

# HAZARDOUS WASTES IN POLAND - NATIONAL REPORT

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## NATIONAL PROFILE

### Geographical

**Area:** 322 577 km<sup>2</sup>, 788 km of coastline (1)  
**Terrain:** from flat through undulating to mountainous  
**Climate:** temperate  
**Population:** 37 879 000 (on the census basis from 7 December 1988), estimated value from 31 December 1993: 38 418 000 (1);  
 23 701 000 (61,7 % of the population) live in the towns (total amount: 835) (1);  
 20 cities with more than 200 000 citizens [total amount of 8 750 500 citizens (22,8 % of the population)] (1).

### Resources and Urban Services

#### Minerals and energy:

The most important: pit-coal, lignite, copper and zinc ores, sulfur.  
 Also considerable output of natural gas, rock-salt (halite), nickel ore.  
 Resources of crude oil and iron ore are insufficient; Less amount of phosphorite and barite.  
 Rock resources like: granite, basalt, sandstone, limestone, marble, etc.  
 Resources for ceramic industry: chalk, gypsum, kaolinite and fire clay, etc.  
 Production of energy in 56 % is based on pit-coal combustion, in 28 % on lignite combustion, 6 % of contribution comes from water-power plants. The rest (10 %) has the origin from other power plants above 0,5 MW (1).

#### Agricultural land:

Cropland covers 60 % of the whole country territory (1).

**Water supply:** 80 % – surface water, 15 % – ground water (1).

**Transport:** good network; supremacy of road transport, the second place: rail. The structure of cargo transport is shown in Table 1.

**Sewerage:** 64,1 % of municipal wastes are treated by waste water treatment plants. 35,9 % are not treated. The full picture is shown in Table 2.

### Economics and Industry

Poland had entered from centrally planned into free market economy. But in industry sector still fuel and power plant industry dominates, based on domestic pit-coal as well as lignite and on imported crude oil. The second place takes metallurgical industry and then electromechanical industry, chemical industry, mineral industry, paper and wood industry, light industry, food industry and then the other branches (e.g. food and printing industry). Nowadays a privatization process of the industry goes on.

Extensive trade and commerce with foreign countries is observed. In the range of import in 1992 Germany was the first

partner, Russian Federation – the second, Italy – the third. The next countries were: Great Britain, the Netherlands, Austria and France. In export in the same year the first partner was also Germany, second one – the Netherlands, the third – Italy and then: Russian Federation, Great Britain, France (1).

According to the structure of the gross domestic product the decreasing contribution of industry and the majority of the other sectors can be observed. On the other hand contribution of trade and communication continuously increases (1).

In agriculture 72 % of cropland is in private hands, 16 % is owned by state, the rest is managed by collective farms. 33,6 % of agriculture activity is plant production, 66,4 % is domestic animal production. In the first group the most important are: corn (wheat especially), potatoes, industrial plants (sugar beet), vegetables and fruits. In the second: slaughter animals (pigs especially) and animal processing products like milk and eggs (1).

## ADMINISTRATION

### Government

Poland has entered into the transition process of political system. Nowadays the national and parliament debate on the project of new constitution goes on.

Table 1. Cargo transport in 1992

Transport facilities	Contribution in percentages
Rail	14.5
Road	80.8
Pipelines	2.2
Inland navigation	0.6
Sea trade	1.9
Air	neglected

Table 2. Municipal wastes and wastewater treatment plants in the towns (2)

Municipal wastes disposed by town sewerage network in 1992:	
Total amount	207 530 m <sup>3</sup>
Waste water treatment	132 990 m <sup>3</sup> (64.1 %)
Mechanical	44 390 m <sup>3</sup> (21.4 %)
Biological	88 610 m <sup>3</sup> (42.7 %)
Not treated	74 540 m <sup>3</sup> (35.9 %)
Amount of towns	
Total	835
Serviced by waste water treatment plants	497
Mechanical	159
Mechanical and biological	338
Not serviced by any plants	338
Amount of waste water treatment plants	
Mechanical	191
Mechanical and biological	416