

Highlights of Bioenergy Research 2020

January 24th, 2020, Messe Congress Graz, Austria

Abstract

IEA Bioenergy Task 33 – activities and projects

Dr. Jitka Hrbek

University of Natural Resources and Life Sciences

Institute for Chemical and Energy Engineering

Muthgasse 107, 1190 Vienna, Austria

IEA Bioenergy Task 33 monitors the current status of biomass and waste gasification (BMG) process in member countries and identifies hurdles to advance further development, operational reliability, and reducing the capital cost of BMG systems.

The Task meetings, which are held twice a year, provide a forum to discuss the technological advances and issues critical to scale-up, system integration, and commercial implementation of BMG processes. Generally, these discussions lead to selection of subtask studies and/or technical workshops that focus on advancing the state-of-the-art technology and identify the options to resolve barriers to technology commercialisation.

In the last triennium 2016-18, following Task projects were finished:

- Status report on thermal gasification of biomass and waste 2019
- Lessons learned about thermal biomass gasification
- Pretreatment of MSW for gasification
- Gasification of waste for energy carriers
- Hydrogen from biomass gasification
- Valorisation of by-products from small scale thermal gasification
- Thermal gasification based hybrid systems
- Gas analysis guideline report
- Implementation of bio-CCS in biofuels production

The presentation focused on the results of „Lessons learned about thermal biomass gasification“ project. Based on the monitoring of previous projects, following questions could be answered:

- What are the parameters determining success or failure of the thermal gasification projects?
- Which way is necessary to go for a successfully finished project without unexpected bad surprises?
- Which tool could be used by the commissioning of gasification facilities? These and further related questions could be discussed to clear the gasification projects set up.

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>