

Energy Efficiency Profile : Portugal

October 2008

Energy Efficiency Trends

Overview

Over the period 1990 - 2006, energy efficiency improved by 5% in Portugal, as shown by the decrease of the energy efficiency index (ODEX). Main effort are registered in household and transport sectors.

Industry

Energy efficiency in the industrial sector (measured at a level of 9 branches, in terms of energy used per production index) are quite inexistent over the period 1990-2006, contrary to the results observed at EU level (40% of improvement). The low increase in efficiency for the whole sector, is mainly due to chemicals, non metallic and cement industrial branches. Paper and pulp industry show a completely different trend but only until 2003.

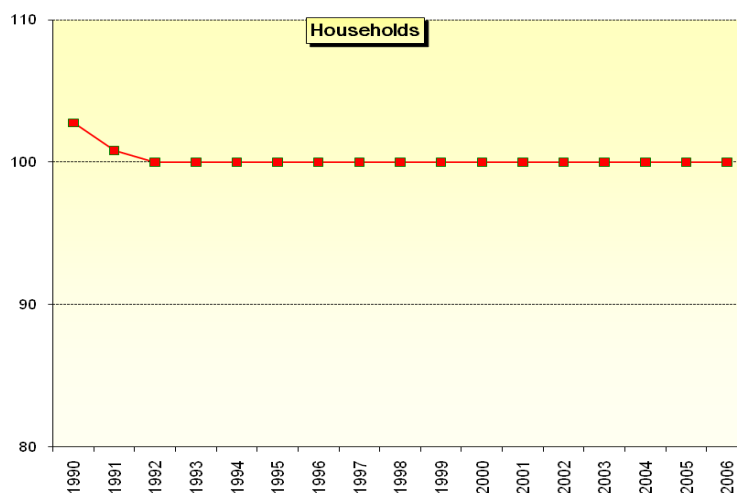
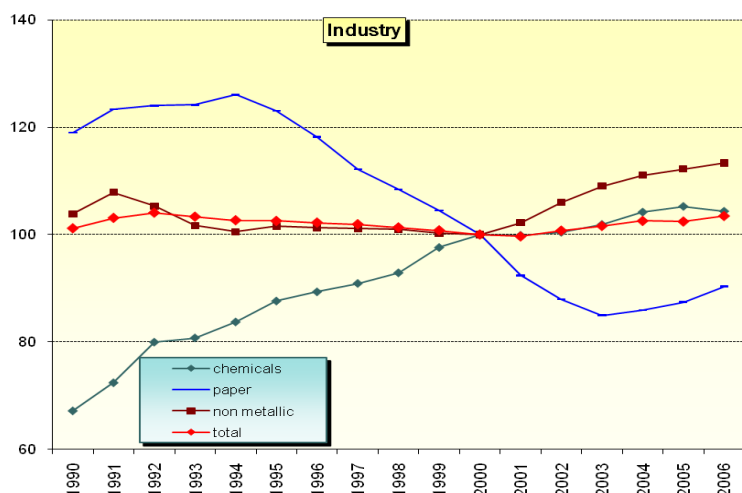
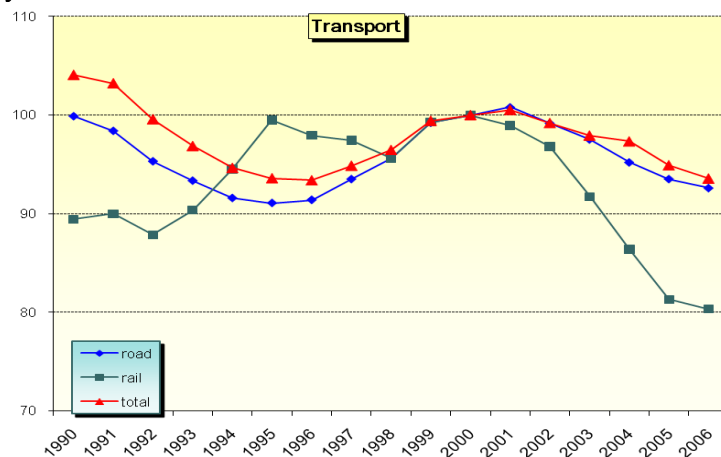
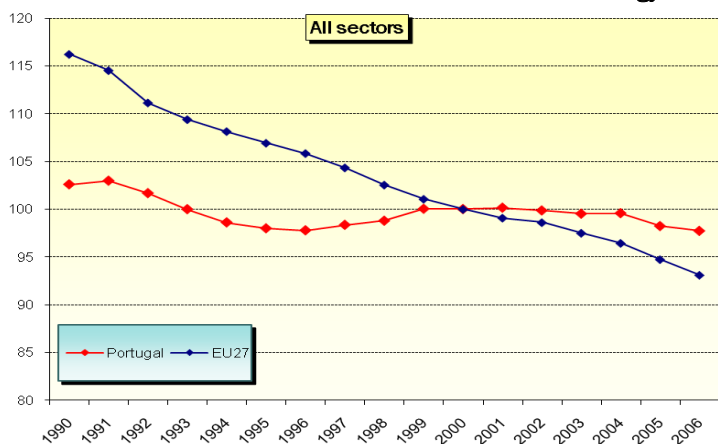
Households

Energy efficiency improvement (3%) is due to the introduction of natural gas, the use of LPG for water and space heating, and also to an improvement in national building construction, namely thermal insulation, use of double gazing and natural lightening.

Transport

Between 1990 and 2006 the transport sector shows an improvement in energy efficiency of 10%. This trend is related to the efficiency improvement in road transport, mainly due to renovation of national car stock, trough the application of legislative instruments, promoting the traffic circulation with new and more efficient car engines.

Energy efficiency index



Energy Efficiency Policy Measures

Institutions and programmes

A new update version of the National Climate Change Program of 31st of July 2004, was approved by Ministries Council on the 1st of June 2006, and is currently under public discussion, before being published in Decree Law. The aim of the current version is to reinforce the monitoring of the GHG emissions, in several economic sectors and to make sure the compliance of Portugal commitments under Kyoto Protocol. In this version, further ambitious measures and policies are put forward, especially directed to sectors not covered by the European Wide Emissions Trading.

Industry

Since the 1990s, the dominating instrument to improve energy efficiency in industry is the Regulation on Management of Energy Consumption (RGCE). This instrument establishes goals for energy intensive companies to progressively reduce their specific energy consumption. RGCE requires companies to audit their energy consumption, every 5 years and meet their targets on energy savings. The main sectors covered are pulp and paper, textiles, chemicals, wood and cork and food and beverage. Since August 2003 until the end of 2004, near 100 audits reports, corresponding to energy savings of 18ktoe per year (6% of the energy consumption of industrial plants), were submitted to DGGE- General Directorate for Geology and Energy [DGGE (2005), *National Reporting Guidelines for CDS-14/15 Thematic Areas- ENERGY*].

Households and Services

On April 2006, after an expectation of almost two years, 3 new Decree Laws were published, setting out the framework for the national Energy Efficiency Certification System. The revision of

the two building codes, on the characteristics of thermal performance and on HVAC systems, was finally published, under

Decree Laws 80/2006 and 79/2006, respectively. The Energy Certification Process of buildings was put in force by Decree n° 78/2006 April 4th. The new legislation establishes higher thermal requirements than the existing standards and adds strict indoor air quality requirements as well as maintenance and periodic inspections during the lifetime of HVAC systems.

Transport

Under the Ministries Council Resolution n°161/2005, of 12th October, the current tax on the purchase of cars was amended. From the 1st of July 2006 on, the tax calculation formula includes an environment component part, besides the cylinder capacity (CC) component. The integration of the environment part in the tax calculation formula will be made progressively, reducing the cylinder capacity component, favouring the less pollutant vehicles. This environmental component part will be differentiated according to the type of fuel used, taking in to consideration the environmental damages for the public health caused by the respective fuels consumption.

Energy prices and taxes

Since June 2002 the Government increased the general VAT from 17% to 19% and in July 2005 from 19% to 21%. This VAT rate applies to LPG, gasoline and automotive diesel. Electricity and natural gas are subjected to 5% VAT rate and heating oil and diesel for agriculture purposes are subjected to the reduced VAT of 12%.

Selected Energy Efficiency Measures

Sectors	Title of measures	Since
Households/tertiary	Revised building code on thermal performance characteristics	2006
Households/tertiary	Revised building code on HVAC Systems	2006
Households/ tertiary	Energy labelling of buildings	2006
Industry	Regulation on management of energy consumption (RGCE)	1982
All	Climate change national strategy (PNAC)	2004
All	Feed-in tariff for renewables	1988
All	Prime Programme - MAPE	2000
Transport	Excise tax relief for biofuels	2006
Transport	Fiscal incentives for old cars scrapping	2000

Source: MURE data base www.mure2.com

