



Programme area: "Intelligent Energy – Europe" Programme

Coordinator: Stuttgart Region Economic Development Corporation, Germany (WRS)
E-mail: markus.siehr@region-stuttgart.de; Tel. +49 711 22835-35

Partners: Rhônealpeénergie-Environnement, France, www.raee.org;
O.Ö. Energiesparverband: ESV, Austria, www.esv.or.at
Institut "Jožef Stefan"JSI, Slovenia, www.ijs.si
Universitat Rovira i Virgili, Spain, www.creuer.urv.net
University Stuttgart, IER, Germany, www.ier.uni-stuttgart.de

Project-Website: <http://www.bioprom.net>

Objectives: - Identification of non-technical barriers concerning bioenergy facilities in urban areas
- implementing biomass facilities in urban areas

Benefits: Job creation; advancement of renewable energies; new markets for service providers

Duration: 01/2005 – 06/2007

Budget: € 717.942 (EU contribution: 49,7 %)

Short description

The mission is to identify and to overcome non-technical barriers for the implementation of bioenergy facilities in urban areas. The project includes a survey and an analysis into five European regions with special focus on interregional knowledge transfer and exchange of experiences (best-practise-models). The overall aims are:

- initiation of ten bioenergy projects – two per region
- external workshops to train farmers and public bodies in realizing bioenergy projects
- communication of best-practise-examples, case studies and success factors, in order to stimulate a network and to accelerate the process and the development of renewable energy technologies

Achieved results

The regional networks concentrate more and more, and the key players take stock in information and in the project results. The installations of new biomass plants are in progress, and the most important success factors and constraints have been identified. Working groups have been installed, and some studies and publications have been spreadened too. The tradefair "renewable resources" will change in 2008 from the city of Böblingen to the new fairground close to the Stuttgart Airport.

Economic factors: The competitiveness of bioenergy depends on the availability of alternative energy options, relative costs and prices, and regulatory frame-works. For urban areas the best option are biomass pellets.

Financial factors: The financial instruments that could be implemented should include some of following:

- funding for execution of feasibility & market studies
- investment subsidy scheme
- soft loan schemes for bioenergy projects

Legal factors: The environmental impacts of a biomass plant should be determined in advance and a lot of different departments of public administration are involved in the process. The "polluting" emissions (PAH's and VOC's and also dust) and data regarding the quantities emitted by each category of project - individual, small and medium output and large output – can represent an important legal barrier.

Socio-economic factors: direct employment in the conversion plants is not big, but other (direct and indirect) employment is more important (bio-fuel preparation, transporting of bioenergy fuels, construction/operation of plants).

Information deficits: For planning a biomass district heating network it is essential to know the estimated grid length and the expected number of connections. When designing bio-energy projects in urban areas it is decisive that citizens accept or even support the project. Citizens perhaps worry about increased air pollution, noise exposure and volume of traffic. It is necessary to inform the local population right from the design or planning stage to avoid opposition against the bio-energy project.

Lessons learnt

- The location of biomass facilities is a much more important barrier than expected.
- The specific capital costs per unit of capacity increase with decreasing plant capacity ("economy of scale").
- urban development leads to more constraints (transports, implantation...)
- Environmental protection regulations are seen as a constraint (level of emissions...)