



# Energy Efficiency Profile : Austria

May 2011

## Energy Efficiency Trends

### Overview

For Austria, the energy efficiency index for the whole economy (ODEX) improved by 19% between 1996 and 2008, compared to 15 % for the EU. Most of the efficiency improvements were achieved in the households sector, but also transport and industry have contributed to this significant improvement in energy efficiency. The indices for transport and especially households show an increase above the EU average.

### Industry

Energy efficiency in industry (measured at the level of 15 branches) improved by 18 % over the period 1996 to 2008. Among the branches involved, the main improvements were obtained in the transport vehicles, machinery and chemical industry. Some branches have poor performances like wood, non ferrous and non metallic minerals which record negative results.

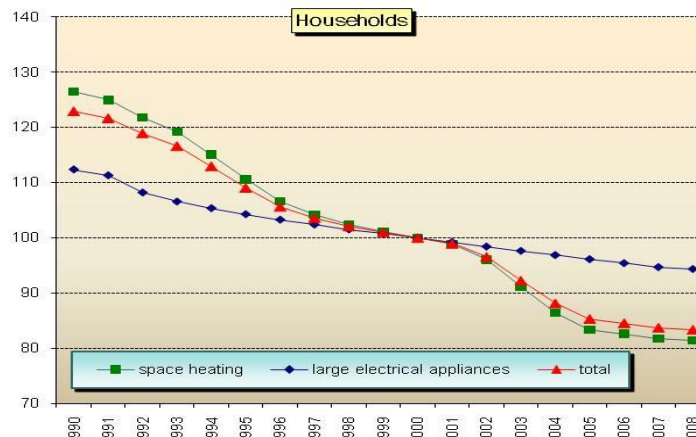
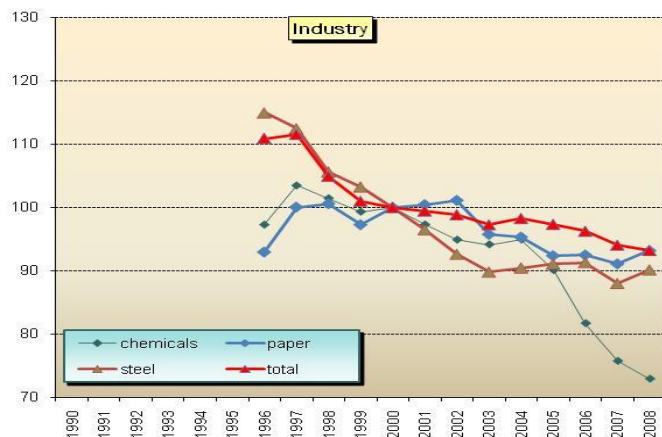
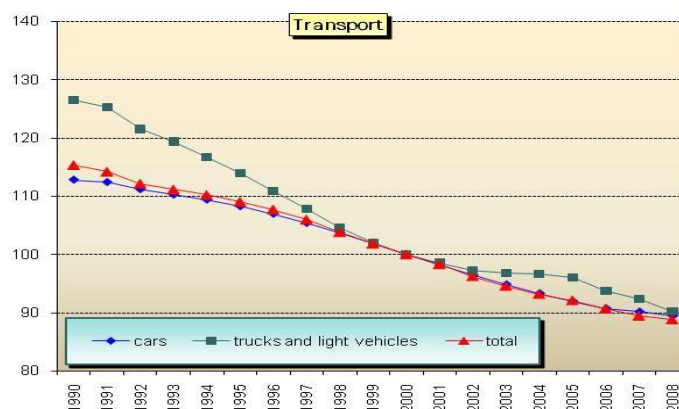
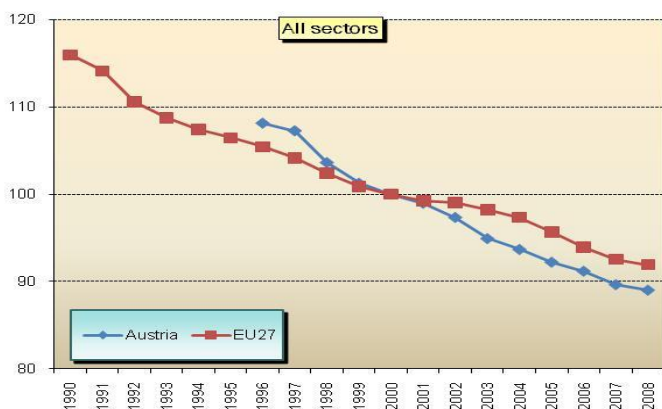
### Households

During the period 1996-2008 overall household energy efficiency (calculated for eight different end-uses) improved by 22 %. During the whole period 1990-2008, the improvement of energy efficiency in the household sector was nearly twice as high for Austria as for the EU (40 %, compared to 21 %). The index is dominated by space heating which is by far the most important end-use being responsible for more than 80 % of the index. For space heating the improvement was 45 %. This is mainly explained by the increasing share of heat insulated dwellings which outweighs the effect of more single family homes, larger floor areas, higher heating temperatures and longer heating periods. Energy efficiency of large appliances increased steadily (18 % reduction during the period 1990-2008). While efficiency of cooking increased over the whole period by 38 %, efficiency of water heating rose by a mere 10 %.

### Transport

Transport energy efficiency has improved steadily over the period 1990-2008 by 27 %, compared to 17 % for the EU. This development is mainly caused by efficiency improvements in road transport (i.e. 36 % reduction for trucks and 23 % reduction for cars) which dominates the transport sector. The bulk of the improvements is attributable to the penetration of new, more efficient cars. Energy efficiency of rail transport improved by 51 % while air transport shows an increase of efficiency by 21 %.

Energy efficiency index (base 100=2000)\*



\* All indicators measured as a three-year moving average; the overall ODEX was calculated from 1996 due to non available data for the production index for industry. Source ODYSSEE  
For more information : <http://www.odyssee-indicators.org/>

## Energy Efficiency Policy measures

### Institutions and programmes

In 2002 the **Green Electricity Act** (Ökostromgesetz) has been issued as the implementation of the EU-Renewables Directive, implementing a feed-in system for RES. Unlike the German law, the Austrian Green Electricity Act is based on short-term planning. Until 2009, the act supported an increase in green electricity output by about 6.1 TWh each year. This corresponds to approximately 11.4% of overall public electricity supply in Austria.

In 2003, the Austrian government has decided to start the implementation of the **Climate Action Plan** and a Joint Implementation programme. "**klima:aktiv**", the national programme for climate protection runs since January 2005. It is a long-term programme and its aim is to widely introduce energy efficient and climate-friendly technologies and services in the fields of construction and living, mobility, company policies, electricity saving and renewable energy sources. The programme contains more than twenty thematic sub-programmes.

### Industry

Improvements in industrial energy efficiency are triggered by a targeted **energy efficiency programme**, consisting of the elements Benchmarking, Best Practice and Energy audits. Besides the usual measures on the **demand side** (buildings envelope, process heat and steam recovery, motors/drives, lighting ...) there is a focus on the **supply side** (e.g. industrial CHP, substitution of fossil fuels, fuel switch etc.). Energy intensive industries are involved in the European **emissions trading scheme**, which was launched in 2005 and is currently in its second phase. This scheme is seen as a major instrument to trigger further energy efficiency improvements (and CO<sub>2</sub> reductions) within the energy intensive industries.

### Households, Services

There are many programmes in Austria which aim to improve energy efficiency by granting **subsidies** for suitable measures. The **housing support scheme** is in quantitative terms the most important subsidy among the energy relevant subsidies in Austria. As it is the case with housing subsidies also the **building regulations** lie within the Austrian provinces authority. Energy related regulations for **existing buildings** within the building codes are existing with respect to the renewing of construction, to building extensions and to the modernisation or replacement of the heating system. There exist several **renovation programmes** and initiatives on the level of the Austrian provinces.

### Transport

Taxes on fuels and on the purchase of vehicles as well as road pricing are the main factors to influence the **financial framework** for motorised transport. The road pricing for trucks was introduced in 2004. Since 2007 taxes on diesel and gasoline and the purchase tax on cars have been determined according to ecological criteria. The purchase tax on cars depends on fuel consumption. In 2008 this tax system has been improved by a bonus/malus system where cars with relative low CO<sub>2</sub>-emissions get tax breaks and cars with higher CO<sub>2</sub>-emissions have to pay a higher NoVA. The **Climate Action Plan** suggests a bundle of 14 measures at national level as well as 11 measures on the level of Länder and municipalities. "klima:aktiv", the national programme for climate protection, contains seven sub-programmes in the field of transport. They mainly aim at introducing **mobility management** in e.g. companies, schools or administration departments and a nation-wide initiative for a fuel-efficient driving style.

### Energy prices and taxes

Additionally to the traditional mineral oil tax, specific taxes on electricity and natural gas have been introduced in the nineties.

## Selected Energy Efficiency Measures

Sectors	Title of Measure	Since
All	National programme for climate protection ("klima:aktiv")	2005
Households	Housing support scheme – refurbishment of buildings	1989
Households	Grants for Renovation concerning Energy Conservation	1989
Households	Grants for renewable energy (thermal solar, heat pumps, biomass heating,...)	1992
Households	Domestic appliances labeling and efficiency standards	1993
Transport	Eco Driving Initiative	2004
Transport	Tax Depending on Motor Vehicle's Fuel Consumption (NoVA) (ecological criteria from 2007), and Vehicle Tax (ecological criteria from 2008)	1992 (2011)
Transport	Subsidies for electric vehicles	2009
Industry	Emission Trading Scheme	2005
Tertiary	Energy saving programme for federal buildings	2001

Source MURE

For more information : <http://www.isisrome.com/mure/>

