

Energy Efficiency Trends

Overview

Over the period 2000-2013, the energy efficiency index for the whole economy (ODEX) decreased by 10%. A large part of this energy efficiency improvement came from industry (despite a short-term deterioration in year 2013), particularly from installations subject to the Emissions Trading Scheme (ETS) (cement and brick industry). Energy efficiency has also improved in the building sector in recent years, thanks to implementation of the EPBD Directive and due to financial support schemes for refurbishing the existing building stock.

Industry

The efficiency in the industrial sector improved by more than 32% in 2012 compared to 2010. In the non-metallic minerals branch, which consumes more than half of final energy consumption in industry and falls under the scope of the EU ETS, the energy efficiency index had decreased in 2012 by 50% compared to 2010. This is mainly reflecting the efficiency improvement in the cement industry, which has undergone major renovation. The sector has adopted new efficient processes, CHP technology, waste heat recovery and also use of waste as biomass for production of electricity and heat.

Households

Between 2000 and 2013 the sector's energy efficiency index has improved by 25%. Most improvement can mainly be attributed to efficient electrical appliances, free CFL lamps, use of solar water heaters (85% of households) and – more recently – the impact of the EPBD (minimum energy efficiency requirements in building shell and heating/cooling equipment) which started to be implemented in 2008.

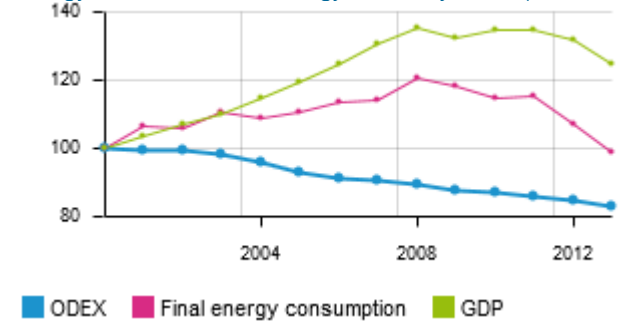
Stricter efficiency requirements have been imposed recently for new buildings in view of the road map for nearly zero energy buildings set by the EPBD recast Directive.

Transport

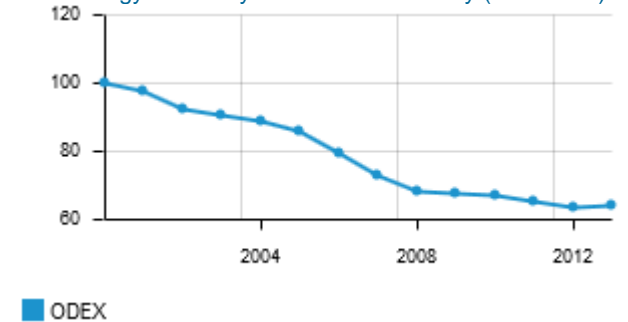
Driven by technical progress that has led to the penetration of more efficient vehicles but counterbalanced by the deterioration of efficiency of trucks, the overall transport efficiency has shown a 10% improvement since 2000.

Public transport (buses) is not well developed and its use has remained low during this period. Aviation has a high share (~27% of final energy consumption). The index for aviation has improved by almost 30%, due to more fuel efficient fleet and most probably higher passenger occupancy of aircraft.

Energy cons., GDP and energy efficiency index (100=2000)

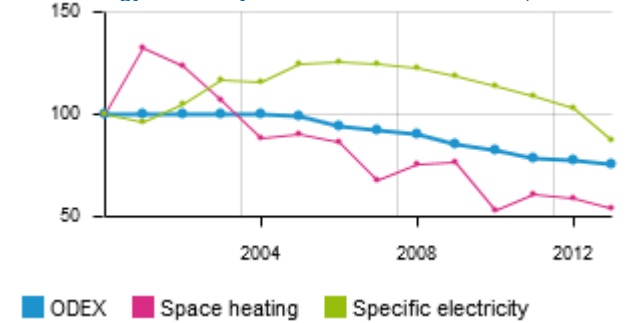


Main energy efficiency indicators in industry (100=2000)



Chemicals : toe per unit of production index
Paper, steel: toe per tonne

Main energy efficiency indicators in households (100=2000)



Space heating : koe per m2
Large electrical appliances: kWh per dwelling

Main energy efficiency indicators in transport (100=2000)



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

Energy Efficiency Policy

Institutional and energy efficiency targets:

The Ministry of Energy, Commerce, Industry and Tourism is responsible for the adoption and implementation of energy efficiency policy including renewable energy and energy efficiency. **The Cyprus Institute of Energy** (NGO) was founded in 2000 to assist the Government in the promotion and implementation of policies and measures in RES and energy efficiency. One of the main tasks of the Institute was the operation of the Governmental financial support schemes for investments in RES/energy efficiency and providing technical support to the Government with the negotiation, transposition and implementation of EU energy policies. It also provided technical assistance and advice to public authorities for RES/energy efficiency policies and assisted in the market facilitation via the development of local sustainable energy markets. In March 2015 the CIE was shut down and all of its operations were transferred to the Ministry of Energy, Commerce, Industry and Tourism.

Industry: The main financial instrument used for the industrial sector is the governmental financial support schemes for the promotion of RES/energy efficiency. The fund is created by imposing a levy of 0.5 cents/kWh on all electricity consumers (yielding revenue of €23 million/year). The government has proposed an increase of the levy to 1 cent/kWh in order to cover the costs of feed-in tariffs for RES investments.

Households, services: Governmental financial support schemes for financing energy saving investments are used extensively in this sector. For the household sector, subsidies apply to thermal insulation, solar thermal heaters, geothermal heat pumps, and PV.

For the tertiary sector, all technologies are eligible provided they satisfy a 10% primary energy savings. Since the first operation of the programme in 2004, more than 50,000 applications for investments have been received and most of them have been approved.

Cyprus has enacted primary legislation for the energy performance of buildings (in compliance with directive 2002/91/EC). Secondary legislation for setting minimum efficiency requirements and thermal building codes are enforced since 1/1/2008.

A new grant scheme for energy renovation of existing buildings is in place. The budget is €15.3 million for the period 2014-2020 for small and medium-sized enterprises (SME) and €16.5 million for households, and covers measures to improve the energy class building certificate to class B or to nearly-zero energy buildings.

Transport: The main type of action used is to provide grants for the purchase of hybrid, electric, or flexible-fuel vehicles and the reduction of other registration fees. A second instrument used is the new national law for the taxation of vehicles, which includes provisions integrating engine capacity and CO₂ emissions criterion providing reduced taxation for low-carbon cars. In 2006 a scrappage scheme for old cars was implemented, and 15,000 old vehicles were removed from the market.

The Ministry of Transport, Communications and Works has submitted an action plan for public transport which includes the radical upgrade of the public bus system

Main energy efficiency policy measures and their impacts

Sector	Main objectives and measures	Implementation starting year
Industry	Emissions trading scheme	2014
	Training and education for energy management and certified energy auditors	2014
Buildings	Law for the energy performance of buildings, minimum efficiency requirements. nZEB	2014
	Subsidised CFL lamps.	2007
Transport	Grants for scrapping of old cars	2007
	National strategy for upgrading the public transport system.	2010