent flooding and reduce flood damage.

# Waste

The <u>current situation</u> in the Czech Republic with regard to waste management can be characterised as follows: i) large quantities of waste produced and often accumulated on site by mining operations, manufacturing, industry, and utilities; ii) high proportion of hazardous waste to total waste produced; iii) predominance of landfilling as a waste disposal technique; iv) little use of waste as a source of secondary raw materials and energy; v) many sites still contaminated by previous industrial and military activities.

The number of inappropriately operated <u>waste disposal facilities</u> (landfills and incineration plants) has been dramatically reduced over the last few years. A cleaner production programme has encouraged companies to improve production process efficiency and reduce waste generation. A <u>new Waste Management Act</u> came into effect on 1 January 1998, replacing previous inadequate legislation. The Act is based on principles and approaches adopted in European Union waste regulations, OECD Council Acts and the Basel Convention; it also includes provisions for the creation of financial reserves for landfill reclamation and after-closure operations. The Act introduces the principle of producer responsibility with regard to packaging and packaging waste. <u>Fees for landfilling</u> have been introduced and their rate is to increase substantially over the next few years, especially as concerns hazardous waste. Decontamination of the sites of former Soviet military installations is well advanced and the remediation of contaminated industrial sites is proceeding as former state property is privatised.

However, the Czech Republic is lagging behind many other OECD countries in waste management. Recycling and utilisation technologies for secondary raw materials are inadequate, as is the capacity of the recycling industry. Landfilling remains by far the most commonly used waste disposal method, including for hazardous waste. Landfill fees are too low to encourage the implementation of more environmentally sound waste management techniques. Existing incineration capacity, though small, is currently far from being fully used. Industrial waste is produced at high rates and has accumulated at industrial sites over the years. No central facility for hazardous waste

treatment and disposal exists or is planned. Progress in rehabilitating the many inappropriate landfill sites which have been closed is slow, and a large number of illegal dumps are still in operation. There is still too little reliable information on waste generation and management.

#### It is therefore recommended to:

- elaborate, as soon as possible, action programmes for <u>implementing the Waste Management Act</u>, including the creation of a reliable information base and the definition of quantitative targets;
- gradually eliminate the differences which still exist between the Waste Management Act and relevant OECD and EU rules, in particular by reducing the number of exceptions to the "green" list of <u>wastes</u> <u>destined for recovery;</u>
- develop separate collection and recycling of <u>municipal waste</u>, introducing the appropriate economic instruments to serve as incentives;
- promote further use of <u>low-waste</u> and <u>cleaner technologies</u> in industry;
- develop the necessary facilities for proper disposal of <u>hazardous waste</u> and take the necessary regulatory and economic measures to ensure that these facilities are used;
- gradually raise the level of fees and charges to ensure full <u>application of the polluter-pays and user-pays principles</u>, for municipal as well as industrial and hazardous waste.

#### Nature, forest resources and biodiversity

There is a long tradition of nature conservation and forest management in the Czech Republic. Its rich natural and cultural heritage attracts many visitors and is therefore also a significant economic asset. Over the past ten years, some modern legal tools (e.g. the 1992 Act on Protection of Nature and the Landscape and the 1995 Forest Act) for conserving nature, maintaining biodiversity and managing forests sustainably have been introduced. About 15 per cent of Czech territory benefits from some form of protection and national parks are actively managed. Protection is given to a significant number of endangered and vulnerable species. Efforts are being made to safeguard the country's exceptional natural heritage in many rural areas as well as in the Czech cultural landscapes, some of which are on the UNESCO World Heritage list. Forestry practices have begun to change, in line with international trends towards greater species diversity and natural regeneration. The provisions for public participation found in nature legislation are the most effective in the country.

While some pressures on nature and on forest resources from agriculture and industry were reduced in the early 1990s, new pressures from current and future economic development (e.g. tourism, transport) need to be addressed. In order to avoid a gradual loss or deterioration of natural areas and valuable landscapes, a strategic approach to tourism should include means of containing the pressures from the growing number of tourists visiting national parks and other protected areas. The Czech National <u>Biodiversity Strategy</u> therefore needs to be completed and implemented as soon as possible. The link between nature and landscape protection activities and <u>land use planning</u> is still weak. Also, nature conservation considerations have so far not been sufficiently integrated in economic and sectoral decision making. In particular, the Territorial System of Ecological Stability could be more fully used in sectoral policies such as <u>transport</u> infrastructure planning. The environmental effectiveness of <u>agri-environmental support measures</u> could be improved.

# It is therefore <u>recommended</u> to:

- urgently complete, adopt and implement the <u>National Biodiversity Strategy</u> and related action plans now under preparation;
- develop a <u>sustainable tourism strategy</u> for protected areas and consider ways in which visitor charges could contribute to financing maintenance and environmental costs;
- establish a <u>comprehensive land use planning</u> system, integrating nature conservation and landscape protection concerns and ensuring transparent public participation;
- <u>create synergies</u> among the policies of relevant ministries (Regional Development, Agriculture, Environment, Finance) to encourage rural land owners to take nature and landscape into account in land use decisions;
- ensure that planning of road infrastructure takes account of the <u>Territorial System of Ecological Stability</u>; examine legislation in other domains (e.g. the Construction Act) to find ways that nature conservation considerations could be taken into account;
- continue and extend the <u>nature-friendly forestry practices</u> indicated in the 1995 Forest Act;

 look for ways to enhance the environmental <u>effectiveness of agri-environmental support measures</u> and to integrate nature and biodiversity concerns in agricultural practices;

strengthen <u>expertise</u> in nature conservation and biodiversity at district level.

#### 2. Integrating Environmental Concerns in Economic Decisions

The <u>social and economic transformations</u> that began after 1989 have led to new democratic institutions and substantial progress towards creating a market economy in the Czech Republic. Overall, the economic transition did not present as high unemployment or inflation as in most other Central and Eastern European countries, and was encouraged by significant foreign direct investment and an effective privatisation process.

# 2.1 Decoupling and sustainable development

Nevertheless, in the period 1990-1997, GDP fell sharply and then recovered, coming close to its 1990 level. During the same period, pollutant emissions fell considerably (e.g. -50 per cent for SO<sub>2</sub>, -42 per cent for NO<sub>x</sub>, -23 per cent for CO<sub>2</sub>). This <u>decoupling</u> was the result of economic restructuring, changes in the energy supply and environmental efforts. However, pressures from sectors such as energy, industry, transport and tourism should be addressed in a cost-effective way.

The Czech Republic formally introduced the policy of sustainable development in its early environmental legislation. In more recent years, integration of environmental considerations in economic policies was not sufficiently reflected in the country's policies or its institutional structure, and the words "sustainable development" were not used. There is now renewed support for sustainable development and for stronger integration of environmental, economic and sectoral policies. Positive steps have been taken by the Ministry of the Environment and the Ministry of Industry and Trade to promote eco-labelling, environmental management systems, eco-auditing, etc. EIA provides a powerful instrument for integrating environmental concerns in projects, plans and policies. However, much greater interministerial co-operation would be needed in order to ensure that vertically-minded administrations tackle horizontal problems such as environmental protection. Similarly, there would be a need to create an effective interministerial body for sustainable development and other interministerial commissions to address such urgent issues as energy and transport; this should be accompanied by increasing consultation with other stakeholders (industry, labour unions, NGOs, local authorities).

<u>Production patterns</u> have significantly improved, with reduced pollutant emissions and less use of natural resources. Nevertheless, the Czech economy still presents levels of pollution and energy intensities per unit of GDP that are among the very highest of OECD countries. Concerning <u>consumption patterns</u>, the use of economic signals such as prices in previously subsidised sectors had a very positive impact on water and electricity use by households. Although prices have been liberalised, there are still significant water and energy subsidies for households and the level of gasoline taxation remains low. Continuing its move towards <u>full pricing of natural resources</u> would enable the Czech Republic to further reduce pollution and its natural resource use, while recognising social constraints.

#### It is therefore recommended to:

- integrate <u>environmental concerns into policies</u> and practices concerning sectors such as energy, transport, industry and tourism;
- speed up <u>greening of the government</u> and promote further development of the environmental goods and services industry;
- promote discussion of a new <u>sustainable development strategy</u>, building on the new State Environmental Policy and with participation by stakeholders;
- promote the use of <u>cleaner technologies</u>, <u>energy saving</u> and of alternative energy sources;
- pay special attention to integrating environmental concerns into <u>fiscal policy</u>;
- reduce subsidies in the water and energy sectors.

#### Industry and the environment

A centrally planned economy giving low priority to the environment, and a concentration of industrial activities in areas close to "cheap" energy sources (e.g. open cast brown coal mining), resulted in some parts of the Czech Republic being among the black spots and most heavily polluted areas of Europe (Northern Bohemia and Northern Moravia). Since the beginning of the transition period, important structural changes have taken place in industry through privatisation, market liberalisation, and foreign trade restructuring. Decline in industrial output, the closing down of some plants, and the modernisation of others, as well as large environmental investments have led to substantial environmental improvement. Through licensing and pollution charges, pollution control has been exercised over major and medium pollution sources. Overall, the rate of decrease in air and water pollution has been greater than that of the fall in industrial production. Through environmental investment, and the system of charges which provides revenue to the State Environmental Fund, industry is implementing the polluter-pays principle. The Ministry of the Environment and the Ministry of Industry and Trade have recently started promoting good housekeeping practices and environmental management in companies. Major companies are showing increasing responsiveness to the need to address environmental issues. In the context of privatisation, arrangements have been made to deal with past environmental damage; there is, however, a considerable backlog of polluted industrial sites. Access to international markets and the prospect of EU membership are important incentives for industry to bring its environmental performance up to western European standards.

As pollution and resource use intensities are still very high, further major efforts will be needed to achieve improved eco-efficiency. New laws on the prevention and management of <u>industrial accidents</u>, and on the handling and labelling of <u>chemical substances</u>, need to be enacted. Command and control approaches through permitting and large investments, mostly in <u>end-of-pipe technologies</u>, have proven environmentally effective and should now be supplemented by cost-effective <u>preventive and partenarial approaches</u> to waste management and minimisation, energy saving, and reduction of pollution intensities.

#### It is therefore recommended to:

- strengthen co-operation between the Ministry of the Environment and Ministry of Industry and Trade,
   with the aim of integrating and reinforcing the environmental dimension of industry policies and of taking cost-effectiveness more fully into account in environmental policy making;
- promote <u>government-industry dialogue and partnership</u>, creating proper conditions for developing preventive and integrative approaches, and focusing on actual environmental progress;
- further use and develop policies directed towards the promotion of <u>integrated environmental</u> <u>management in companies</u> (e.g. stimulation of "good housekeeping", use of environmental audits to identify low-cost solutions for improvements); give more attention to developing and implementing policies for small and medium-sized enterprises;
- elaborate a policy approach for industry including quantified environmental <u>objectives with medium</u> <u>and long-term time frames</u>; consider giving industry greater flexibility to choose <u>the most cost-effective means of reaching these objectives</u>;
- adopt laws concerning the prevention and management of <u>industrial accidents</u> and the handling and labelling of chemical substances;
- consider ways to accelerate the clean-up of <u>past environmental damage</u>, in particular polluted industrial sites which pose high risks to public health and the environment;
- further encourage the adoption of <u>cleaner technologies</u> by industry.

#### 3. International Co-operation

Since the early 1990s, great progress has been made in international environmental co-operation. The Czech Republic became a party to most major international agreements on the environment; it became a member of the Council of Europe and of the OECD; and it fulfilled related environmental commitments. In addition, it has started the accession process for becoming a member of the EU, which will require vast changes in its environmental laws and regulations as well as stricter enforcement. Concerning official development assistance, it has already become a donor country and is supporting the Global Environment Facility.

The Czech Republic has reduced very significantly the discharge of pollution in its three main <u>international</u> <u>rivers</u> (Elbe, Morava, Oder), entered into agreements with neighbouring countries on the protection of these rivers and started to prepare national action programmes to further protect them. Concerning <u>transfrontier air pollution</u>, it has reduced its emissions of  $SO_x$ ,  $NO_x$  and VOC considerably and met all its international commitments in this area. In particular, it has equipped all its power stations with desulphurisation equipment. <u>Emissions of  $CO_2$ </u> which decreased significantly from 1990 partly due to the fall in economic output, are likely to be in 2000 at a level well below that of 1990. Although  $CO_2$  emissions are likely to grow as a result of economic growth, by 2010 they could still be about 8 per cent below the 1990 level, <u>in line with the Kyoto target</u>. The production and consumption of ODS, regulated by the Montreal Protocol, are now banned; a strict national law was adopted to restrict ODS use.

Although progress during the transition period has been remarkable, there are still areas of concern. Lack of adequate national legislation has prevented the Czech Republic from ratifying important conventions on water management and on industrial accidents or implementing related OECD Decisions and Recommendations. Concerning transfrontier air pollution,  $\underline{SO_x}$  and  $\underline{NO_x}$  emissions per capita and per unit of GDP are generally well above those in other European countries. Furthermore, in spite of the measures taken and reductions achieved, some parts of the Black Triangle are still seriously polluted. Changes in the level of  $CO_2$  emissions in the Czech Republic have been linked for the most part to economic changes. Steps could be taken to further reduce  $CO_2$  emissions through energy savings or improvements in energy efficiency; indeed, at present  $\underline{CO_2}$  emissions per capita and per unit of GDP are also high compared to the average for OECD Europe. Although the Czech Republic supported the Rio Declaration, it has taken relatively few initiatives at national level to face <u>liability</u> issues, to give legal force to the precautionary principle, to implement the principle of <u>sustainable development</u>, to prepare and adopt a national Agenda 21, or to increase <u>public participation</u>.

While it is understandable that a country in transition cannot deal early on with all environmental issues, future progress towards sustainable development and European integration will require priority setting, because of the scarcity of means available, and a <u>wider democratic debate</u> with greater information provision and the participation of all stakeholders. The emphasis given to international environmental issues, to harmonising national legislation with EU legislation and to implementing international agreements should be supported by greater human and financial resources. At the same time, activities aimed at collecting and using foreign funds should be pursued in order to improve the country's environment and reduce transfrontier pollution.

# It is therefore recommended to:

- ratify and implement international environmental agreements (Annex III);
- enact <u>national laws</u> which would enable the Czech Republic to become a party to those significant international environmental agreements to which it is not yet a party;
- improve <u>public awareness</u> in relation to new environmental commitments associated with membership in the OECD and with EU accession;
- fully implement <u>recent OECD Recommendations</u> on environmental information and pollutant release and transfer registers;
- develop a national programme to <u>reduce GHG emissions</u>, improve <u>energy efficiency</u> and prepare for the adoption of appropriate legal measures;
- increase <u>resources</u> to carry out international commitments, to prepare accession to the EU and to enforce new legislation approximating that of the EU;
- make full use of opportunities <u>for foreign assistance</u>, with the aim of strengthening environmental infrastructure and contributing to the solution of priority international environmental problems.