

PARTNER REQUEST

PS-KBBE- Production and utilization of energy from lignocellulosic biomass in dry-cold environments

ABSTRACT:

The main goal of the project "Production and utilization of energy from lignocellulosic biomass in European marginal rural areas: energy crops adapted to dry-cold environments" is to select and evaluate lignocellulosic plant species (herbaceous and woody –shrubs and trees) that can perform better in marginal rural environments than the those currently available in the market.

The research center looks for partners to join the consortium to submit the project to FP7-KBBE-2012-6 call.

DESCRIPTION:

The consortium is interested in the production and energetic utilisation of agriculture biomass in rural areas where water resources are scarce, such us in Mediterranean European regions, with the cooperation of European research teams with advances technologies for mechanization and thermo chemical conversion of biomass, but also concerned by the need to address the energy challenges of rural areas (energy supply and decentralisation) where drought and limited water resources could be a future scenario.

Forming a common platform between European research scientists and stakeholders companies interested to work on bioenergy production in rural areas will give the opportunity to develop adequate technologies for the production and utilization of energy from biomass in European marginal rural areas.

The main goal of the project is to select and evaluate lignocellulosic plant species (herbaceous and woody –shrubs and trees-) that can perform better in marginal rural environments than the those currently available in the market (herbaceous species Miscanthus, switchgrass, reed canary grass, sweet sorghum; woody species poplar, willow, eucalyptus, paulownias).

The expected results are:

- develop energy crops adapted to dry-cold EU environments to produce local biomass at low cost in a sustainable way
- provide answers as to whether promising energy crops can be allocated to specific European rural areas and their biomass quality/yield optimised at every step of the energy chain up to the factory gate
- improve the link between agriculture activities and the environment, reducing environmental footprints
- improve social welfare and job opportunities in rural areas; introduce more resilient and diverse agricultural production systems
- provide feedstock to improve energy use of biomass residues (agriculture, forestry, industry and urban organic waste).

The work packages will be:

WP1: COORDINATION

WP2: BIOMASS FEEDSTOCK production and quality: energy crop species adapted to dry-cold environments

WP3: HANDLING and MECHANIZATION of BIOMASS: requirements for the establishment, harvest, handling, storage and transport of biomass crops

WP4: SYSTEM ANALYSIS of ENERGY CROPS: environmental and socio-economic impact on marginal rural areas

WP5: AGROENERGY DISTRICTS: establishing agro-energy chains at industrial scale

WP6: DISSEMINATION

The project will be submitted to:
FP7-KBBE-2012-6, Area 2.1.2 Increased sustainability of all production systems
Topic KBBE.2012.1.2-01: Development of new or improved logistics for lignocellulosic biomass harvest, storage and transport, with deadline 15 November.