

BENWOOD

Coordination Actions in support of Sustainable and eco-efficient short rotation forestry

The globally increasing demand for energy and the need to reduce oil, gas and coal consumption has been driving the development of renewable, carbon-lean alternatives to non-renewable fossil fuels. New initiatives on producing biomass on agricultural land have been taken in the area of 'Short Rotation Forestry' (SRF). This approach is to use largely pest resistant trees which are also adapted to local climates, soils and able to quickly rebuild new shoots after being cut back. Cultivated and harvested between eight and 20 years after planting, these fast-growing trees appear to be a valuable source of biomass. The BENWOOD project has as its main goal the promotion and the exchange of experience and practices among researchers and project developers on how SRF can be a sustainable and eco-efficient land use management system for fossil fuels substitution.



Researchers from 12 countries including Brazil, China, India and Africa, participate in this two-year EU funded project. It has developed useful guidelines for farmers and stakeholders from the energy and biomass sector and includes exchange of best practices and business models, eligible planting material as well as crop and field maintenance. BENWOOD also aims at enhancing the Afforestation/Reforestation projects in developing countries, in particular when implemented under the Clean Development Mechanism (CDM) framework of the Kyoto protocol. The CDM allows industrialised countries with a greenhouse gas reduction commitment to invest into ventures that reduce emissions in developing countries as an alternative to more expensive emission reductions in their own country.

Background

Cut a stick of about 20 cm length from a one-year old branch of a willow or a poplar tree. The stick should have some visible buds on it. Stick the stick into the soil and keep the soil humid. The stick will develop roots, leaves other branches and - within quite short time - from your stick you'll have another tree grown. This way, from a 20 cm stick stuck into the soil in spring you can get a tree of 1,5m in autumn. Let the tree grow for a couple of years, e.g. 3 years, then fell the entire tree leaving a stump of some 5-10 cm height in winter. You have harvested your first tree. Repeatedly cutting back the tree (harvesting it), letting it resprout and regrow for some years, cutting back again etc. is a method called 'Short Rotation Forestry' (SRF).

Since its start in April 2009, the BENWOOD project has developed guidelines for CDM project developers, combining requirements on land use management, food safety, hydro regime and climate conditions. A particular focus of the project is on the competition for land use between biomass production for energy and food production. The guidelines - addressed to farmers and stakeholders from the energy and biomass sector - will present current best practices and business models, eligible planting material as well as crop and field maintenance.

Objectives

The BENWOOD project has four main objectives:

- to draw an overview on SRF production practices (planting material, harvesting, transport logistics etc.), extract the best practices and evaluate their broader applicability and transferability
- to assess the conditions specific to CDM countries (focus on Brazil, India, P. R. China, African countries)
- to share knowledge with other SRF, agroforestry, agricultural and forestry based initiatives



- to elaborate EU SRF guidelines and standards for land use management and a SRF R&D agenda with focus on CDM/JI countries and on the needs of developing countries
- to disseminate results through several useful tools (workshops, website, publication of a brochure, DVD containing film clips and photographs provided local training of farmers)

Results

After more than one year, BENWOOD main results in terms of public deliverables are:

- SRF guidelines/standards targeting CDM project developers, farmers and stakeholders from the energy and biomass sector
- R&D agenda describing the most pressing current open research questions on Short Rotation Forestry in 'CDM countries'.
- Two public workshops bringing together decision makers and scientists, as well the FAO and CDM project developers for discussions and exchange of best practice as well as visits of laboratories and fields. A live internet based public workshop on CDM issues in Short Rotation Forestry will be held with participants worldwide.
- DVD and brochure, holding related film clips, pictures, pdfs and a brochure which sums up the results.
- Public website disseminating the project results and providing stakeholders with the possibility to contribute to the project.

For more information, please visit the website: www.benwood.eu

Or contact the project co-ordinator:

Thomas LEWIS

Tel: +43-650-8498736

Fax: +43-650-118498736

E-mail: office@energieautark.at

EC Contribution : 1 million €

Duration : 24 months

Starting date : 01/04/2009

Project partners:

Energieautark Consulting GMBH (Coordinator) – Austria ; Georg-August-Universitaet Göttingen Stiftung Öffentlichen Rechts – Germany ; Beijing Forestry University - China ; Kompetenzzentrum Hessenrohstoffe (HERO) E.V. – Germany ; Punjab Agricultural University – India ; Universität Für Bodenkultur Wien – Austria ; Sveriges LantbruksUnivesiteit – Sweden ; Kochanska-Dubas Jolanta Wena – Poland ; Alasia New Clones S.R.L. – Italy ; Bioenergy 2020+ GMBH – Austria ; Plantar S/A – Brazil ; Faculty of Forestry, University of Zagreb – Croatia ; International Centre for Research in AgroForestry – Kenya ; Bangor University – U.K.