

ENVIRONMENTAL PERFORMANCE REVIEW OF POLAND

EXECUTIVE SUMMARY

Since 1989 Poland's economy has undergone a profound transformation from a centrally planned to a market economy. Economic growth has been accompanied by restructuring of the economy (e.g. privatisation of many large industries, liberalisation of the electricity market). In 2001 the service sector accounted for 64% of GDP and industry for nearly 33%, with a shift towards less energy- and material-intensive industries and processing activities. After a two-year recession followed by a gradual economic recovery, the highest rate of GDP growth was reached in 1995 (6.9%); the growth rate subsequently slowed, to 4.3% in 2000 and 1.1% in 2001. There are currently serious concerns about the state of Poland's public finance.

Since the early 1990s Poland has made remarkable environmental progress, meeting most of its environmental targets and decoupling a number of environmental pressures from economic growth. This progress reflects both the reshaping of its economy and a strengthening of its environmental policies. Since the 1995 OECD Environmental Performance Review, the EU accession process has shaped Poland's approach to environmental management through the requirement to transpose European Directives. Yet in several respects the road towards environmental convergence within the EU is likely to be a long one. While pursuing sustainable development balancing economic, environmental and social concerns, Poland could still improve its ranking among OECD countries for a number of indicators of pollution intensity per unit GDP. Priority environmental issues include pollution prevention, waste water treatment, waste management, biodiversity and landscape conservation, and climate protection.

To meet these challenges, Poland will need to: i) expand its environmental infrastructure (e.g. for waste and waste water treatment) and continue implementing its environmental policies; ii) further integrate environmental concerns into economic and social decisions; and iii) reinforce its international co-operation on environmental issues.

This report examines progress made by Poland since the previous OECD Environmental Performance Review in 1995, and evaluates the extent to which the country's domestic objectives and international commitments are being met. It also reviews progress in the context of the OECD Environmental Strategy. Some 46 recommendations are made that could help strengthen Poland's environmental performance in the context of sustainable development.

Despite important environmental progress

Transition towards a market economy has led to major institutional and economic structural changes in the last ten years. Reforms initiated in the early 1990s provided opportunities to revise and implement environmental management and legislation, and to achieve greater integration of environmental concerns into other policies. Adopted in 1997, Poland's present Constitution states that the country will ensure "protection of the environment, while pursuing the principle of sustainable development." More recently the EU accession process has been the main driving force for further institutional and economic structural changes. The transposition of EU environmental legislation in particular has led to a range of new legislation.

Poland's environmental management is founded on solid environmental institutions and competences. Two national environmental policies were adopted in 1991 and 2000 under fast-changing circumstances. The Second National Environmental Policy defines short-term (2000-02), medium-term (2002-10) and long-term (2010-25) objectives for management of natural resources, improvement of environmental quality, strengthening of policy instruments for environmental management, and co-operation on environmental issues of international concern. Together with economic structural changes, these efforts by Poland have contributed to progress on a number of fronts (e.g. reductions of traditional air pollutant emissions, water withdrawal, nutrient discharges and non-municipal waste generation). Poland's inspection and enforcement capacity has been preserved (in the national Inspectorate for Environmental Protection), although follow-up by prosecutors could be strengthened. Expenditure on pollution abatement and control, which was between 1.5 and 2% of GDP throughout the 1990s, has largely been financed by high pollution charges and fines (e.g. for air pollution) redistributed through the National Fund for Environmental Protection and Water Management and a number of other environment funds operating at regional and local levels. Between 1990 and 2000, Poland expanded its use of economic instruments to implement environmental policy and to recover the operational costs of environmental services

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(e.g. drinking water supply, waste water treatment). Access to environmental services varies significantly among regions; related investments should be targeted to ensure that basic social and health standards are met throughout the country. Increases in prices relating to household services (e.g. provision of water, energy and transport) have had a significant incentive effect, although with some regressive distributional consequences. In line with the Aarhus Convention, legal bases have been established for access to information and to the courts.

... Poland faces large investment needs for its environmental infrastructure

However, despite undeniable progress in reducing pollutant emissions and discharges to the environment, Poland lags behind most other OECD countries with respect to a number of environmental indicators. Having done a great deal to resolve environmental problems inherited from the past, Poland now aims at another level of environmental quality and at environmental convergence with other European countries. Considerable investment in environmental infrastructure is therefore still necessary. In particular, an environmental investment estimated between 1.2 and 2.7% of GDP per year will be required over ten years to comply with the terms of EU accession. Financing of this investment remains uncertain despite the support expected from European funds. Poland must clarify environmental priority setting and ensure that cost-effectiveness has a central place in decision criteria. On-going efforts to improve the transparency and accountability of decision-making by environment funds should be sustained. Introduction of the European system of integrated pollution prevention and control (IPPC) and the recent decentralisation of environmental management will necessitate further strengthening of environmental institutions. Consideration needs to be given to use of emissions trading schemes to help reduce Poland's high air pollutant emission intensities. Further efforts are also needed to ensure that local spatial development plans correspond with those established at the regional level, and that both types reflect national environmental objectives. Use of quantitative environmental indicators to inform the process of policy formulation, for communication with stakeholders as well as monitoring policy effectiveness, will also be important.

Economic forces and changes in major sectors such as industry, energy, transport and agriculture strongly influence environmental conditions and trends. They can either enhance or diminish the benefits of environmental policies and technical progress. Further integration of economic and sectoral policies is needed to move towards cost-effective environmental protection and sustainable development in Poland.

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While GDP grew by 45% between 1990 and 2001, Poland strongly decoupled its emissions of several air pollutants (e.g. SO_x, NO_x, CO₂), its use of water resources, and its use of agricultural inputs (e.g. nitrogenous fertilisers, pesticides) from economic growth. Municipal waste generation, increasing at only one-fourth the rate of GDP during this period, was also weakly decoupled from economic growth. Economic restructuring, industry and energy sector reforms and environmental policies explain these trends. The ongoing privatisation process, combined with a high share of foreign direct investment, is accelerating the introduction of cleaner production processes and cleaner products. Poland has established a national policy and institutional frameworks for sustainable development. Strategies for economic and sectoral development (e.g. transport, rural development and agriculture) rather systematically integrate environmental objectives. Environmental objectives have also been integrated into certain areas of fiscal policy (e.g. through differentiated taxes on motor vehicles and their fuels). Environmental impact assessment is used to assess and mitigate the negative environmental impacts of major infrastructure projects (e.g. motorways).

...much remains to be done in the energy, transport, and agriculture sectors

Despite this progress, the emission intensity of Poland's economy remains among the highest in the OECD with respect to SO_x, NO_x and CO₂ emissions per unit GDP. Further measures are especially needed to reduce emissions from the energy and industry sectors (e.g. from large combustion plants). While there has been some reduction in use of coal, the subsidisation of coal mining distorts market signals; this has slowed progress on reducing discharges of saline effluents to surface waters, and on switching by stationary sources to less carbon-intensive fuels. Taxes on fuels used for stationary combustion are very limited so far, providing little incentive to conserve energy or to switch to less polluting forms of energy. The moderate fuel switching that has occurred has mainly resulted from modernisation, reinforced

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by air emission charges and fines. Pressures from transport and agriculture were relatively low between 1990 and 2000 (e.g. compared with the OECD and EU averages), but they are likely to increase markedly with the growth or intensification of these sectors. There has been little integration of environmental concerns into non-environmental chapters during the EU accession process. Polish authorities should better integrate these concerns into sectoral reforms and development projects, as well as into spatial planning. Continuing efforts towards efficient pricing of natural resources and environmental services would enable Poland to improve overall economic efficiency; social concerns (e.g. affordability) should be taken into account.

In the global and EU contexts, Poland faces challenging international commitments

Poland has strengthened its international environmental commitments in a global context (e.g. ratification of the UNFCCC and its Kyoto Protocol), and in a European context during the EU accession process (e.g. transposition of EU Directives into national legislation). It has reduced its emissions of CO₂ from energy use by 16% since 1990 through economic restructuring, energy conservation and fuel switching. By participating in several pilot Joint Implementation projects, it has contributed to international experience with the Kyoto flexible mechanisms. Poland has reduced its contribution to regional transfrontier pollution in recent years, achieving large reductions in its emissions of acidifying air pollutants in line with the protocols to the UN-ECE Convention on Long-range Transboundary Air Pollution (i.e. Oslo, Sofia, Gothenburg, Aarhus), which it has signed but not yet ratified. It has considerably reduced pollutant loading to transboundary rivers and to the Baltic Sea. Poland has also updated its legal framework for transfrontier shipments of hazardous waste to be consistent with the Basel Convention, as well as strengthening and expanding its enforcement capacity.

Poland has not yet adopted a coherent national climate protection policy, despite some steps to integrate climate protection concerns into energy policy. Such a policy would facilitate identification of the climate protection measures that would most cost-effectively reduce emissions of other air pollutants (e.g. SO_x, NO_x, VOCs) as well as GHGs, thus contributing to more efficient use of limited pollution control resources. Poland's emissions of acidifying pollutants (e.g. SO_x, NO_x) per unit of GDP remain among the highest in the OECD. To fully comply with its Helsinki Commission (HELCOM) commitments, it will need to further reduce nutrient loading to coastal waters, in particular by completing waste water treatment networks in the Vistula and Odra basins and by ensuring the use of port waste reception facilities. Given the overexploitation of a number of important fish stocks in the Baltic Sea, Poland should strengthen its management of shared fish stocks (i.e. through increased surveillance and inspection), and take further steps to reduce fishing fleet capacity.

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THE OECD ENVIRONMENT PROGRAMME

Annex: 46 Recommendations*

Environmental management	<ul style="list-style-type: none"> • further implement the <u>polluter pays and user pays principles</u> to make provision of environmental services more efficient and contribute to their financing, taking into account social considerations; • increase and maintain <u>environmental expenditure</u> at levels necessary to implement the EU environmental acquis, using more private funding (e.g. user charges) and EU funding for environmental investments; • further enhance the transparency, accountability and effectiveness of <u>environment funds</u> (national, regional and local); • expand the use of <u>economic instruments</u> to improve the cost-effectiveness of environmental management; assess the potential role of <u>tradeable emissions permits</u>; • further strengthen <u>enforcement</u> of environmental regulations, expanding the role and capacity of the Inspectorate for Environmental Protection and of prosecutors, in line with new responsibilities (e.g. implementation of IPPC, decentralisation of environmental management responsibilities); • strengthen integration of environmental objectives into <u>spatial planning</u> and enhance the coherence of local and regional plans; • strengthen the use of <u>quantitative indicators</u> to assess pressures on the environment and the effectiveness of policy responses.
Air	<ul style="list-style-type: none"> • finalise and implement the national <u>air management strategy</u> and related sectoral <u>action plans</u>, with appropriate review mechanisms; • continue efforts to reduce emissions of <u>SO_x, NO_x, NMVOCs, particulates and toxic organic chemicals</u> from both stationary and mobile sources, in order to meet national and international commitments and minimise local air pollution hotspots and chronic photochemical oxidant pollution; • further enhance the role of <u>economic instruments</u> (e.g. emission trading, extended use of excise duty on non-automotive fuels) in the policy mix to improve the cost-effectiveness of environmental management; • further integrate <u>environmental concerns into energy policies</u>, including through promotion of energy efficiency, progressive removal of environmentally harmful subsidies, and strengthening of incentives for cleaner production; • accelerate the modernisation of <u>air quality monitoring networks</u> and streamline their administration.
Water	<ul style="list-style-type: none"> • mobilise <u>financing</u> needed to upgrade and extend both urban and rural sewerage, waste water treatment and drinking water supply infrastructure, giving consideration to greater involvement of the private sector; • apply the <u>user pays and polluter pays principles</u> more fully for water services, taking into account social considerations; • pursue implementation of EU legislation and <u>implementation of the new institutional framework</u> for water management established by the 2001 Water Act; • focus water management <u>priorities</u>, with clear quantified objectives and time limits, while paying particular attention to minimising the costs of meeting environmental quality targets; • continue to implement <u>flood prevention and mitigation</u> programmes and plans, in particular by protecting flood plains and natural buffer zones; • introduce measures to promote use of <u>phosphate-free detergents</u> (e.g. product charges, phase-out).
Waste	<ul style="list-style-type: none"> • implement the <u>national waste management plan</u>, establishing a mechanism for regular review of progress; • strictly enforce technical standards for <u>landfills</u> and urgently close a number of substandard sites; reinforce enforcement of prohibitions against illegal dumping; • review possible approaches to increasing <u>private and public financing</u> of the upgrading and expansion of waste management facilities; address the large financing gap expected due to implementation of EU waste legislation and domestic legislation on land contamination; • continue to improve the system for regulating the movement and treatment of <u>hazardous waste</u>, expanding the capacity to destroy PCBs and obsolete pesticides; • strengthen measures to increase <u>municipal waste recovery rates</u>, with stronger initiatives by authorities concerning separate collection and the creation of sustainable recycling markets.
Nature and biodiversity	<ul style="list-style-type: none"> • ensure proper implementation and monitoring of the <u>National Biodiversity Strategy</u>, including through strengthened institutional co-ordination at all administration levels and improved measurement of status and trends of biodiversity across the country; • ensure that development projects and programmes respect <u>Natura 2000 designations and management concepts</u>, and redouble efforts to organise consultations at the local level on Natura 2000 proposals, especially when sites are outside existing protected areas; • improve conservation in <u>Landscape Parks</u> through incentives and legal mechanisms to encourage private owners or leaseholders within these parks to respect biodiversity conservation objectives; ensure integration of Landscape Park conservation plans into local land use planning; • develop diverse, thriving <u>rural economies</u> that value biodiversity (e.g. through green tourism, environmentally sound agriculture, efficient use of agri-environmental and less favoured area programmes); remove perverse incentives such as the reduced VAT on agricultural pesticides; • establish protected areas in the <u>marine environment</u> and expand efforts to protect marine biodiversity.

* These Recommendations were formally approved by the OECD Working Party on Environmental Performance.

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<i>Towards sustainable development</i>	<ul style="list-style-type: none"> • further <u>decouple</u> environmental pressures from economic growth to reduce pollution intensity and improve resource efficiency of the economy; • consider economic, environmental and social aspects in setting <u>national priorities</u> at the strategic, planning, programming and budgeting levels; • at project level, ensure the integration of environmental concerns through EIA and spatial planning and develop <u>sharing of best practices</u> among regions and municipalities; • continue to integrate environmental concerns into <u>sectoral fiscal and price signals</u>; extend the taxation of fuels used by stationary sources, differentiating tax rates to internalise environmental externalities; • prioritise implementation of <u>cost-effective measures</u> to improve the energy efficiency of large stationary sources and to reduce the carbon intensity of the energy supply (e.g. through progressive removal of environmentally harmful subsidies); • further promote capacity building and networking for <u>local development initiatives</u> integrating economic, social and environmental concerns (e.g. Local Agenda 21) in urban and rural development.
<i>Sectoral integration: transport</i>	<ul style="list-style-type: none"> • fully implement exhaust emission control, automotive fuel quality control and in use-vehicle inspections to reduce <u>road vehicle emissions</u>; • fully integrate environmental considerations into Poland's <u>road transport infrastructure</u> development (e.g. the Trans-European Network), using environmental impact assessment and strategic environmental assessment; in particular, ensure consistency with the Habitats Directive and with the sustainable development scenario of Poland's 2001 National Transport Plan; • <u>establish priorities</u> for scheduling and financing transport infrastructure investments; • implement <u>demand management measures</u> for both passenger and freight transport (e.g. park and ride, combined freight transport, tighter parking control in city centres); • facilitate sharing of cities' experiences improving <u>urban public transport</u>, with appropriate national administrative support for local authorities; • review and revise <u>transport taxes and charges</u>, with a view to better internalising the environmental externalities of various transport modes.
<i>International commitments</i>	<ul style="list-style-type: none"> • adopt and implement a coherent <u>national climate protection policy</u> which identifies priority policy measures based on their cost-effectiveness (e.g. in terms of cost per unit of avoided emissions) and is co-ordinated with energy and transport policies (e.g. taking ancillary benefits into account); • ratify relevant Protocols to the UN-ECE Convention on <u>Long-range Transport of Air Pollutants</u>, and pursue their reduction targets (e.g. for SO_x, NO_x, VOCs, NH₃) through the national air management strategy; • complete investment in <u>municipal waste water treatment</u> stations and strengthen measures to reduce nutrient run-off from agriculture, as necessary, to comply with pollution reduction commitments made in the framework of HELCOM; • strengthen <u>monitoring and inspection of fish catches</u> (in harbours, on ships, by satellite) and work to improve information collection on by-catch and discards in offshore fisheries; take further steps to reduce fishing capacity; • strengthen enforcement against <u>illegal trade</u> in ozone-depleting substances, endangered species and hazardous waste; • ensure better integration of <u>environmental concerns into development projects</u> financed by international and EU funding.