

# Kainuu Bioenergy Programme

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## 1 Introduction

The European Union aims to increase the amount of renewable energy sources in compliance with the Kyoto Agreement on climate change. According to a statutory obligation set by the EU in January 2008 Finland must increase its use of renewable energy sources to 38% of total energy consumption. In Kainuu this will not only signify an increase in the use of wood energy but also to a lesser degree in the use of biogas, sources derived from agriculture and solar energy. The emissions trade and fuel price-rises have already increased the demand for renewable fuels. It is therefore well worth focusing future efforts on the effective use of Kainuu's bioenergy resources since Kainuu has vast reserves of wood energy.

At the beginning of 2008 a bioenergy coordination programme began in Kainuu with the aim of increasing bioenergy production and use and to strengthen the whole bioenergy sector in Kainuu. The programme is managed by the Kajaani University Consortium's Lönnrot Institute that has implemented several national and international research and development projects in the field of bioenergy from 1984. Previously wood and peat energy development was emphasised, currently the main focus is to promote the use of renewable energy sources.

## 2 Objectives of the programme

The general aim of the Kainuu Bioenergy Coordination Programme is to manage bioenergy development in Kainuu. The Coordination Programme is striving to increase the use of local energy and cooperation between regional bioenergy bodies and also with bodies in nearby regions to ensure that challenging bioenergy goals are reached. These goals include doubling forest energy production, increasing the degree of local energy refining and to facilitate structural changes in energy infrastructure and services.

It is also intended that the project will improve know-how and as a result research and development in the field will need boosting while further training and information will also be required. In addition the project aims to promote the business requirements of bioenergy companies and to create new bioenergy business opportunities in the Kainuu region.

A new operational model will be created for Kainuu's bioenergy sector, with its guiding principles provided by the Lönnrot's Institute lead bioenergy committee. This model will still involve close collaboration with different bodies thus ensuring that limited resources are allocated correctly without overlap.

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### 3 Results

During the first year of operations seven subprojects were set up to implement the Kainuu Bioenergy Programme: Additionally Kainuu bioenergy bodies have also submitted three schemes to local officials for processing. One project crossing regional borders (Wenet Centre), is also awaiting a funding decision. The aim of this project is to advance the marketing of Eastern Finland's companies' know-how and products abroad.

The following Kainuu Bioenergy programme implementation subprojects have already begun:

- Coordination of Bioenergy Program, Kajaani University Consortium (Lönrot Institute)
- Forest Energy in Kainuu, Kainuu Forestry Centre
- Biogas and Energy Grass, MTT Agrifood Research Finland (Sotkamo)
- Recycling of Organic Waste, Kainuu Environment Centre
- Fat Waste Converted to Bioenergy, Eko-Kymppi Oy
- Developing Wood Management, Kainuun Etu Oy
- Energy Park - Preliminary Survey, Snowpolis Oy

### 4 Relevance of the research

The Bioenergy Coordination Programme's aim of doubling forest energy production is a challenge. In order to achieve this aim several different actions are required, for example a change in energy infrastructure and the development of energy wood acquisition logistics. In order to accomplish this, cooperation between Kainuu bodies as well as other regional bodies is being advanced.

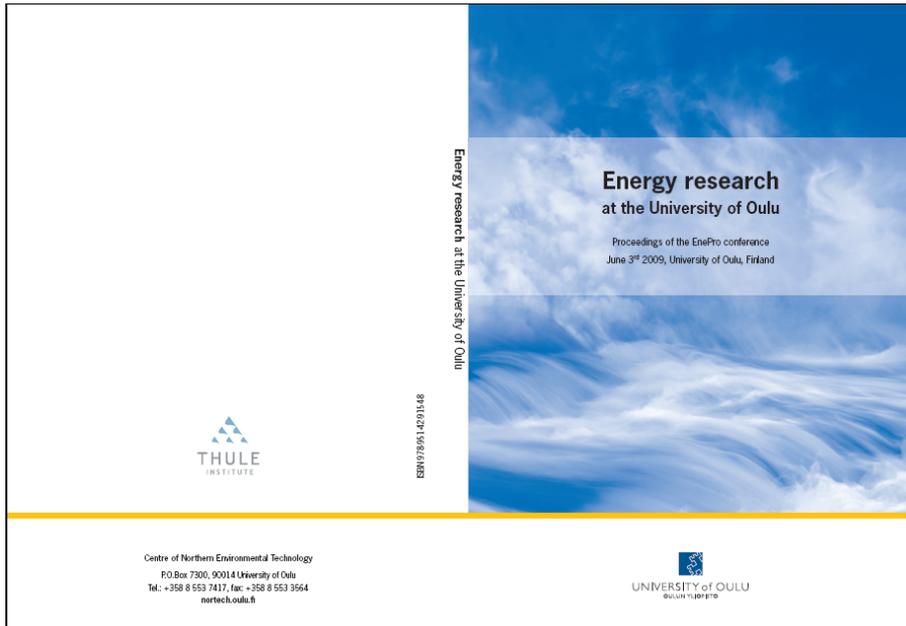
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