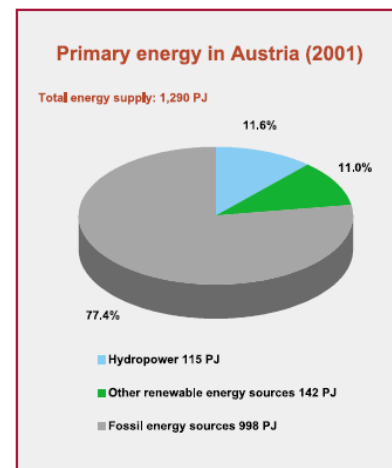


# DEVELOPMENT OF TOOLS FOR THE IMPLEMENTATION OF BIOMASS PROJECTS IN A SUSTAINABLE WAY

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The sustainable supply on the side of a secure and socially balanced supply of energy has been a focus of Austrian energy policy for the last 10 to 15 years. The permanent promotion of renewable energy sources, at the instigation of many different groups in Austria, became a basic strategic aspect of this policy, made by the federal government and also made by the Laender-governments. The share of renewable energy sources in the total energy system has been rising since the mid 70ies and amounted to 22.65 percent of total energy supply in 2001. Is the most significant source hydropower, with a share of 11.7 %, the remaining shares of slightly less than 11 percent are for the most part covered by biofuels, above all biomass.



The following tools and their development were an important part for the enhanced utilisation of renewable raw materials and energy sources in the past years, special for using biomass.

## *Ecology-oriented taxation concept*

Within the framework of the Austrian sustainable policy an ecology-oriented tax system was introduced many years ago. A first step had been the energy tax on gas and electricity as from 1996 onwards. A part of the tax revenue is remitted to the Laender for the implementation of energy saving and environment protection measures through intergovernmental transfers. This also includes measures for the promotion of renewable energy sources and special programs for the different

regions. An ecology-oriented tax system is an increase/introduction of taxes levied on fossil energy sources and, consequently, a relatively more advantageous position of renewable energy sources, because the price for the fossil fuels includes then more "real costs".

#### *Eco-Power Act*

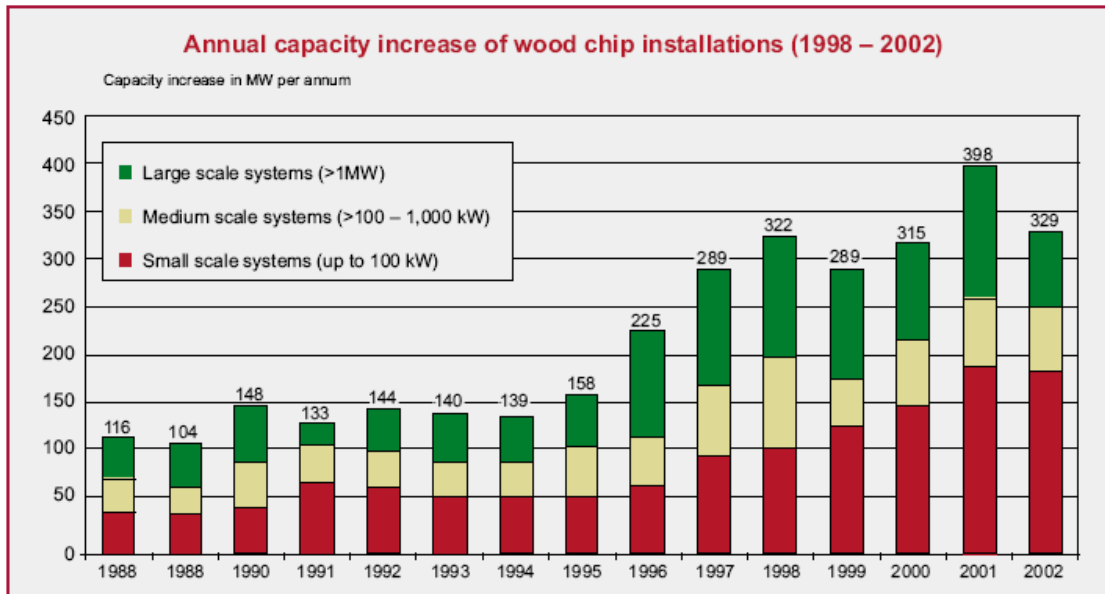
On the basis of the 2002 Eco-Power Act a federally uniform purchasing and payment obligation for "eco-electricity plants" (plants run on solar energy, wind, biomass, biogas, landfill gas, sewage gas, or geothermal energy, and certain kinds of waste, but excluding hydropower) had been introduced. By 2008 a share of 4 % – assessed in relation to the total supply of electricity to the end consumer – must be gradually reached with these energy sources.

#### *Further promotion programmes*

In order to facilitate the introduction and realisation of biomass plant on the market numerous promotional instruments exist. The Laender have special housing construction subsidies, if the heating system is installed with a biomass boiler or is connected to a biomass plant. Supporting schemes for Farmers and communities facilitate the investments in biomass plants und heat water pipelines.

Research programs effected a change in the development of combustion and controlling engineering for all-scale heating installations. Emissions of organic combined carbon and carbon monoxide can be reduced between one tenth and one hundredth on both manually operated and automatically fed installations which in turn had a positive effect on the sale and use of the latter. The efficiency of the new devices rose from an average of 60 % to 80 % in the course of the past years, while both the quality of design and comfort of handling could be essentially improved. In order to achieve further handling comfort when using biomass, pellets have been increasingly promoted over the past years and the expected results have materialised: Pellet-fired installations significantly surpassed those fired with wood chips. During the period 1997 to 2001 altogether about 10,500 wood chip installations and some 12,300 pelletfired plants were installed within a capacity range of up to 100 kW.

New impulses can also be expected from the introduction of the CO2 certificate procedure envisaged in the near future.



Source: Lower Austrian Chamber of Agriculture

In some regions the development of the last years saved a lot off jobs and brought new jobs. Many companies export heaters and systems for using biomass. The value production remains in the region, where the biomass is used. For example the entire consumption of heat- and electric energy in Güssing (Burgenland) is made from biomass, the city is self-sufficient concerning this energy.

But all the programs are worthless, if there are not protagonists available, who realise the programs in the regions. Sustainable thinking and acting will create a better quality of living, a more dynamic economy, and an intact living space with further development possibilities for all future generations. The enhanced utilisation of renewable raw materials and energy sources is therefore an integral part of a sustainable strategy and the regions, where these strategies will be practiced, will be the winners in future.