

Highlights of Bioenergy Research 2020

January 24th, 2020, Messe Congress Graz, Austria

Abstract

IEA Bioenergy highlights

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The IEA Bioenergy Technology Collaboration Programme (IEA Bioenergy TCP - www.ieabioenergy.com) is a global government-to-government collaboration on research in bioenergy and is the main initiative under the auspices of the International Energy Agency (IEA - www.iea.org) to develop and deploy bioenergy in a sustainable way in order to achieve a low carbon economy. As of the 1st July 2019, 24 countries and the European Commission are participating in IEA Bioenergy.

The mission of IEA Bioenergy is to increase knowledge and understanding of bioenergy systems in order to facilitate the commercialisation and market deployment of environmentally sound, socially acceptable, and cost-competitive bioenergy systems and technologies, and to advise policy and industrial decision makers accordingly. The TCP provides platforms for international collaboration and information exchange on bioenergy research, technology development, demonstration, and policy analysis with a focus on overcoming the environmental, institutional, technological, social, and market barriers to the near- and long-term deployment of bioenergy technologies.

The work within IEA Bioenergy is structured in a number of Tasks, which have well defined objectives, budgets, and time frames, which are agreed per period of three years (triennium). Results from the triennium 2016-2018 are publicly available and new work programmes for the 11 Tasks*, as well as special collaboration projects (between different Tasks) have been formulated for the triennium 2019-2021. Special collaboration projects are focusing on high temperature heat in industry; deployment of renewable gas; bioenergy combined with carbon capture and storage/utilization (BECCS/U); and the role of bioenergy in a world aiming at reaching well-below-2°C targets and Sustainable Development Goals.

Through this active collaboration with involvement of over 200 experts at global level, the platform aims to support sustainable energy deployment and through joint efforts bioenergy can be properly positioned within the rapidly changing arena of renewable energy and bioeconomy.

The presentation will show some highlights achieved in the past years, and the main focus areas in the current triennium.

** these are the current active Tasks in IEA Bioenergy:*

- Task 32 - Biomass combustion
- Task 33 - Gasification of biomass and waste
- Task 34 - Direct thermochemical liquefaction
- Task 36 - Material and energy valorisation of waste in a circular economy
- Task 37 - Energy from biogas
- Task 39 - Commercializing conventional and advanced transport biofuels from biomass and other renewable feedstocks
- Task 40 - Deployment of biobased value chains
- Task 42 - Biorefining in a circular economy
- Task 43 - Sustainable biomass supply integration for bioenergy within the broader bioeconomy
- Task 44 - Flexible bioenergy and system integration
- Task 45 - Climate and sustainability effects of bioenergy within the broader bioeconomy

More information about the event, photos and presentation slides are available for download:
<https://nachhaltigwirtschaften.at/en/iea/events/2020/20200124-highlights-bioenergy-research.php>