



Energy Efficiency Profile: Italy

May 2011

Energy Efficiency Trends

Overview

The improvement in energy efficiency of final consumers was 11% over the period 1990-2008 against 24% for the EU average. The slow progress, especially in the late years 90s and the early 2000, was due to industry and transport sectors that had negative performances. Only in the last years the increase in energy efficiency has been more rapid: 1%/year over 2004-2008 against 0.3%/year over 1994-2004, because of both sectors showed good results while the household sector kept on improving the energy efficiency every year.

Industry

In the last years the energy efficiency in the industrial sector is speeding up: the index registered an improvement of around 9% over the period 2004-2008 after a stabilization before. This acceleration is due to those sectors that in the last years had an increase in energy efficiency after huge losses in the years 90s and in the first years of 2000: +15% for food +32% for textile, over the period 2004-2008 after the cuts of 31% and 33% in 1990-2004. In the last years also machinery showed a progress in energy efficiency (7% in 2004-2008). The best sectors were chemicals and steel with an improvement in energy efficiency of 43% and 21%, respectively since 1990.

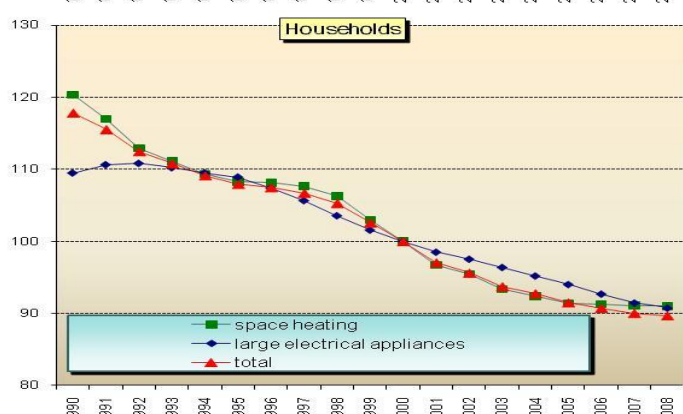
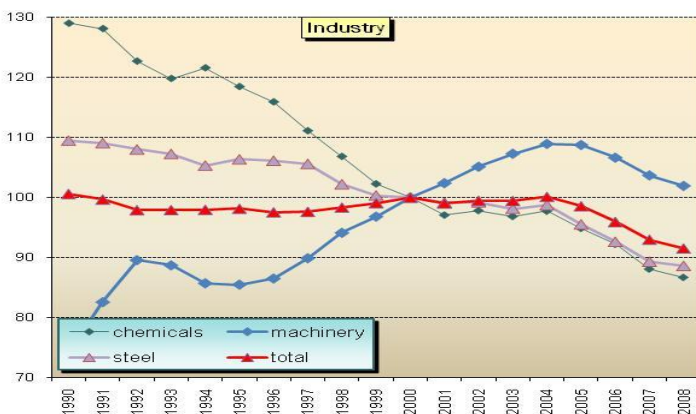
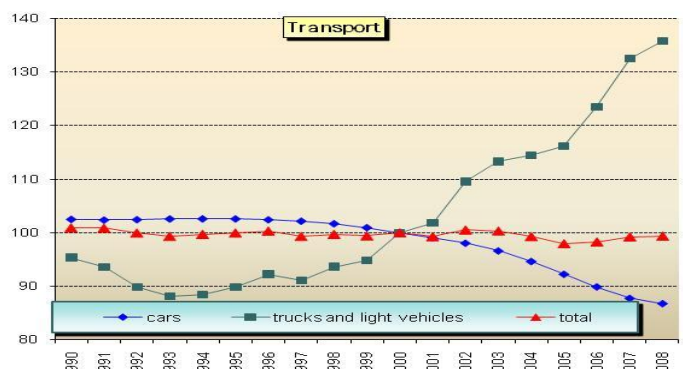
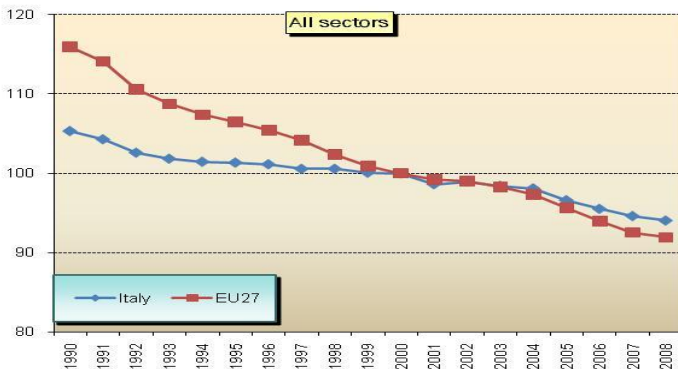
Households

Household is the sector that showed the best result in energy efficiency: an improvement of 28% over the period 1990-2008. In the last years the energy efficiency progress has been slower: 1.8%/year over 1990-2004 against 0.8%/year over 2004-2008. The improvements of the last years depend mainly on large electrical appliances (improvement of 1.1%/year over 2004-2008) while space heating had a progress of 0.3%/year. New measures are set for efficient use of energy in the end-users: incentives as tax deduction to interventions for the thermal insulation of the buildings, renewables for winter and summer air-conditioning, installation of solar panels, substitution with high efficiency appliances, and obligations for new buildings.

Transport

The energy efficiency in the transport sector improved very slowly: 1.5% over the period 1990-2008. This poor result is due to the fact that improvements in cars efficiency (16% over 1990-2008 and 8% since 2004) have been counterbalanced by a high loss in the efficiency of trucks (-40% over 1990-2008). The other transport modes show also greater improvements in efficiency: 26% for air transport and even 46% for rail transport (over 1990-2008); however, rail represents a small part of the transport sector consumption. A fund was set up to promote goods transport by new maritime routes instead of roads.

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

Italy submitted the action plan to achieve an energy savings of 9% in 2016 (Directive 2006/32/EC). The plan shows the current and future actions with an expected energy savings of 35.7 TWh/y in 2010 and 126.3 TWh/y in 2016. Market incentives are settled to increase energy efficiency interventions (white certificates and the electricity generation from renewable (green certificates). These incentives are in line with the 'Renewable Energy Action Plan', approved the 30th of June 2010 (Directive 2009/28/EC), that sets the target of increasing the share of energy from renewable energy sources in gross final consumption from 5% in 2005 to 17% in 2020.

Industry

Inside the "Industry 2015" programme (900 M€ in 2007-2011) to increase the competitiveness of the industry, the industrial innovation project on energy efficiency is settled. This project aims at energy savings in industrial production and final uses and utilization of renewable energy sources. The actions concern investments in renewable, in new products with low environmental impact and able to save energy, in manufacturing processes to cut the energy intensity. The current actions involve high efficiency cogeneration, the mechanical compression of steam, the use of high efficiency electrical engines and inverters and high efficiency fluorescent lamps with automatic control on the basis of the natural light. Under the "energy efficiency" sub-programme (€250 million), the thirty projects which won the call for bids currently involve 234 companies and 160 research organisations, doubling the investments in research and development activity.

The Directive for promotion of CHP has been effectively implemented by the Legislative Decree n.20 of the 7th of February 2007, amending the previous regulatory framework (239/04).

Households, Services

The Laws n. 296/06, n. 244/07 and L.D.115/2008 set the principles and the methods to improve energy efficiency for households. New buildings can be built only if they respect minimum efficiency standards and from 2009 (Law n.244/2007) must have renewable system to produce electricity with a power at least of 1 kW for each dwelling (for industrial buildings larger than 100 m² the limit is 5 kW) and they have to be built to realize water savings. The Budget law 2007, 2008 (covering the years 2009-2010) and 2011 have introduced a set of tax credits equal to 55% of the costs for actions in energy savings in buildings (high efficiency boilers, high efficiency glasses, installation of solar panels, insulation), and a tax credit equal to 36% for the substitution with high efficiency lighting appliances in commercial buildings. In 2007 there were 106.000 interventions with an estimate of primary energy savings of 880 GWh/y and CO₂ avoided of 193,000 t/y.

The Legislative Decrees of 16th of February 2011 and the 18th November 2010 has implemented the Energy Related Products Directive (Directive 2009/125/EC, replacing the previous legislation (L.D.n.201 2007 implementing the Directive 2005/32/EC)

Transport

To promote the use of biofuels and other renewable fuels, the minimum share of biofuels in motor fuels has been raised to 3.5% in 2010, 4% in 2011 and 4.5% in 2012. It has been established a fund (€270 MI in 2007-2010 and €30MI for 2011) to grant economic incentives to road haulage companies which make use of new maritime routes instead of roads.

Selected Energy Efficiency Measures

Sectors	Title of Measure	Since
All	The market incentives: the white certificates system	2004
Households/ Industry	Setting of eco-design requirements for energy-related products	2011
Households	Energy Performance of Buildings	2006
Households	New Fiscal incentives for energy savings in the household sector	2007
Transport	EU Directive on use of biofuels - Initiatives to promote the bio-fuels	2005
Transport	The Motorway of the Sea: the Ecobonus	2007
Industry	Promotion of Heat and Power	2005
Industry	Financing for energy efficiency and diffusion of renewable	2007
Tertiary	Standard for efficient lighting and electric appliances, Fund for energy efficiency	2008

Source : MURE
www.mure2.com