

IEA BIOENERGY

Task 40: International Sustainable Bioenergy Trade: securing supply and demand

Task meeting

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FAO Headquarters, Rome, Italy

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Ongoing technology programmes in Finland

Energy and Environment Technology

- [ClimBus - Business Opportunities in the Mitigation of Climate Change 2004-2008](#) ongoing
- [DENSY - Distributed energy systems technology programme 2003-2007](#) ongoing
- [FINE Particles - Technology, Environment and Health 2002-2005](#) ongoing
- [FUSION - Fusion Technology Programme 2003-2006](#) ongoing
- [Streams - Recycling Technologies and Waste Management 2001-2004](#) ongoing
- [Wood Energy 1999-2003](#) ongoing

Wood Energy technology programme, 1999-2003

The National Wood Energy Technology Programme focuses on developing the production technology and improving the quality of forest chips from logging residues and small-sized trees.

In 1998, energy use of forest chips in Finland amounted to 0.5 million solid-m³. The target of the Programme is to reach 2.5 million m³ in 2003.

The programme's total budget for 1999 - 2003 is about EUR 35 million, Tekes's share amounts to EUR 11.5 million.

The target is to be achieved mainly by increasing the production of chips from logging residues from regeneration areas because of their better cost competitiveness. In addition, technology is also developed to promote the energy use of small-sized trees from early thinnings because of the great silvicultural benefits involved.

ClimBus technology programme

Tekes has launched a new technology programme called ClimBus - Business Opportunities in Mitigating Climate Change. The programme will run during 2004-2008. The total budget is estimated to exceed € 70 million.

The programme aims at developing products and services that are internationally top-class in cost-effectiveness to reduce greenhouse gas emissions. The vision is that Finnish companies will be internationally important suppliers of technology and services related to climate change mitigation in 2010 and the net sales of the branch would have grown from the present 4,5 billion euros to 7 billion euros. The focus areas of the programme are:

- Clean energy production and fuels**
- Business services**
- Technologies for energy efficiency and non-CO2 greenhouse gases**

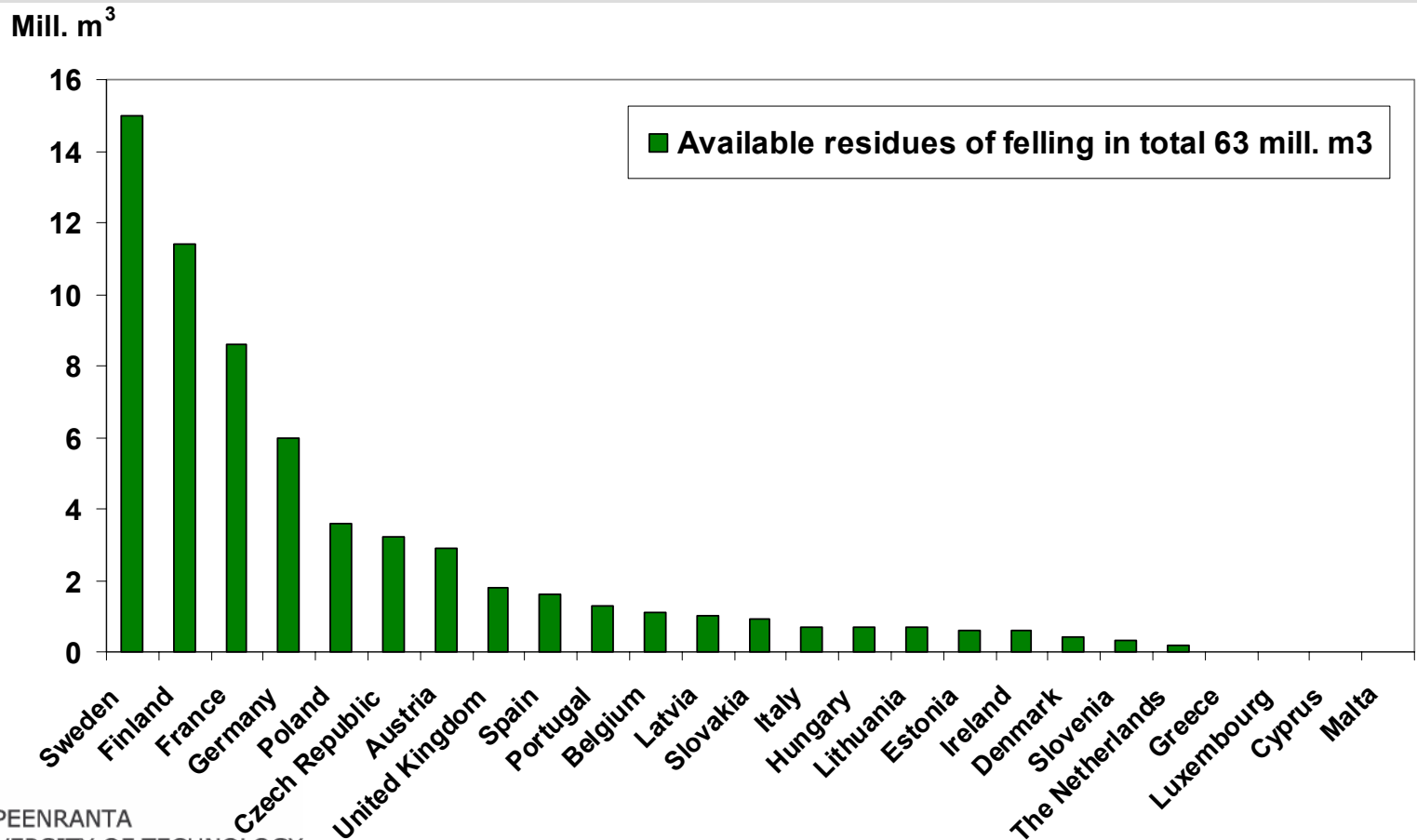
The programme aims also at generating an overview of the business opportunities that e.g. climate policy creates and the technologies of the future that are winning technologies on the market after 2010.

LUT's research projects in biotrade

1. **Development of marine transportation system for forest residue-based fuels, 2003-2005, scope of the project 18 months**
2. **INTERNATIONAL BIOENERGY TRADE: business opportunities and forecasting the effects for Finland, schedule 2005-2006, finance applied from ClimBus –programme, scope of the project 23-28 months**
3. **Research Course & Workshop on Bioenergy technology (bioenergy trade), for post graduate students, finance applied, schedule: summer 2005 or 2006**
4. **M.Sc. program on bioenergy technology, 2005-, under planning**



Volumes of available logging residues in EU25



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Source: Karjalainen, T. et al. 2004

EUBIONET II -Project

EUBIONET II - Efficient trading of biomass fuels and analysis of fuel supply chains and business models for market actors by networking

The project aims to increase deployment of biomass fuels into European market and match technology uptake through market and policy analysis and a number of well-defined tasks to meet European policy targets in renewable energy sector. The project results will lead to increased use of biomass fuels and market uptake of innovative bioenergy technologies.