IEA Bioenergy
Technology Collaboration Programme

Workshop Announcement

IEA Bioenergy: Task 33

Valuable (by-)products of gasification

19.10.2022

Living Hotel Kaiser Franz Joseph,
Sieveringer Str. 4, 1190 Vienna,
and per Zoom

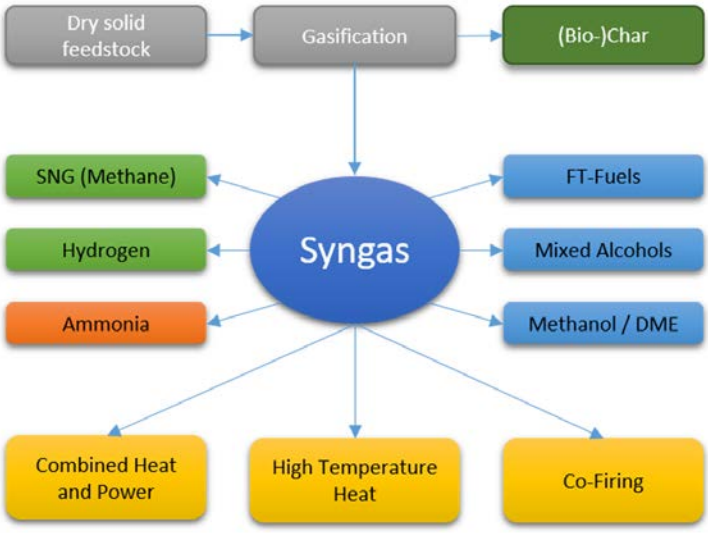
Site visit - project Waste-2-Value

20.10.2022

INTRODUCTION

The main product of biomass gasification process is producer gas, which could be after cleaning and conditioning converted into synthesis gas. The syngas contains mainly CO and H_2; this mixture is beneficial for further processing, e.g. for production of biofuels and/or biochemicals.

In the figure below, the syngas utilization pathways can be seen. Starting with dry solid biomass, which is through gasification process and following cleaning and conditioning steps converted into syngas. Depending on the demands of the cleaning process, the syngas could be used for combined heat and power production, co-firing or production of high temperature heat.
For the synthesis of biofuels and/or biochemicals, more precise cleaning process is necessary. In this way gaseous bio-products such as synthetic natural gas (SNG), hydrogen or ammonia can be produced. Moreover, the liquids biofuels and biochemicals, such as Fischer-Tropsch (FT) liquids (e.g. biodiesel, biokerosene, biopetrol), mixed alcohols or methanol/DME can be produced.



The valuable by-product of gasification is biochar, which could be utilized in many ways, e.g. for soil improvement, as an additive to animal feed, in industrial processes such as filtration medium, etc. In order to greenhouse gases balance (GHG), it could be employed as a storage of carbon.

Combined heat and power (CHP) production through biomass gasification is already matured technology and this fact is confirmed by more than 1 700 operational units in Europe.
To save the fossil fuels and for better GHG balance, biomass gasification is employed also in industrial processes. The produced gas is co-fired in the boilers and the heat is used within the industrial process.

In the last years, development of units for SNG or FT liquids, as well as methanol of mixed alcohols can be observed. In this way it is clear that the gasification technology will play an important role in fossil-free future.

The actual developments in the field of gasification (by-)products will be presented in the workshop.

The actual programme of the workshop can be found on the IEA Bioenergy Task 33 website:

www.task33.ieabioenergy.com

PROGRAMME

For the actual programme please visit www.task33.ieabioenergy.com

PRACTICAL INFORMATION

Date & Timing

19.10.2022, Workshop "Valuable (by-)products of gasification", approx. 9 a.m. to 5.30 p.m.

20.10.2022, Site visit – project "Waste-2-Value", 12.30 – 13.30

Meeting location

Workshop on 19.10.:

Living Hotel Kaiser Franz Joseph,

Sieveringer Straße 4, 1190 Wien

kaiserfranzjoseph@living-hotels.com

Site visit on 20.10.:

11.Haidequerstraße 6, 1110 Vienna

(Bus departs from Hotel K. F. J. at 11.45)

Registration

Deadline for registration: 11.10.2022

Detailed information www.task33.ieabioenergy.com

More information:

Dr. Jitka Hrbek

Jitka.hrbek@boku.ac.at

0043-66488537003

Prof. Christoph Pfeifer

Christoph.pfeifer@boku.ac.at

0043-66488586424

Link / website

www.task33.ieabioenergy.com