



# Energy Efficiency Profile: France

May 2011

## Energy Efficiency Trends

### Overview

The energy efficiency of final consumers improved by 18% (or 1.1%/year) in France between 1990 and 2008. This is close to the EU average. All sectors participated to this improvement.

### Industry

Energy efficiency improved by about 17% 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 food, machinery and textile industries.

The intensity of manufacturing has decreased by 1.2%/year since 1990; these progress were mainly registered during the period 1993-2001 (reduction of 1.9%/year of the manufacturing intensity).

### Households

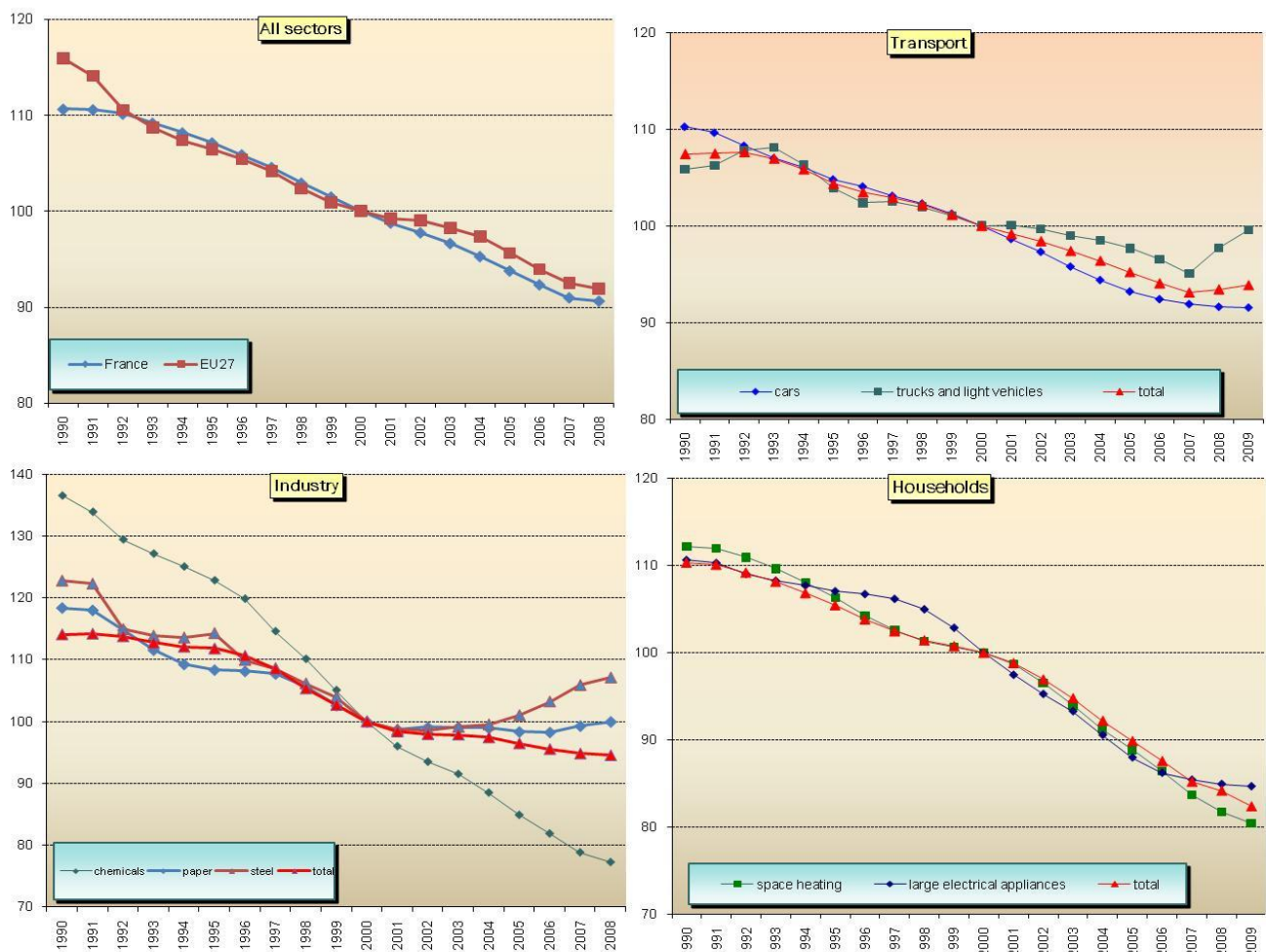
Energy efficiency improved by 25% (1.5%/year) between 1990 and 2009 in the household sector, due to progress realized for space heating (29% improvements) and for large electrical appliance (24%). Less energy is required every year per dwelling for space heating, as a result of an increasing share of 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 (13% since 1990). The progress was the most significant for cars (17%): the specific consumption of cars in litres/100km is regularly decreasing since 1990 (-1%/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 1993, almost all traffic indicators tend to show a slowdown of the energy demand growth of transport compared to the economic activity, except for rail.

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).

In terms of CO<sub>2</sub>, the adoption of the National Programme against Climate Changes (PNLCC) in January 2000 has been reinforced in 2004, 2006 and 2009. These programs are part of the 2005 energy law.

In 2007, the President of the Republic launched an original approach, "The **Grenelle Environment Round Table**": It brought together for the first time the State, the regional authorities and civil society representatives in order to define a roadmap for ecology and sustainable development. Mid-term and long term objectives have been proposed in this round table (2020, 2050).

### Industry

The most challenging operation in industry was the implementation of the CO<sub>2</sub> National allocation plan amounting to 132.8 Mt CO<sub>2</sub> between 2008 and 2012. In 2010, ADEME has implemented 780 audits. Since 2008, 3400 energy audits have been carried out.

### Households, Services

The thermal building code was reinforced as of July 2005 for both households and the service sectors. This should bring on average energy savings of 15%, compared to 2000 standards. For the existing stock, the tax credit scheme, which was very successful, has been reinforced in 2005 and can reach 50%. In 2010, 1600 buildings have been audited for a total of 5185 buildings since 2008. This measure is completed by demonstration projects and by OPATB program (energy efficiency of residential and tertiary building). The total subsidies dedicated to these measures reached €37 millions in 2010.

The implementation of local energy information centres has been reinforced: in 2009, there were 230 centres with 400 advisers, which resulted in savings estimated at 95ktoe/year and 160kt CO<sub>2</sub>/year in 2009.

In 2009, 84.5 TWh Cumac of energy savings were certified, mainly in the household and service sectors (corresponding approximately to 7.77 TWh per year) in the **white certificate scheme**.

Since 2006-2007, the energy performance audit of the household or a building was a legal obligation for the sale, for the hiring and for construction.

A zero interest green loan was created in December 2008. In 2010, around 150 000 loans have been granted versus an objective of 200 000. The objectives for the next years are 240 000 more in 2011, 320 000 more in 2012 and 400 000 more each year as of 2013.

### Transport

There is a large subsidies scheme for clean fuels vehicles (electric, hybrid, LPG or CNG fuelled). For passenger transport, there are measures to organise mobility plan for employees in some companies (about 11700 agreements listed in 2009) and for schools (about 1500 mobility plans for schools in 2008). For the transport of goods, the main area is the support to rail/road-combined transport. In addition, several audits of company fleet have been performed. For cars, the main measures are the compulsory energy and CO<sub>2</sub>, labelling scheme and an ecological bonus since the first January 2008. Between 2008 and 2010, the average of CO<sub>2</sub> emissions of the new cars decreased by 12% from 149 to 131gCO<sub>2</sub>/km.

### Energy prices and taxes

There is no environment or CO<sub>2</sub> tax in France. However in all consuming sectors, the energy prices at the consumer level have raised again.

### Budgets

The budget of ADEME allocated for energy efficiency and renewable in 2009 was €446.5 million. The most important budget for the government is for the tax credit €2.6 billion.

## Selected Energy Efficiency Measures

All	White certificate scheme	2006	Excluding energy intensive industries, 84.5 TWh cumac were certified
All	Local energy information centres	1990	230 centres; 600 000 contacts between 2008 and 2010; 260 ktoe/year and 440 kt CO <sub>2</sub> /year
Households	Building insulation standards of 2005 : RT 2005	2005	15% of energy savings compared to 2000
Households	Tax credit for energy efficiency works and RES	1978	2.6 billion Euro in 2010, up to 50% aid
Households	Energy performance audits	2006	
Households, tertiary	Audits subsidies in buildings	1980	1.94 t CO <sub>2</sub> saved per audited building
Transport	Car labelling	2006	
Transport	Ecological Bonus	2008	In six month, the average of CO <sub>2</sub> emissions of the new cars decreased by 149 to 140gCO <sub>2</sub> /km.
Industry	Quota Allocation plan	2002	
Industry	Energy audits and subsidies	1999	16.5 t CO <sub>2</sub> saved per company
Tertiary	"High environmental quality" in buildings (HQE)	2001	

Source : MURE  
www.mure2.com