

Topic ENERGY.2012.3.2.3: Pre-commercial industrial scale demonstration plant on lignocellulosic ethanol

Open in call: FP7-ENERGY-2012-2

Contents/scope: This topic aims to support the construction of the first pre-commercial plant on lignocellulosic ethanol based on sustainable biomass resources including waste streams. The call aims at industrially led projects with minimum installed production capacity of 60,000 tons per year. The proposals should address the complete value chain including the supply chain of the sustainable biomass resource and the eventual use of the biofuel in the market wherever appropriate. A detailed Life Cycle Analysis and GHG calculations must be included in the proposal and will be evaluated under the "Scientific and Technological Quality" criterion.

Funding scheme: Collaborative Projects with a predominant demonstration component

Implementation/management: The leading role of relevant industrial partners is essential to achieve the full impact of the project. Applicants must demonstrate that by the time of the submission of their application (deadline of the call) they have been operating demonstration scale plants with minimum installed production capacity of 4,000 tons per year or have such plants under construction with planned commissioning the latest by 31/12/2012 (justification shall be provided in the proposal and will be evaluated under the 'Implementation' criterion). The number of operating hours by the time of the submission of the application (deadline of the call) may be an asset for the applicant. In addition, the proposers must provide additional information by completing Table 1 "Techno-economic Analytical data" and Table 2 "Key Performance Indicators" that have been approved by the TEAM of European Industrial Bioenergy Initiative (EIBI). Tables 1 and 2 as well as information on EIBI are made available through the relevant Guide for Applicants. The elements will be evaluated respectively under the 'Implementation' and 'Impact' evaluation criteria.

Expected impact: The construction of such pre-commercial plants will accelerate the deployment of lignocellulosic ethanol technologies aiming to facilitate achieving the EU lignocellulosic biofuels targets of the Renewable Energy Directive. Furthermore it will provide reasonable basis for ensuring the reliable supply of sustainable biomass resources to the plants and it will be the first step towards reducing the relative high cost of the enzymes used in the process and lignocellulosic ethanol. The combined production of a high annual volume of lignocellulosic ethanol will be the first step towards commercialisation and market deployment.

Additional information: The topic aims to facilitate the implementation of the SET Plan European Industrial Bioenergy Initiative (EIBI). The European Commission reserves its right to ask the project, during the negotiation, to establish strong links, where appropriate, with relevant R&D projects at EU, national or regional level.

It is envisaged that up to two projects could be funded.