



# Energy Efficiency Profile : Poland

October 2008

## Energy Efficiency Trends

### Overview

In the period 1996-2006 the energy efficiency index for the whole economy (ODEX) decreased by 37%, against 8% for the EU27. This is due to remarkable improvements in industry sector. Efficiency in households improved in line with the country average while transport sector achievements lagged behind.

### Industry

The energy efficiency of industry was systematically improving and energy intensity decreased by 55% over the analyzed period (1995-2006). The most dynamics improvement was observed between 1996 and 2000. The improvement in paper industry went almost in line with industrial average. The progress in chemical and cement industry was lower, especially before 2000. In chemicals the improvement amounted to 14%, while in cement industry to 6% until year 2000. Since then the pace of improvement in these branches was similar to average. Energy intensity of steel industry was rapidly falling until year 2002, when it began to increase. Generally the improvement of the index for Poland is better than for UE due to intensive applying of more energy-saving technologies.

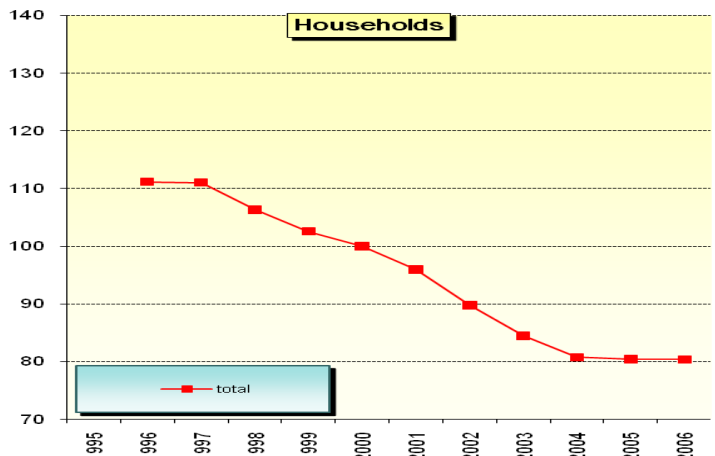
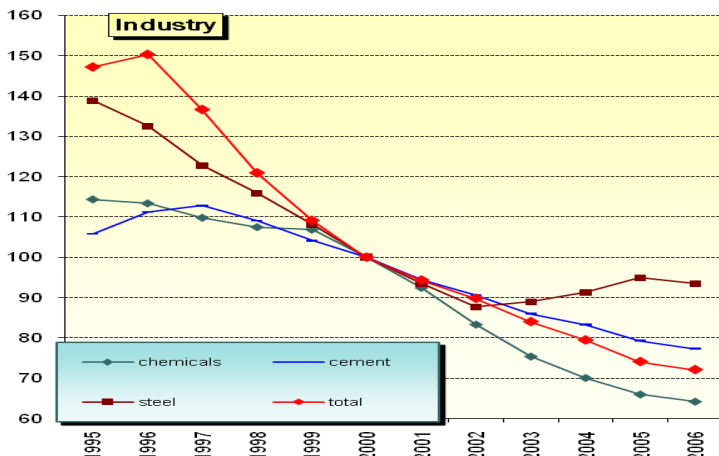
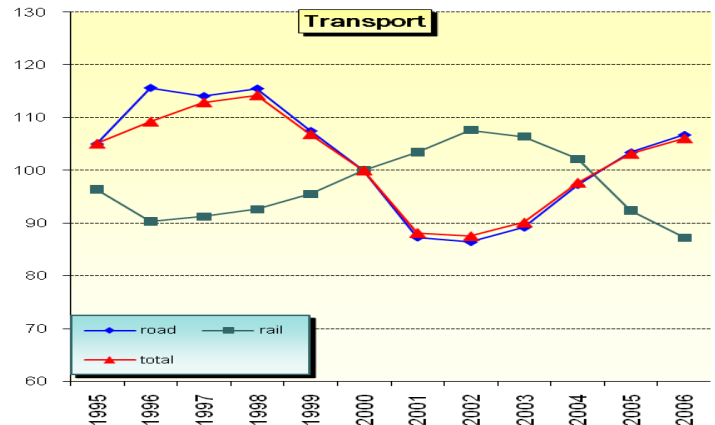
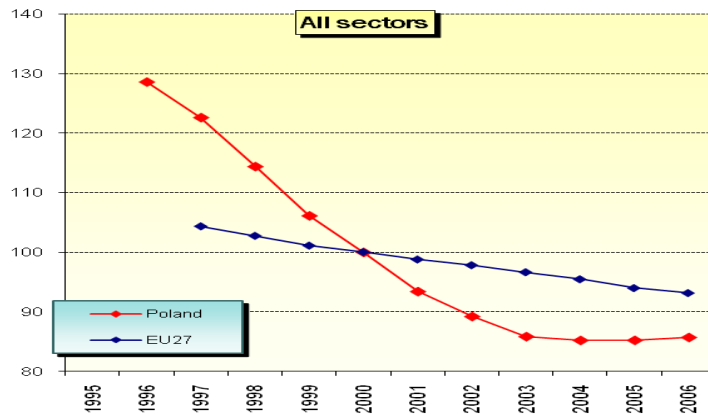
### Households

Between 1996 and 2006 the energy efficiency index in the household sector decreased by 28% which means a remarkable improvement in the energy efficiency. This can be attributed to improvements in the efficiency of the building stock (this is made up of the large number of new houses which adhere to more stringent building regulations as well as retrofitting of existing stock) and fuel switching to oil and gas from solid fuels as well as using more energy efficient electrical appliances. The improvement in the energy efficiency of households has been especially noticeable since 2000.

### Transport

The ODEX indicator for transport strongly fluctuated between 1995 and 2006, reaching finally primary level. 10 % progress was achieved by rail transport, although the importance of rail transport was falling. Growth of fuels consumption, number of vehicles and freight and passenger traffic during this period (except for years 2000-2002 in case of consumption) caused overall little worsening in road transport energy efficiency index.

Energy efficiency index, base 100 = 2000



# Energy Efficiency Policy Measures

## Institutions and programmes

Following the requirement of Directive 2006/32/EC, the Government of Poland prepared the National Energy Efficiency Action Plan aiming to achieve the imposed by Directive indicative target 9% for energy savings in 2016 and an intermediate target of 2% in 2010. The document contains the list of innovative measures and funds, which will enable the achievement of assumed goals. The energy efficiency becomes the important element of the state energy policy. The government is finalizing the preparation of Energy Efficiency Law to widely implement energy efficiency actions e.g. introduction of white certificate system is being planned. The already existing effective measures and funds related to energy efficiency will be continued having significant input in achieving the intermediate target.

The Polish National Energy Conservation Agency (KAPE S.A.) was created after the resolution passed by the Polish Parliament, a decision of the Government of the Republic of Poland, together with agreement between shareholders in 1994. KAPE S.A. carries out activities aimed at rationalization of energy management with respect to the environmental protection and through pro-ecological measures related to energy generation, transmission and utilization. There are several regional energy conservation agencies dealing in the field.

Poland continuously supports CHP development. The **legal obligation for energy suppliers to purchase electricity produced in cogeneration** is expressed in the Decree of the Minister of Economy on the Specific Scope of the Obligation to Purchase Electricity Produced in Cogeneration with Heat). This obligation referred to in article 9a of the Energy Law shall be considered fulfilled if the share of electricity purchased from cogeneration sources connected to the common grid is not lower than 16 % in 2010. Energy efficiency as well RES related investments and promotional activities are strongly being supported by the environmental protection funds. In 1989

began operating **The National Fund for Environmental Protection and Water Management (NFOSiGW)**. The mission of the Fund is to provide financial support for undertakings of a national or interregional scale. **Sixteen Regional Funds** for Environmental Protection and Water Management constitute the regional level. Both the national and the regional funds are legal entities and they take independent decisions in the field of choosing investments to be financed. The energy efficiency investment project will be strongly supported from available EU funds.

## Industry

**The Polish Energy Efficient Motor Programme (PEMP)** is five years programme financed by Global Environment Facility. The main objective of the project is to reduce domestic GHG emissions in Poland by overcoming existing barriers for increased market penetration of energy efficient motors and related efficiency improvements in the electric motor system (including variable speed drives), particularly, but not exclusively, in the manufacturing industry, the energy sector (heating), the utility sector (water supply and sewage treatment) and mining.

**The Poland-Japan Energy Conservation Technology Centre (ECTC)** is a joint project between Polish and Japanese Governments with aims at contributing to further promotion of the energy conservation technology in the Polish industrial sector, making the best use of the Japan's knowledge and experience.

## Households, Services

In 1998 the **Act on Support for Thermo-Modernisation Investment in Buildings** came into power, assisted by Thermo-modernisation Fund. The Act covers the rules of providing financial support to the investors (building owners or administrators) in the form of the premium which **can cover up to 25% of credit loan taken out for realisation of the thermal modernisation investments. Up to the end of 2008 the Directive 2002/91/EC would be fully implemented.**

## Selected Energy Efficiency Measures

Sectors	Title of measures	Since	Energy	CO2
Households/ Services	Thermo-modernisation Fund	1998	~131 ktoe/year	
General cross-cutting	Green certificates for electricity production from renewable energy sources	2005		
General cross-cutting	Quota system for the promotion of green electricity	2005		
General cross-cutting	Quota system for the promotion of CHP	2005		
General cross-cutting	The National Fund for Environmental Protection and Water Management	1989		
General cross-cutting	The EcoFund Foundation	1992		76,836 Mg/year
Industry	The Polish Energy Efficient Motor Programme	2004	55.7 GWh/year in 2005; 231,6 GWh/year in 2006	3.7 Mton CO <sub>2</sub> by 2013 (cumulative)
Transport	The Cities for Bicycles project	1995		
Industry	Information/Training for top-level management and energy managers by Energy Conservation Technology Centre	2004		

Source: MURE data base

[www.mure2.com](http://www.mure2.com)

