



Energy Efficiency Profile: France

October 2012

Energy Efficiency Trends

Overview

The energy efficiency of final consumers improved by 21% (or 1%/year) in France between 1990 and 2010. This is close to the EU average. All sectors participated to this improvement.

Industry

Energy efficiency improved by about 21% since 1990. Above-average improvements in energy efficiency could be observed in the steel, paper, non ferrous and chemical industries. On the other hand, some branches have poor performance such as cement, food, and especially textile industries.

Households

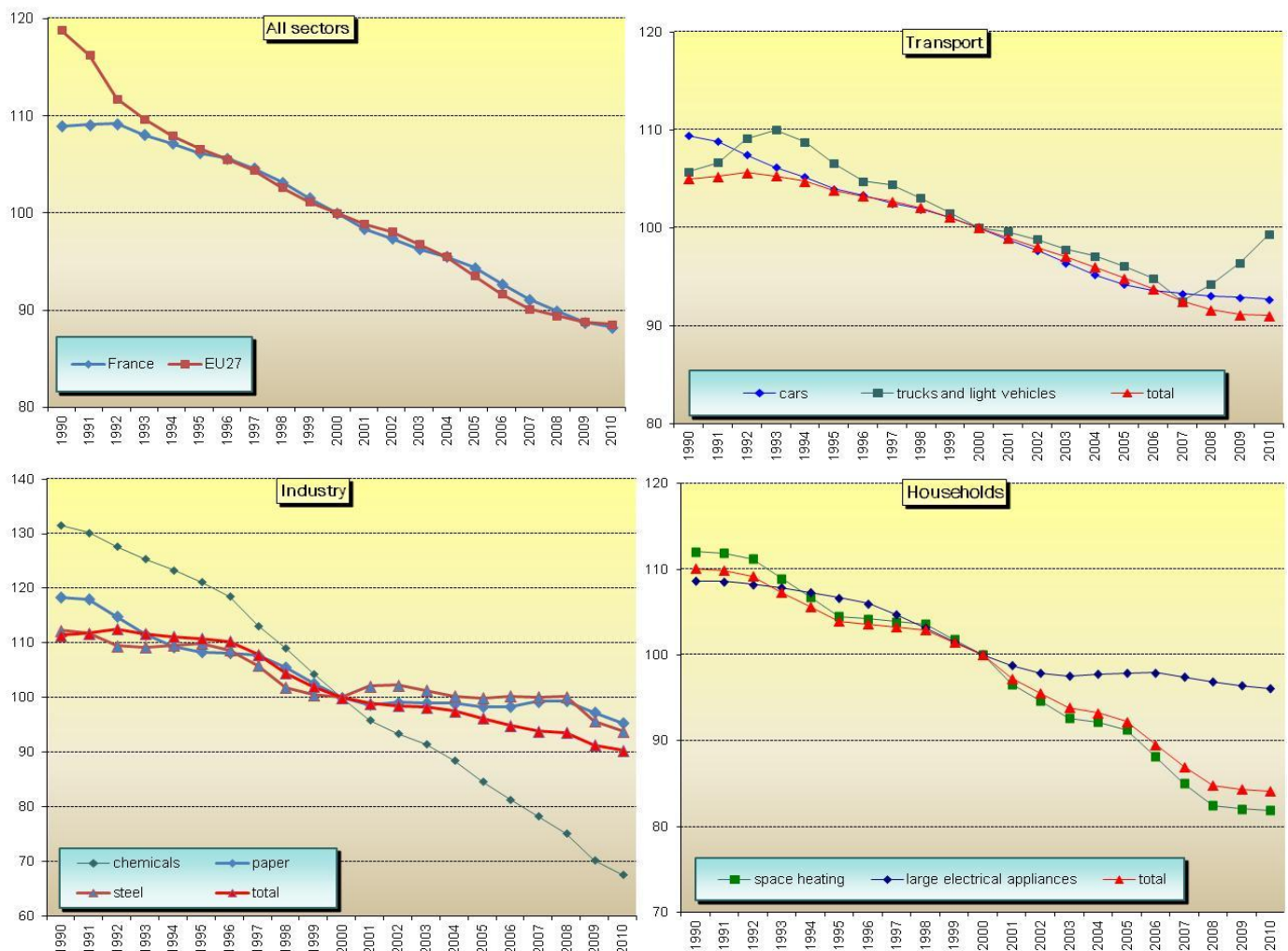
Energy efficiency improved by 26% (1.3%/year) between 1990 and 2010 in the household sector, due to progress realized for space heating (25% improvements) and water heating (18%). Less energy is required every year per dwelling for space heating, as a result of an increasing share of more efficient new dwellings in the total stock of dwellings, and the substitution to electricity. Most of the progress has been realized until 1997 and after 2001.

Transport

The transport sector has experienced regular energy efficiency improvements (14% since 1990). The progress was the most significant for cars (17%) and air transport (19%): the specific consumption of cars in litres/100km is regularly decreasing since 1990 (-0.85%/year), with improvements for new cars, even if part of this gain was offset by a shift to larger cars; for trucks and light vehicles, the progress was lower : around 6%.

Since 2006, water transport didn't have any energy efficiency gain and since 2007 due to the crisis, trucks and light vehicles have lost 7% of energy efficiency.

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

ADEME is the national, agency in charge of implementing RUE, RES and environmental policies. It operates within a 4 years agreement with the government (2009-2012). The official target is to bring the annual reduction in the final energy intensity to 2%/year from 2015 and to 2.5%/year by 2030. There is since 2006 an energy saving obligation scheme for utilities with a target of 345 TWh cumac (lifetime cumulated and discounted) for the period 2010-2013: end of 2011, 15 TWh of annual energy savings (232 TWh cumac), had been certified, mainly in the household and service sectors. Since 2011, the scope was extended to oil companies.

Industry

The most challenging operation in industry was the implementation of the CO₂ National allocation plan amounting to 132.8 Mt CO₂ between 2008 and 2012. In 2011, ADEME has implemented 1215 energy audits. Since 2008, 4615 energy audits have been carried out. Since 2010, 2600 M€ of green loans subsidised by OSEO (a public agency) was proposed to industrial companies to allow them to be more environmentally friendly (in their process and products) in order to be more competitive

Households, Services

The main objectives resulting from the "Grenelle of Environment" are a 38% reduction in the primary energy consumption of existing dwellings in 2020 through the refurbishment of 400 000 dwellings per year from 2013 and of 800 000 social houses. For new building, the objective is a widespread diffusion of low consumption buildings (BBC) (by 2010 for state building, 2012 for services and 2013 for household), and positive energy buildings to 2020. According to the new thermal regulation, RT 2012, all new buildings with a building built from January 2013 must have primary energy consumption lower than 50 kWh/m². For the existing stock, the tax credit scheme, which was very successful, has been extended until 2015. Between 2005 and 2010, it benefited 8 millions operations (insulation, fuel shift...etc). This tax credit can be aggregated with the zero interest eco loan. In 2010, around 150 000 loans have been granted versus an objective of 200 000. The objectives are to reach 320 000 loans in 2012 and 400 000 per year from 2013. In 2011, 1099 buildings have been audited for a total of 6184 buildings since 2008. The implementation of local energy information centres has been reinforced: in 2011, there were 250 centres with 405 advisers, which resulted in savings estimated at 134kt CO₂/year in 2011. Since 2006-2007, the energy performance certificate of dwellings or buildings is mandatory for the sale, hiring and construction.

Transport

The "Grenelle of Environment" has set an objective of reduction of CO₂ emissions in transport by 20% in 2020 and of a decrease of the average emissions of the car stock from 176gCO₂/km to 130 gCO₂/km. Two million of electric and hybrid cars are planned in 2020. The main measures for cars are the compulsory labelling scheme and an ecological bonus since January 2008. Between 2008 and 2011, the CO₂ average emissions of new cars decreased by 15% from 150 to 128gCO₂/km. For the transport of goods, the main measure is the voluntary agreement "CO₂ objective" which is very successful. In 2012, 600 companies have signed the charter (representing 62 000 trucks). The potential of savings is estimated at 423 kteq CO₂/year.

Energy prices and taxes

There is no environment or CO₂ tax in France.

Budgets

The budget of ADEME allocated for energy efficiency and renewable in 2011 was €387 million. In 2011, the most important budget for the government is the tax credit, €1.9 billion.

Selected Energy Efficiency Measures

| Sector | Title of measure | Since | Evaluation |
|----------------------|--|-------|--|
| All | White certificate scheme | 2006 | Since 2006, 15TWh saved or 8 Mteq CO ₂ |
| All | Local energy information centres | 1990 | 250 centres; 760 000 contacts between 2008 and 2011; 134 kt CO ₂ /year |
| Households | 2012 Thermal Regulation (RT 2012) | 2013 | Specific primary energy consumption below 50 kWh/m ² |
| Households | Tax credit for energy efficiency works and RES | 1978 | 1.9 billion Euro in 2011, can be aggregated with the zero interest rate eco-loan |
| Households | Energy performance audits | 2006 | |
| Households, tertiary | Audits subsidies in buildings | 1980 | 1.94 t CO ₂ saved per audited building 6184 building between 2008 and 2011 |
| Transport | Car labelling | 2006 | |
| Transport | Ecological Bonus | 2008 | Since 2006, the CO ₂ average emissions of the new cars decreased from 149 to 127.7gCO ₂ /km. |
| Transport | Voluntary agreement "CO ₂ objective " | 2008 | 600 companies have signed the charter |
| Industry | Quota Allocation plan | 2002 | |
| Industry | Energy audits and subsidies | 1999 | 16.5 t CO ₂ saved per company |

Source : MURE
www.mure2.com