



Energy Efficiency Profile: Hungary

May 2011

Energy Efficiency Trends

Overview

Between 1998 and 2009 the global energy efficiency index (ODEX) improved by 15%, against 12% for the EU. Significant part of the efficiency improvement resulted from energy efficiency improvements in the industrial and transport sectors, since the energy efficiency of households slightly deteriorated.

Industry

ODEX decreased by 44% in the industrial sector between 1998 and 2009. 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 to 60 % in the overall value added. The energy efficiency improved by 7%/year in manufacturing, the largest improvement was in machinery and metal products (11%/year) due to new investments and installations of more up-to-date production equipment.

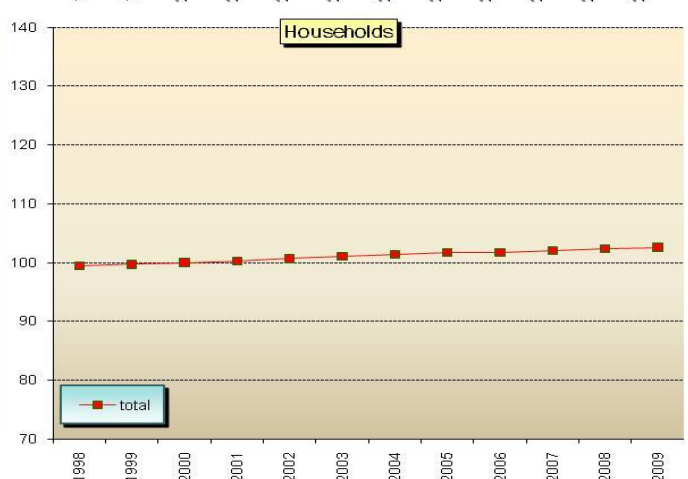
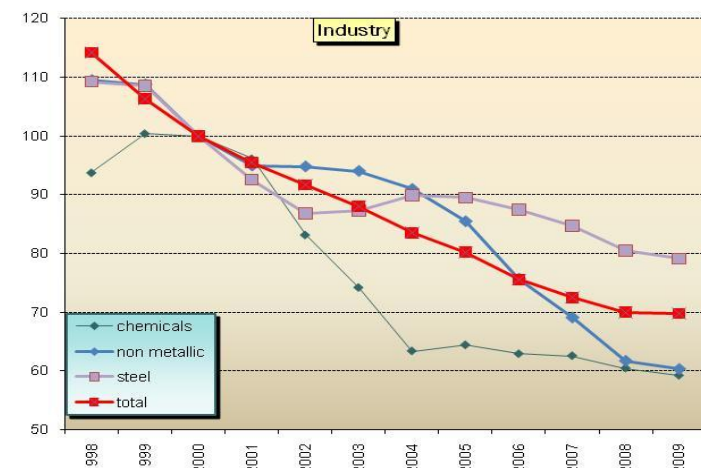
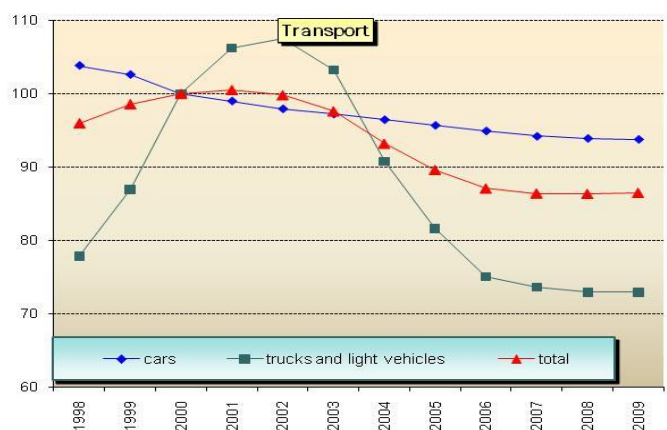
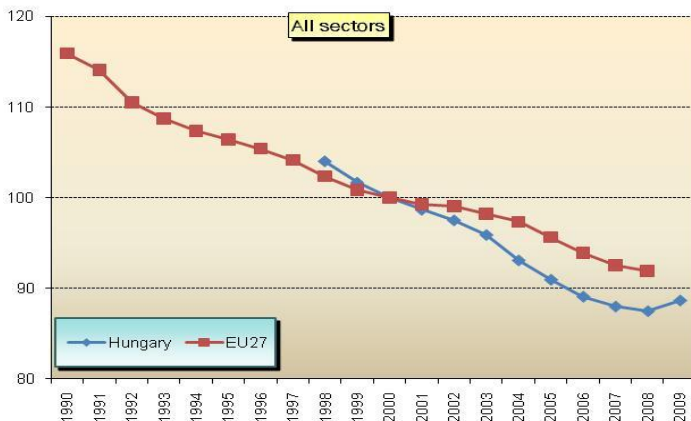
Households

The ODEX of households slightly deteriorated since 1998. 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 % in 1998 (in 2009 gas represents 58% of the households' consumption). Subsidised household gas prices played an important role in the massive fuel switching. The unit consumption per m2 for space heating increased from 11,9 koe/m2 to 12,8 koe/m2 between 1998 and 2009 (+0,7%/year) This deterioration comes from the fact that the household size getting smaller and smaller due to demographic reasons and the rate of renovation of dwelling is low.

Transport

The ODEX of transport decreased by 9.5% between 1998 and 2009. The unit consumption of good transport was in 209 almost at the same level as in 1998 and 2009. It has however decreased since 2002. The unit consumption of passenger transport increased by 60% between 1998 and 2009 due to on the one hand a shift from rail to road transport for goods (multinational companies, which are dominating the Hungarian economy, prefer road transport to rail transport, since it is more flexible and less volume sensitive), on the other hand the stock of cars, the motor performance of cars and the average distance travelled by cars increased relatively rapidly.

Energy efficiency index (base 100=2000)*



* All indicators measured as a three-year moving average.
Source ODYSSEE
For more information : <http://www.odyssee-indicators.org/>

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 an 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. The “**Environment and Energy Operative Programme**” provides funds to the business sector and tertiary sector using direct subsidies.

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 dwellings made of pre-fabricated blocks with weak heat insulation characteristics constitute 19 % of the total number of dwellings in Hungary. The programme sets out the energy efficient renovation and building engineering modernisation of pre fabricated flats. Maximum 30% of the investment cost or maximum € 2050 is financed by the state Fund.

The programme named “**Residential energy saving programme For Successful Hungary**” aims at renovating traditional households buildings

The introduction of “**Accounting based on metering**” was a major step in district heating. According to the Act on District Heating of 2005/18 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 modernize the car fleet, the purchase of new cars was facilitated by preferential financial incentives. For freight transport, **combined road-rail transportation** is on development to decrease the major role of the road transportation.

Selected Energy Efficiency Measures

Sector	Measure	since
Industry	Promotion of CHP basic decree 56/2002 presently valid amendment 206/2009	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”	2001
Households	District Heating Law	2005
Transport	Combined road-rail transportation	1990

Source : MURE www.mure2.com

Energia Központ Kft.



Energy Centre Hungary



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