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ENVIRONMENTAL CHALLENGES FOR POLAND IN THE CONTEXT OF EU ACCESSION – SELECTED ISSUES

1. Introduction

Poland's aspiration to join the European Union has accelerated the process of environmental improvements. These improvements originate in the transposition and implementation of the *environmental acquis*, which covers such issues as nature protection, water and air quality, waste management, chemicals and genetically modified organisms, industrial pollution and risk assessment.

The Polish government has adopted 31 December 2002 as the date, by which Poland will be prepared for accession to the European Union (EU). This process of harmonisation and implementation of *environmental acquis* means the introduction of about 170 EU legal documents in Polish environmental legislation. This goal is closely connected to many environmental challenges that Poland faces at present. There is a wide range of environmental challenges. Their scope covers not only environmental, but also economical and social aspects.

2. State of the Environment

In the period 1988–1998, substantial progress was achieved in Poland in the field of environmental protection. Distinct reductions in emissions into the air and water were observed, legally protected areas were expanded

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and environmental investments raised. Moreover, Poland became a party to a number of international conventions regarding environmental aspects.

This change in the state of the environment is visible in every monitored medium: air (see Table 1), water (see Table 2) and soil (see Table 3 and 4). However, these are facts, there is still a lot of work needed.

Table 1. Changes in the emission levels of selected pollutants into the air

Substance	Years									
	1988	1990	1991	1992	1993	1994	1995	1996	1997	1998
SO ₂ (thousand tonnes)	4180	3210	2995	2820	2725	2605	2376	2368	2181	1897
No _x (thousand tonnes)	1550	1280	1205	1130	1120	1105	1120	1154	1115	991
CO ₂ (mln tonnes)	509	384	388	359	372	348	330	373	370	—
Particulates (thousand tonnes)	3400	1950	1680	1580	1495	1395	1308	1250	1130	871

Source: Central Statistical Office GUS 2000

Table 2. Change in wastewater discharges [in hm³]

Wastewater	Years										
	1988	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Industrial	9581	9055	8418	7973	7757	7798	8129	8324	8269	8188	7902
Municipal	2478	2314	2166	2075	1981	1999	1852	1752	1692	1656	1590
Untreated	16641	1343	1134	995	844	809	700	611	520	424	376

Source: Central Statistical Office GUS 2000

Table 3. Industrial wastes generated [in mln tonnes] annually and disposed municipal wastes [dam³]

Wastes	Years								
	1988	1990	1991	1992	1993	1994	1995	1996	1997
Industrial	186	144	129	122	121	122	123	125	125
Municipal	46478	42686	40915	47000	40941	42364	42248	44697	46859

Source: Central Statistical Office GUS 2000

3. Selected Environmental Challenges

In spite of the fact that the state of the environment is continuously improving, Poland still faces a large number of environmental problems that, to a large degree, seem to be inherited from the past. Thus, various

Table 4. Protected areas

Area	Years										
	1988	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
National Parks	127	166	178	178	244	249	270	301	305	306	307
Nature reserves	114	117	123	122	111	117	121	128	130	141	144
Landscape parks	1014	1215	1384	1565	1727	1861	1931	2082	2129	2404	2451
Protected landscape parks	3209	4575	4781	5567	5324	5258	5783	6613	6757	6771	7153

Source: Central Statistical Office GUS 2000

environmental challenges may be distinguished, the criteria of classifying them depending on the point of reference.

In general terms, selected issues such as the strengthening of local authorities after the decentralisation of power, environmental investments, creating enforceable environmental legislation against industrial pollution, information and public participation are worth mentioning.

Reaching any of the enumerated goals would not be possible without increasing environmental awareness. This might be brought about by a strong environmental movement, initiated not only by ecological education, but also by non-governmental organisations, which ensure environmental issues remain on the political agenda. Additionally, they mobilise the population and motivate people to take on special responsibilities.

The issues, enumerated above, give an idea about the fields to which more attention should be paid.

Environmental information and the public participation

One of the basic principles of Poland's environmental policy is to involve the public in environmental protection. Practice shows that this happens by consulting on draft legal acts and documents of strategic nature with, for instance, representatives of environmental Non-Governmental Organisations, or by consulting with local communities regarding investments plans etc. For many years, Poland's principles were set out in the Aarhus convention, an international agreement.

Increasing public participation in environmental matters needs to be enhanced by easy access to information on the environment. This simple fact is reflected in the Polish Constitutional Act, where it states in Article 74 that *Everyone shall have the right to be informed of the quality of the environment and its protection* and in article 61, that *A citizen shall have the right to obtain information on the activities of organs of public autho-*

ity (...). Additionally, on 1st January 2001, an act on access to information on the environment and environmental impact assessments came into force. At present, this act fulfils the requirements of the most significant law in the European Union concerned with public access to environmental information: EU Directive 90/313/EEC on Freedom of Access to Environmental Information. Since that time, the information on the environment held by public authorities has been made more available to the public.

The implementation of this act is just the first step in the process of public participation. It will definitely help to gather information that has been scattered at many sites. Moreover, on one hand, it is a challenge to make practice guides, that would help local authorities to deal with these new responsibilities. On the other hand, public awareness must rise, in order to make use of this act for environmental protection in the long term.

Strengthening of local authorities

Assuming that all environmental problems have a local origin, power should be devolved to self-governments, which actually takes place not only in the EU member countries, but also in Poland.

According to the administrative reform in the country as implemented on 1st January 1999 most environmental tasks were assigned to local governments. Since then, local budgets have had to finance a large number of environmental investment projects. It concerns mainly those related to water quality and waste management ones. In the context of EU accession, local governments had been obliged to formulate local and regional strategies and development plans. All of these actions should improve environmental management at the local, as well as regional level.

Enforceable environmental legislation against industrial pollution

In the past, Poland, as well as other Central and Eastern European (CEE) countries, had developed stringent, but not enforceable environmental legislation. Thus, new governments faced a problem. This problem increased when the aspirations of Poland became greater concerning international co-operation.

Some of the legal environmental requirements, such as the ambient standards for water and air pollution, are unrealistically strict. However, this legislation could be used to bring about improvements in envi-

ronmental conditions, if the government were willing to enforce it instead of maintaining previous levels of production.

In spite of the fact that Polish legislation partly conforms to EU legislation, many changes were required. In some cases, new environmental priorities have been drawn up. Thus, environmental regulations, existing for many years, began to be changed, in order to reach European standards. One of the primary, and at the same time the most important change, was the exchange of *command-and-control* approaches for *market-based* approaches. In Poland, emission standards have not been linked to pollution charges, either in the way they operate or in the implied weight placed on reducing emissions of different pollutants. Enterprises are confused and feel that they are being unfairly subjected to inconsistent signals. Furthermore, an efficient system of pollution charges, that reflect the environmental damage caused by emissions, imposes a heavy fiscal burden on enterprises that have never had to meet strict environmental standards in the past. In many cases such fines (when enforced) lead to bankruptcies. The present charges are 15 times as high in real terms as the charges in force in 1990. This provides a genuine incentive to reduce emissions.

Another issue concerns slightly different attitudes to ecological problems. While Polish law aims to preserve nature and is concerned with ecological effect, EU legislation is based upon a technical approach, that obligates enterprises to respect all standards and use the *best available technique* (BAT), in order to ensure a higher level of protection against pollution. Council Directive 96/61/EC about Integrated Pollution Prevention and Control (IPPC), addressed to large industrial installations, forces Poland to set up new emission standards based on Best Available Techniques (BAT). This is another EU requirement that aims to replace the *end-of-pipe* emissions reductions by pollution prevention activities.

Environmental investments

Substantial changes have taken place in the state of Poland's environment in the last decade. These can be distinguished according to the two most important factors influencing the improvements.

Environmental investments did not rise immediately after 1989, but they oscillated around the same level. The improvement of the state of the environment was initiated by the economic recession, which led to a decreasing level of production and as a result caused a reduction in the emission of pollutants.

Secondly, it was possible to improve the state of environment due to the establishment of an effective system for financing environmental protection (see Table 5). Ecological investments started to rise after 1993. Poland launched and implemented a large number of projects, which brought substantial improvements. Despite these changes, there is still a gap between the current state of the environment and the state described by the relevant legal acts of the EU.

Table 5. Environmental investments in Poland in 1989–1999

Type of investment	1990	1995	1996	1997	1998	1999
	In millions of PLN					
Environmental protection*	415	3171	6138	7354	9019	8549
Water management	253	999	1415	1784	1748	1767

* This includes wastewater management, air protection, waste management, ground protection, biodiversity, noise and vibrations, protection against radiation.

Source: Central Statistical Office GUS 2000

In spite of such great efforts, there is still a need to place a higher priority on environmental investments. A very good example of an investment that should be set as a priority is the building of sewer systems. About 17.3% of habitants of urban areas are still not supplied with sewer systems. Another point is that in 1999 about 78% of the population living in urban areas are served by wastewater treatment plants, while only about 8.5% of the population living in rural areas is served.

Another problem exists in the waste management system. In Poland, a very small amount of municipal wastes are segregated into paper, texture, glass, plastics or metals. Thus, recycling processes are impossible to initiate. In comparison to, for instance Sweden, where more than 72% of glass was recycled in 1996, Poland faces an enormous problem. Moreover, it means that in the country the majority of waste is simply dumped at landfills, which does not favour sustainable land management. In 1997, Poland's population generated 12183 thousand tonnes of municipal wastes, and 11813 thousand tonnes was disposed at landfills.

The structure of funds allocated to environmental investments is going to be changed, in order to reduce the role of environmental funds (see Table 6). The internal assets of companies, the budgets of municipalities, credit granted by commercial banks must play a more important role. A tendency of combining all these sources has recently started and hopefully will enable more investments to be made.

Table 6. Share in total funds allocated to environmental investments in [%]

Funding Source	1991	1992	1993	1994	1995	1996	1997	1998
Environmental funds	40	58	47	41	40	34	30	27
Investors own funds and bank credit	30	20	25	31	32	38	40	42
Central budget	5	5	7	5	5	5	3	2
Local budgets (town, municipalities)	20	13	16	19	18	19	23	25
Foundations and foreign assistance	5	4	5	4	5	4	4	4

Source: Central Statistical Office GUS 2000

4. Benefits Resulting from Pursuing the Environmental Goals

The implementation of EU environmental law into Polish legislation is considered, by many experts, to be a very costly undertaking. In spite of that, Poland is expected to obtain many benefits concerning environment protection, which will probably exceed the economic costs.

In general terms, the expected benefits can be divided into two groups: benefits for Poland's inhabitants and benefits for external actors.

People living in the country will not only be supplied with better information about the state of the environment, but they will also be able to influence decision-makers, thanks to improved access to information and the possibility of public participation in the environmental impact assessment procedure.

Improvement of, for instance, water and air quality, as well as the waste management system, is directly connected with the living conditions of people. Thus, the threat to human health will be reduced, especially in regions where such a risk existed (the highly urbanised or industrialised areas of Silesia). Investments in the structure of the water supply and sewer systems will increase the standard of life in rural areas.

In spite of the fact that enterprises will have to respect emission limits due to new standards (some of them will have to adhere to the integrated pollution prevention and control requirements) and make many ecological investments, they will be able to compete on the EU market.

From the international point of view, one of the major benefits that might be achieved will be a change of Poland's ecological image on the political agenda. Till now, Poland has been seen as a one of the major polluters in Europe.

Reaching environmental goals, Poland is becoming more attractive to tourists and new investors. The question appears as to whether their presence doesn't create new environmental challenges.

Literature

- Environmental Action Programme for Central and Eastern Europe – setting priorities*, Abridged version of the document endorsed by the ministerial conference, Lucerne, Switzerland, 28–30 April 1993.
- Environment 2000*, Central Statistical Office (Główny Urząd Statystyczny), Warszawa, 2000.
- Karaczun, Z., M., *Informacja o kosztach i korzyściach wdrożenia w Polsce wymagań prawa ekologicznego Unii Europejskiej*, http://www.mos.gov.pl/integracja_europejska/koszty/index.shtml
- Mateczak, P.: *Problemy ekologiczne jako problemy społeczne*, Wydawnictwo Naukowe UAM, Poznań, 2000
- Poland's Negotiation Position in the Area of Environment*, http://www.mos.gov.pl/integracja_europejska/stanowisko/index.shtml