EERA BIOENERGY BIOENERGY JOINT PROGRAMME

The European Alliance for excellent research in sustainable bioenergy

Biobased fuels, power and heat in a circular bioeconomy



EERA Bioenergy Joint Programme addresses the challenges of the European energy and environment policies from a research and innovation perspective. The main European organisations involved in R&D&I in biobased fuels, power and heat, and bioeconomy are part of EERA Bioenergy.

EERA Bioenergy promotes international co-operation to accelerate the SET-Plan priorities and actions to contribute to the decarbonisation of the energy sector, by assessing R&D&I priorities to accelerate the implementation of biomass technologies in Europe.

JOINT PROGRAMME STEERING COMMITTEE JOINT PROGRAMME **MANAGEMENT BOARD** JOINT PROGRAMME SECRETARIAT THERMOCHEMICAL PLATFORM BIOCHEMICAL PLATFORM THERMOCHEMICAL RESIDENTIAL/DOMESTIC **FORESTRY** AND ENZYMES HEATING AND COOLING INCLUDING MICRO-CHP DECONSTRUCTION AND MEDILIM- TO SEAWEED ARGE-SCALE CHCP VALUE CHAIN DESIGN BIOCHEMICAL AND/OR WASTE TRANSFORMATION OF FOSSIL FUEL PLANTS INTO ADVANCED AND BIOREFINERY BIOFUELS AND BIO-BASED CHEMICALS **ENERGY ISLANDS**

ΔΝΔΙ ΥSIS

SOCIAL ANALYSIS

ANALYSIS



Subprogrammes

Subprogramme 1: Sustainable production of biomass

Coordinator: Dr. Wolter Elbersen, from Wageningen University and Research (WUR) woltenelbersen@wurnl

Aims at the supply of biomass resources including biomass from forest, agriculture, waste and residues and marine biomass. The Subprogramme deals with challenges in security and sustainability of biomass supply, delivering biomass of the right quality at low casts and fitting biomass for energy in the circular bioeconomy.

Subprogramme 2: Termochemical Platform

Coordinator: Berend Vreugdenhil, from TNO (Netherlands) berend.vreugdenhil@tno.nl

Aims at increasing the efficiency, sustainability (lower GHG emissions) and cost-competitive production of advanced biofuels and bioenergy carriers from biomass through thermochemical processing. Research areas are identified for the development of primary thermochemical conversion processes, downstream processing and advanced biofuel and intermediate carrier value chains.

Subprogramme 4: Stationary bioenergy

Coordinator: Berend Vreugdenhil, from TNO (Netherlands) berend.vreugdenhil@tno.nl

Aims at upgrading the development of efficient, flexible, affordable and environmentally friendly heat, power and cooling production from biomass. It covers all plant scales, from small residential/ domestic units to medium- to large-scale bioenergy plants focusing on the conversion of woody biomass, especially important for the residential sector, and low-grade feedstocks/residual streams through combustion and gasification technologies.

Subprogramme 3: Biochemical Platform

Coordinator: Marcelo Domine, from the Spanish Institute of Chemical Technology – ITQ (UPV-CSIC) mdomine@itq.upv.es

Aims at improving the technology and developments in biochemical and chemical processes and technologies for producing advanced biofuels, mainly including aviation and maritime fuels, and the co-production of other bio-based chemical products in biorefinery approaches from all fractions of lignocellulosic biomasses; the biogas from anaerobic digestion; the syngas obtained from thermochemical biomass and bio-waste processing; and the hydrogen from biological and renewable origin.

Subprogramme 5: Sustainability / Technoeconomic analysis / Public acceptance

Coordinator: Dr. Raquel S. Jorge, from the Norwegian University of Science and Technology (NTNU) raquel.s.jorge@ntnu.no

Aims at creating robust tools to tackle these three dimensions of Bioenergy which are essential for its successful implementation: 1) assessment of bioenergy's environmental sustainability, 2) technoeconomic analysis of bioenergy technologies and value chains; 3) social analysis and public perception aspects linked to Bioenergy development.

EERA Bioenergy is open for any organisation actively involved in research and innovation focusing on biobased fuels, power and heat, of the European Union*, to join.

EERA Bioenergy has two categories of members: Full Members and Associate Members.

* Including candidate countries of the European Union or countries associated to the Framework Programme of the European Union.

JOINT PROGRAMME SECRETARIAT

Dr. Margarita de Gregorio, Spanish Technology and Innovation Platform "Biomass for the Bioeconomy" (BIOPLAT) margadegregorio@bioplat.org

JOINT PROGRAMME COORDINATOR

Myrsini Christou, Center for Renewable Energy Sources and Saving – CRES mchrist@cres.gr