ODYSSEE-MURE

Energy Efficiency Country Profile: Croatia

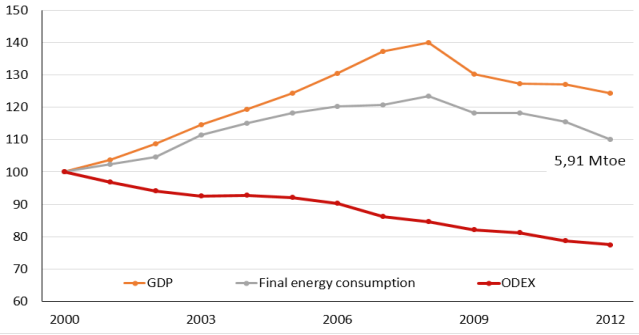
March 2015

Energy Efficiency Trends

Overview

In the period 2000 – 2012 the energy efficiency index for the whole economy (ODEX) decreased by 22.4% (2.1%/year). The industrial sector and transport sector contributed the most to this improvement. GDP and final energy consumption were increasing until 2008 followed by a decline. GDP was lower in 2012 by 15.8 % (2.9%/year), and the final energy consumption by 13.3% (2.8%/year) compared to the year 2008.

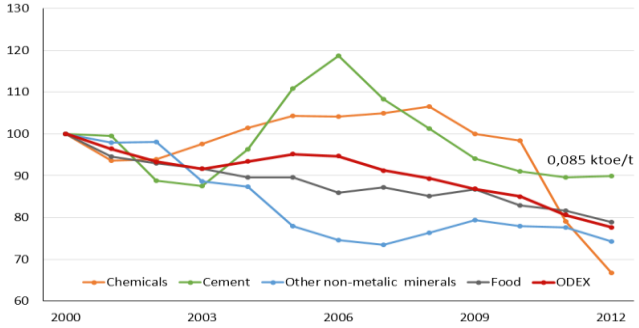
Energy cons., GDP and energy efficiency index100=2000)



Industry

The energy efficiency in the industrial sector improved by 22.4% in 2012 compared to 2000. Final energy consumption in industry grew until 2008 followed by a drop in consumption due to the economic crisis. Final energy consumption in 2012 was lower by 17.3% compared to the year 2000, or 40.2% compared to the year 2008. The largest share in final energy consumption have the cement industry and other non-metallic minerals industry. In the period 2000-2012 the improvement of energy efficiency in the cement industry amounted to 10% (0.9%/year), in other non-metallic minerals industry 25.8% (2.5%/year). A considerable share in energy consumption realized food and chemical industries. The savings in these industries amounted to 21.2% (2%/year) and 33.2% (3.3%/year).

Main energy efficiency indicators in industry (100=2000)

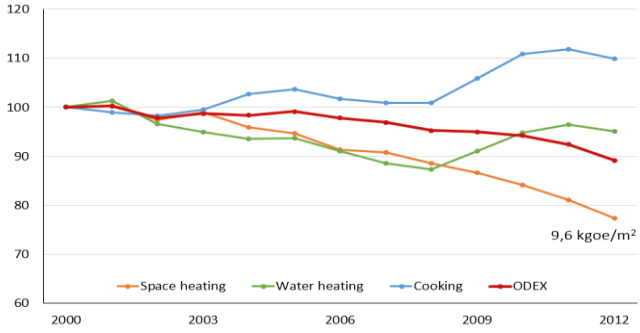


Chemicals, Food, non-metalic : toe per unit of production index
Cement industry: toe per tonne

Households

Energy efficiency in households is improved by 11 % between 2000 and 2012. Progress came mainly from the space heating which represent about 60 % of energy consumption in households. The achieved energy efficiency for heating amounts 23 %. Limited improvement of 0,5 % is achieved in the consumption of electrical appliances which share in final energy consumption of 14%. Water heating improved efficiency for 5 % while efficiency for cooking decreased for 10 percent. The share of energy consumption for cooking and hot water amounts about 36 percent in final households energy consumption.

Main energy efficiency indicators in households (100=2000)

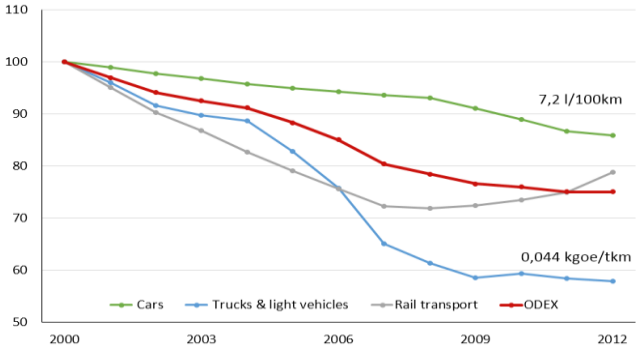


Space heating : koe per m2
Water heating, Cooking: koe per dwelling

Transport

The energy efficiency index of the transport sector improved by 25% in 2012 compared to 2000. Improving efficiency was achieved in passenger cars (14%) as a result of the increase in the number of new efficient vehicles (with respect to specific consumption in l/km) and an increase in the number of diesel vehicles compared to those using gasoline as fuel. The efficiency of trucks and light vehicles increased by 42% between 2012 and 2000. Other transport modes (rail, water and air) have a smaller impact on the overall energy efficiency in transport due to their small share in consumption.

Main energy efficiency indicators in transport (100=2000)



Cars: litres per 100 km
Road traffic of goods (trucks): koe per tonne-km

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Energy Efficiency Policy

Institutional and energy efficiency targets:

By becoming a full member of the EU, the Republic of Croatia has, together with other Member States and pursuant to Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC, assumed the obligation of increasing energy efficiency in the EU in order to achieve the objective of saving 20 per cent of primary energy consumption at EU level by 2020.

With the Energy Strategy, the National Energy Efficiency Programme, and the First National Energy Efficiency Action Plan, the Republic of Croatia set the target of reducing final energy consumption in 2016 by 19.77 PJ, in accordance with the requirements of Directive 2006/32/EC on energy end-use efficiency and energy services (ESD). The sectoral distribution of the target was revised in the 3rd NEEAP in accordance with the amended projections for final energy consumption and the savings potentials per sector.

Government of the Republic of Croatia adopted the Programme of Energy Renovation of Public Sector Buildings. The renovation of buildings owned by the public sector, with a reduction of overall costs of energy commodities, has been contracted under the Programme; the share of renewable energy sources has been increased, the energy management information system has been established, and the conditions for the development of the energy services market have been created.

The measures for the design and introduction of a systematic programme for the renovation of multifamily housing and energy renovation of commercial non-residential building and public sector buildings were introduced with 3rd NEEAP.

In accordance with the Heat Energy Market Act, with the aim of achieving greater utilisation of the national thermal potential for heating and cooling, the Government will adopt the Programme on the utilisation of potential for heating and cooling efficiency for the 2016–2030 period.

Many cities have voluntarily joined the 'Covenant of Mayors', an initiative which encourages European cities to combat climate change by developing Sustainable Energy Action Plans (SEAPs) which are a basis for future implementation of specific projects on energy efficiency and use of renewable energy sources.

The main incentive for energy efficiency projects in industry is coming through programs of the Fund for the environmental protection and energy efficiency, where funding is offered for energy audits and investments in energy efficiency improvement.

To stimulate more efficient cars and efficient driving, the government introduced a mix of financial and policy measures like eco driving training, intermodal freight transport, incentives for energy efficient vehicles and alternative fuel infrastructure etc.

Main energy efficiency policy measures and their impacts

Sector	Main objectives and measures
Cross-sectoral	Energy audits and energy management in large companies; Energy efficiency education and training.
Industry	Introduction of efficient electric motor drives; Energy audits of small and medium-sized enterprises.
Buildings	Programme of energy renovation of family homes; Increasing the number of nearly zero energy buildings; Energy labelling of household appliances and energy standards.
Transport	Financial incentives for energy efficient vehicles; Developing an alternative fuel infrastructure; Promotion of integrated transport.
Public services	Energy Efficient Public Lighting Programme; Programme of energy renovation of public sector buildings.
Tertiary	Programme of energy renovation of commercial non-residential buildings (building refurbishment, EE lightning systems, solar and photovoltaics systems).