

KBBE.2012.1.2-01: Development of new or improved logistics for lignocellulosic biomass harvest, storage and transport

(Topic implemented jointly by Themes KBBE and ENERGY but only open in call FP7-KBBE-2012-6)

Content/scope: The topic aims at the development of new or improved logistics for harvesting, transport and storage for each of the following raw material types: (1) agricultural residues (e.g. cereal straws, harvested weeds ...), (2) forestry residues (e.g. low value forestry wastes) and (3) biomass from energy crops. Each raw material type shall be investigated separately i.e. through an individual project. The projects should include the adaptation of agricultural practices (including sustainable soil management), the development of harvesting machineries adapted to the raw material used (combined harvesting equipment when appropriate), possible on-site pre-treatment of the biomass, storage and transport. The process operations for all the steps from harvesting to transport and storage should be defined and demonstrated at an industrial pilot-scale under real operational conditions.

Environmental (e.g. effect on soil organic content), economic (e.g. potential market for lignocellulosic biomass, economic viability and added value for farmers / forest owners) and social sustainability for the developed logistics shall be assessed, including scenarios for transport distances. The projects shall also investigate the social, economic, regulatory and other barriers to innovation in this area. Proposals will have to include a clear plan for exploitation of the scientific and technical results.

Funding scheme: Collaborative project (small or medium-scale focused research project targeted to SMEs).

Additional eligibility criteria:

- The requested European contribution shall not exceed EUR 3 500 000 per proposal.
- Projects will be selected for funding on the condition that the estimated EU contribution going to SME(s) is 25% or more of the total estimated EU contribution for the project as a whole.

Implementation/management: In order to maximise industrial relevance and impact of the research effort, the active participation of agriculture and forestry sector players, machinery manufacturers and biomass end-users is essential.

Expected impact: The development of improved logistics to harvest, store and transport lignocellulosic biomass for the production of bio-energy and bio-materials is expected to create a market for agriculture and forestry residues, and for energy crops; and to foster the bio-energy market in Europe. The creation of a market for biomass residues is also expected to improve economic conditions at the farm and forestry level.

Projects will deliver practical solutions, implementable in the rural communities across Europe, to the supply of lignocellulosic biomass for bioenergy and bio-materials in an economically, socially, and environmentally sustainable manner. The projects will contribute to the implementation of EU policies, notably with respect to the SET-Plan and the bio-based economy.

Additional information:

- Up to one project will be funded in each of the three raw material types (agricultural residues, forestry residues and energy crops).
- The total budget of the topic is limited to EUR 10 000 000.