



Energy Efficiency Profile : Hungary

October 2008

Energy Efficiency Trends

Overview

Between 1998 and 2005 the energy efficiency index (ODEX) improved by 8 %, against 9% for the EU-27. Significant part of the efficiency improvement resulted from energy efficiency improvements in the industrial sector, since the energy efficiency of households and transport sector remained quite stable.

Industry

ODEX decreased by 19 % in the industrial sector between 1998 and 2005. All the ten branches participated to this improvement. The Hungarian manufacturing industry shifted towards less energy demanding structure, while the share of machine and vehicle manufacturing increased from 33.0 to 55,9 % in the value added of the manufacturing. The energy efficiency of the chemical industry (29 % improvements) decreased more than the average of the manufacturing in the surveyed period, principally due to the installation of more up-to-date production equipment.

Households

The ODEX of households is quite stable since 2000. There was a massive fuel switching that took place between

1990 and 1998, when the majority of the households replaced tile stoves, coal and oil fuelled boilers with high efficient gas fuelled boilers. As a result the share of natural gas in household's final consumption increased from 25 % in 1990 to 54,2 % in 1998. Between 1998 and 2005, the fuel switching was only modest: the market share of gas, increasing from 54,2 % to 61,4 % in 2005. Its effect was compensated by the increase of the heated area. Subsidised household gas price played an important role in the massive fuel switching.

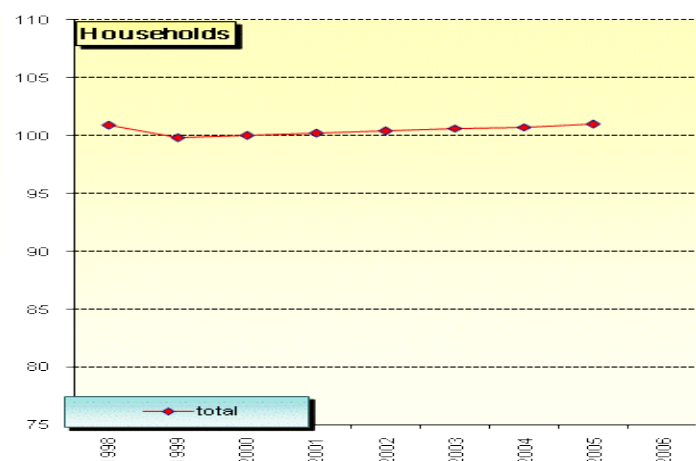
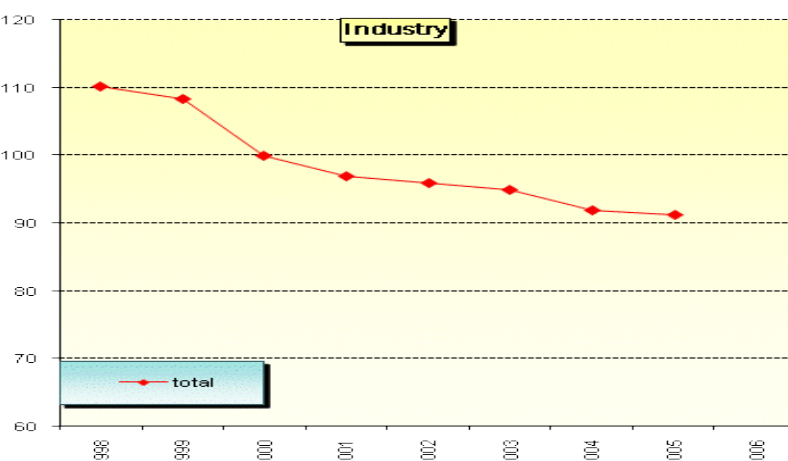
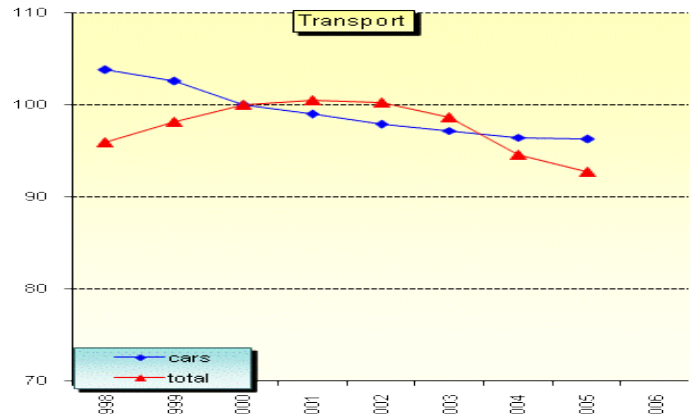
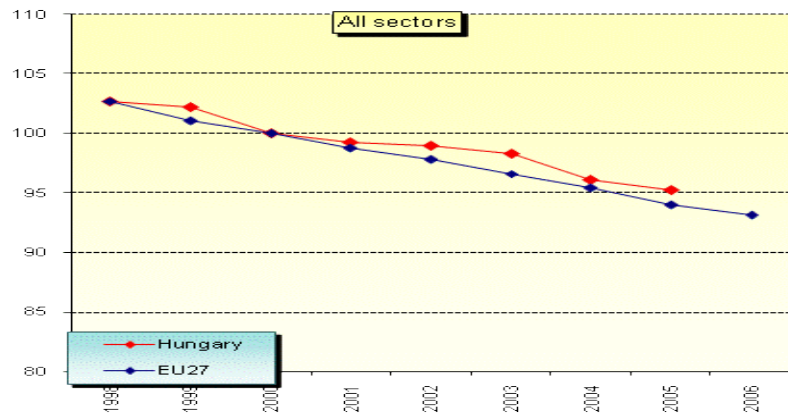
Transport

The ODEX of transport decreased by 3 % between 1998 and 2005.

The index of trucks and light vehicles increased (+7 %). The index of cars decreased (-8 %). ODEX increased until 2002 and decreased afterwards.

There are two phenomena in the background: on one hand the majority of the shipment of goods shifted from rail to road transport, because the multinational companies, which are dominated the Hungarian economy, prefer the road transport to rail transport, since it is more flexible and less volume sensitive; on the other hand, rapid renewal of the fleet of cars and their replacement by modern and energy efficient cars.

Energy efficiency index , base 100=2000



Energy Efficiency Policy Measures

Institutions and programmes

The energy policy is described in a document named “**The Business Model of Energy Sector**”. The **Energy Efficiency Action Plan** attached to the document includes specific provisions for the annual reduction of the energy intensity by 3.5 %/year, for decreasing primary energy demand by 1.79 Mtoe per year and for the annual reduction of CO₂ emissions by 5 Mt.

Hungary’s energy efficiency agency, **Energy Centre Hungary** has operated since 2000 in the present structure. The agency’s major tasks are energy statistics, technical-economic evaluation of energy efficiency projects, consultation for energy efficiency projects (heating, district heating, energy management of buildings, lighting systems, etc.).

Industry

The improvement of industrial energy efficiency is facilitated by several programmes: **installation of industrial CHP’s**, that on average are 20-25 % more efficient ; **industrial fuel switching**, with a shift to natural gas and a wider use of electricity as a result of the increasing demand of precise metering and the controllability of processes; **soft loans for the energy efficiency investments of business sector**, through a Fund that provides up to 80 % of the project cost. The financial fund operates as a revolving fund, according to which the repayments of the previous loans are the resources of the new ones.

Households, Services

Among the operating building renovation programmes, the most important one is the programme named “**Energy efficient renovation of residential buildings built with industrialised technology**”. The flats made of pre-fabricated blocks with weak heat insulation characteristics constitute 18.8 % of the total number of flats in Hungary. The programme sets out the energy efficient renovation and building engineering modernisation of pre fabricated flats. Maximum one third of the investment cost or maximum € 1490 is financed by the state, further one third is provided by the municipality and the remaining one third is paid by the owner. For renovation of traditional households buildings it is working the programme named “**Residential energy saving programme For Successful Hungary**”.

The introduction of “**Accounting based on metering**” was a major step in district heating. According to the Act on District Heating of 1998/18 the district heating companies must cease flat-rate based tariffs and payment that is without metering, and they must establish the conditions of metering by heat centres.

Transport

In order to achieve a high renewal rate was required for the modernisation of the car fleet, the purchase of new cars was facilitated by preferential financial incentives.

For freight transport it is organized a **combined road-rail transportation** for decreasing of shipment of goods in road.

Selected Energy Efficiency Measures

Sector	Measure	since
Industry	Promotion of CHP basic decree 56/2002 presently valid amendment 389/2007	1997
Industry/ tertiary	Energy Efficiency Loan Fund	1991
Industry/ tertiary	Environment and Energy Operative Programme	2007
Households	Support of the Energy Efficient Renovation of Residential Buildings Built with Industrialised Technology	2001
Households	Residential energy saving programme “For Successful Hungary”	2007
Households	District Heating Law	1998
Transport	Combined road-rail transportation	1990

Source: MURE data base

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