

THE “DEVELOPING FOREST ENERGY” PROJECT



Euroopan maaseudun
kehittämisen maatalousrahasto:
Eurooppa investoi maaseutualueisiin.



Työ- ja
elinkeino-
keskus

DEVELOPING FOREST ENERGY 2008-2010

FUNDING

- The funds come mainly from the European Union (The European Agricultural Fund for Rural Development)

BACKGROUND

- The European Union's climate and energy policy
- Climate change
- Wood is the most important source of bioenergy in Finland

THE AIM

- The aim of this project is to comprehensively clarify: the potential possibilities for forest energy, the problems facing the forest energy sector and the information needed by it

ORGANISATIONS

Forest Centre of South Ostrobothnia

- Forest management planning
- Regional forest programmes
- Forestry grants for private forest owners
- Supervision of the implementation of the Forest Act
- Bioenergy
- Etc.

Seinäjäki University of Applied Sciences

- Education
- Research & Development
- Five faculties
- School of Agriculture and Forestry
 - Agricultural education since 1875
 - Forest education since 1903

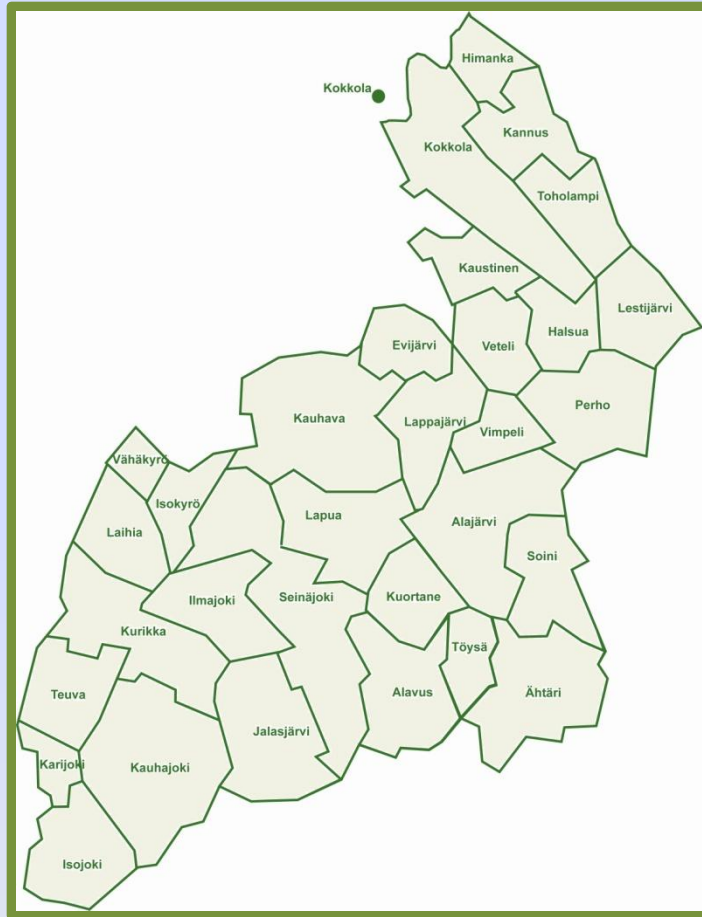


IN CLOSE CO-OPERATION WITH

- Forest companies
- Heating entrepreneurs
- Forest machine entrepreneurs
- Forest research organisations
- Public and private forestry organisations
- Forest owners
- Domestic and international universities



THE AREA OF OPERATION



- Forest Centre of South Ostrobothnia
- 1.25 million hectares of forest
- A quarter of Finnish heating entrepreneurs operate in the area
- Forest energy sector is a remarkable employer

The technological and economical development of forest energy logistics (1/8)

- Development of measurement and pricing of forest energy
- Moisture content of energy wood
- Improvement in the efficiency of the forest energy logistic chain
- Calculations of emissions of CO₂
- Utilization of geographical information systems (GIS) in forest energy procurement



Picture: Risto Lauhanen

The development of heating entrepreneurship (2/8)

- Cost efficiency of heating entrepreneurship
- Critical aspects of heating entrepreneurship
- Theme days and seminars
- Heating entrepreneurs and their customer satisfaction study



Picture: Jussi Laurila

The environmental aspects of the production and utilization of forest energy (3/8)

- Improvement of efficiency
- Power plant emissions
- Find out how to reduce emissions
- Clarify effect of forest energy production on forest ecosystems
- Clarify local environmental aspects and find out different kinds of solutions
- Environmental effects of harvesting peat land forest
- Water protection
 - Stump harvesting



Picture: Jussi Laurila

The potential resources, production and consumption of forest energy (4/8)

- Potential of forest energy
- Resource needs of forest energy harvesting machines and operators
- Flow of energy wood within the area and between other areas
- Consumption of energy wood
- Production of energy wood



Picture: Risto Lauhanen

The familiarisation of citizens with forest energy (5/8)

- Citizens opinions and expectations of forest energy
- Homepage
 - www.kehittyvametsaenergia.fi



Picture: Jussi Laurila

The use of forest energy on farms (6/8)

- Information:
 - Operating of power plant
 - Procurement and choice of wood energy
 - Fire safety
 - Energy efficiency on farms
 - New machines and devices
- Events:
 - Power plants on farm
 - Theme days
 - Etc.
- Guidebooks:
 - Planning and purchase of power plant
 - Grain drying using bioenergy



Picture: Jussi Laurila

Combustible materials



Cutter chips



Chips



Briquettes



Crushed stumps

Pictures: Jussi Laurila

The harvesting and storage of forest energy (7/8)

- Forest energy terms
 - Unit of measurement
 - Moisture content
 - Etc.
- Rating of energy wood harvesting
- Development of storage methods
- Exhibition of energy wood harvesting



Picture: Jussi Laurila

Forest energy: seminars, theme days and excursions 8/8

For forest owners, farmers, researchers, entrepreneurs and professionals

- Bioenergy
- Energy wood
- Forest energy
- Power plants
- Heating entrepreneurship
- Quality of chips and chopped firewood
- Harvesting technology



Picture: Jussi Laurila

Thank you for your attention!



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Pictures: Jussi Laurila, Risto Lauhanen & Tiina Sauvula

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