



# **Energy Efficiency Profile: Austria**

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# **Energy Efficiency Trends**

### Overview

The Austrian energy efficiency index for the whole economy (ODEX) improved by 15% between 1996 and 2010, compared to a figure of 16% for the EU. Most of the efficiency improvements were achieved in the households and transport sectors. In the industry sector, a significant decrease in energy efficiency can be observed from 2007. The reason for this negative development is believed to be the economic crisis. Austria's efficiency in industry lags considerably behind that of the EU.

### Industry

Energy efficiency in the industry sector improved by 7% over the period 1996 - 2010. This value is far behind the respective figure for the EU, where efficiency improved by 21%. The peak regarding energy efficiency in Austria in the period under review is recorded for the year 2007, which shows an improvement of efficiency by 15% compared to 1996. In the three-year period from 2007 to 2010, efficiency in industry decreased by 9%. Among the branches involved, the largest improvements were obtained in the transport vehicles, steel and chemical industry. Some branches like wood, non ferrous, paper and pulp, food, mining and construction, posted a negative development.

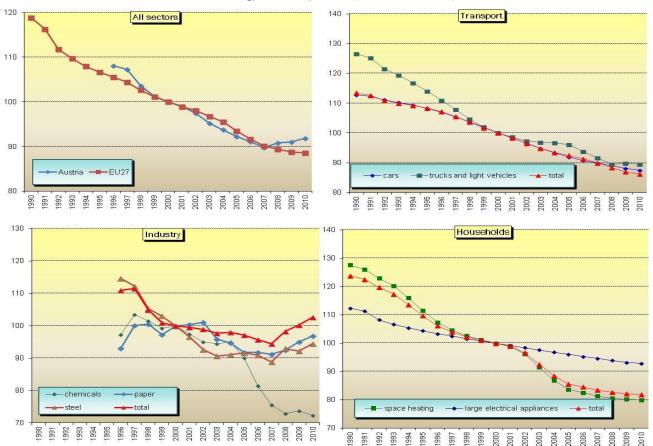
### Households

In the household sector, energy efficiency improved by 34% in Austria over the period 1990 to 2010, compared to 25% for the EU. Space heating efficiency improved by 37% over the period under review. Space heating is by far the most important end use, being responsible for more than 80% of the energy efficiency progress. This is mainly due to the increasing share of well insulated dwellings, which outweighs the effect of a larger number of single family homes, higher indoor temperatures and longer heating periods. Energy efficiency of large appliances increased steadily, by 17% over the period 1990-2010. While energy efficiency of cooking increased by 42% over the whole period, efficiency of water heating rose by a mere 11%.

### **Transport**

Transport energy efficiency improved steadily by 24% over the period 1990-2010, compared to 20% for the EU. This development is mainly caused by efficiency improvements in road transport (in particular, progress by 29% for trucks and 22% for cars). Energy efficiency of rail transport improved by 38%, while air transport shows an increase of efficiency by 28%. From the year 2007, the curve for efficiency of trucks flattened, while a slight decrease in efficiency of rail transport can be noted.

### Energy efficiency index (base 100=2000)\*



<sup>\*</sup> 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

Austria's National Energy Efficiency Action Plan (NEEAP) set a target of 80.4 TJ energy savings in 2016. The intermediate target of 17.9 TJ for 2011 was exceeded, since final energy savings achieved in 2010 amounted to 49 TJ. In March 2010, the Austrian Energy Strategy included new energy efficiency measures and new targets. A 10% reduction below the 2005 level of final energy demand by 2020 was set for buildings, and a 5% reduction for the transport sector.

According to the 2010 Electricity Act, smart metering will be introduced. In 2012 the Minister of Economy has issued a decree, which determines that electricity network operators have to equip at least 95 percent of all metering points by the end of 2019.

In 2003, the Austrian government launched the Climate Action Plan and a Joint Implementation programme: "klima:aktiv", the national programme for climate protection has run since 2005. The aim of this long-term programme is to widely introduce energy efficient and climate-friendly technologies and services in the fields of construction and living, mobility, company policies 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 benchmarking, Best Practice and energy audits elements. Besides the usual measures on the demand side (buildings envelope, process heat and steam recovery, motors/drives, lighting, etc.), specific emphasis is put 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 achieve 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 the most important subsidy, in quantitative terms, among the energy relevant subsidies in Austria. As it is the case with housing subsidies, the building regulations also lie within the authority of the Austrian provinces. Energy related regulations for existing buildings within the building codes exist with respect to the renewing of construction, to building extensions and to the modernisation or replacement of the heating system. There are several renovation programmes and initiatives at 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 (NoVA) depends on fuel consumption. In 2008, this tax system has been amended with a bonus/malus system where cars with relatively low CO<sub>2</sub> emissions get tax breaks and cars with higher CO<sub>2</sub> emissions have to pay a higher NoVA tax. The Climate Action Plan comprises a bundle of 14 measures at national level as well as 11 measures at the level of federal provinces 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, for example in companies, schools or administration departments and a nation-wide initiative for a fuel-efficient driving style (Ecodriving).

### **Energy prices and taxes**

In addition to the traditional mineral oil tax, specific taxes on electricity and natural gas were 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 using renewable energy in the fields of heating and hot water (thermal solar, heat pumps, biomass heating ,)	1992
Households	Domestic appliances labeling and efficiency standards National energy labels for household appliances 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/











