btg bioliquids

BTG Bioliquids pitch for TC Biomass Chicago

September 11th, 2024

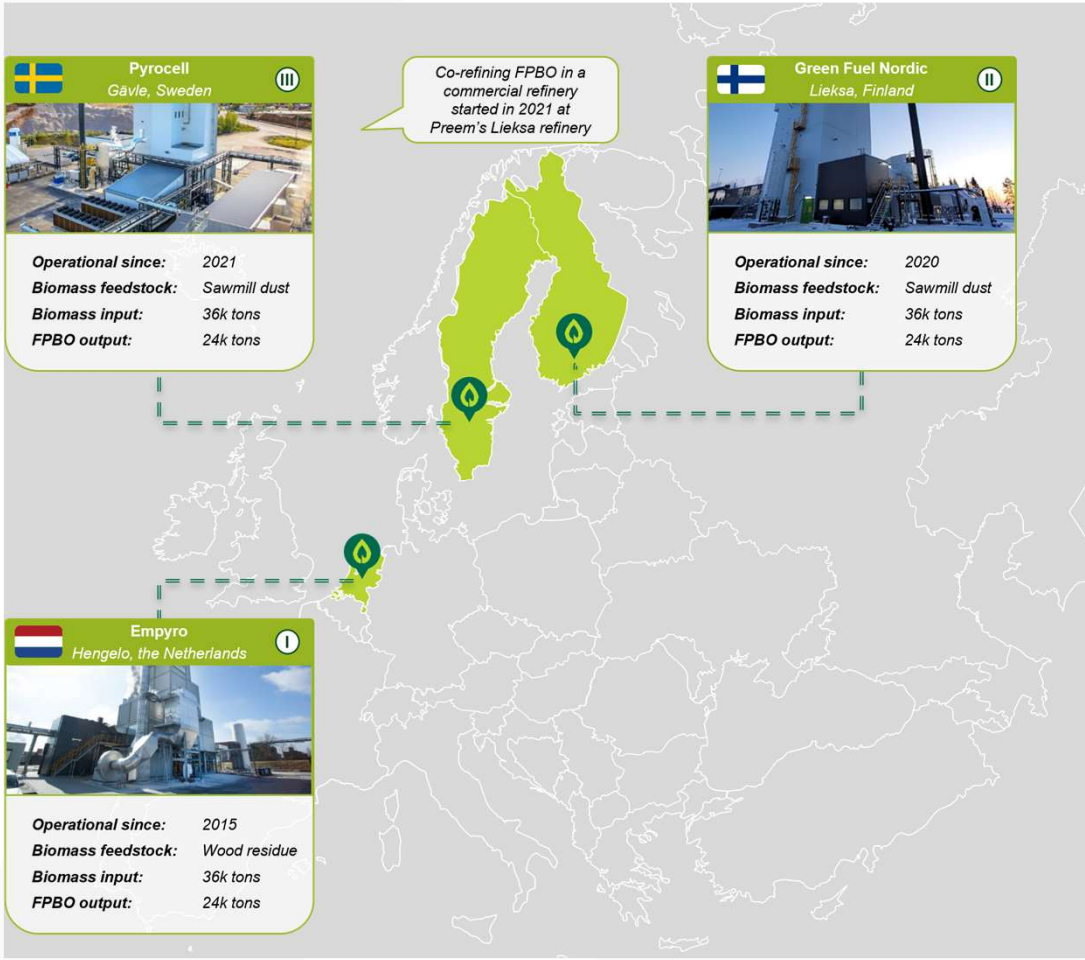
Company introduction

- As a technology provider and product leader we are committed to the commercial deployment of our fast pyrolysis technology
- Explicitly made from biomass residues which is known as second generation (2G) or advanced biofuel which means that it **does not compete with the food chain**
- Experienced project development team assisting customers and initiating own projects in pyrolysis oil production and upgrading technologies
- Highly standardized and modular design. Our motto is "scaling by numbers".

Standardization

The BTG Bioliquids pyrolysis plants are highly standardized. We have the strategy to scale by numbers. Bring the pyrolysis plants to the biomass and convert the crude biomass to crude pyrolysis oil. Advantages of standardization:

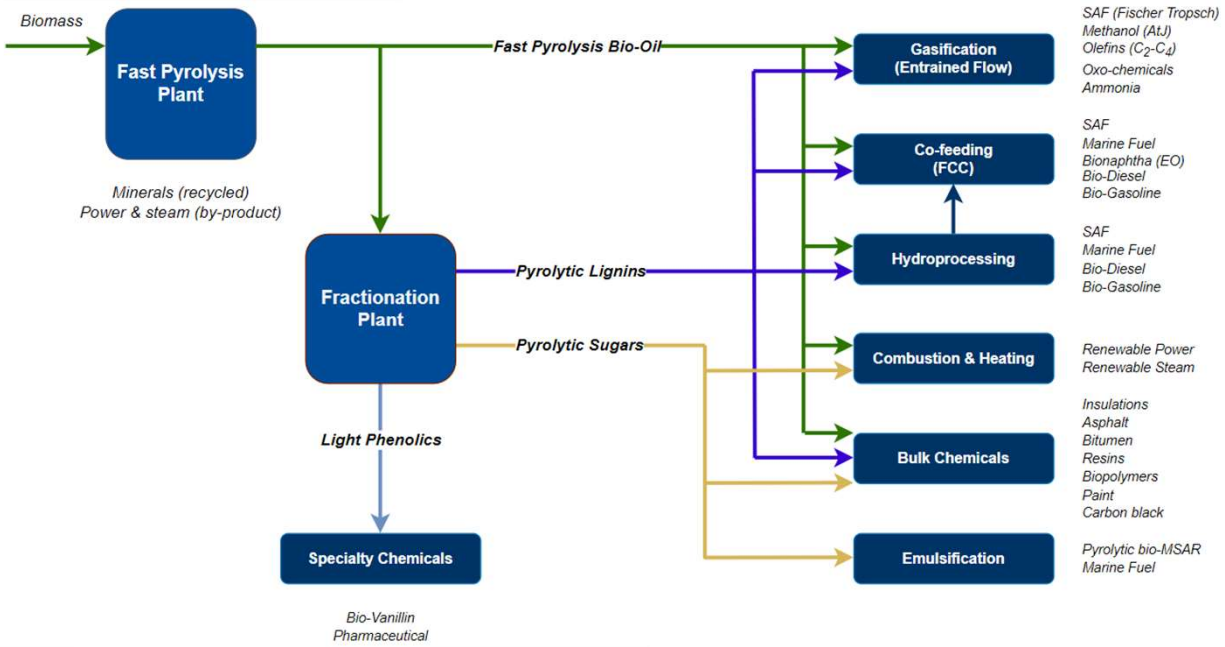
- No scale up risk. We have done it before! Lessons learnt from the first Empyro plant in 'own backyard' has helped optimizing the technology and operational processes to increase overall plant performance
- Hardly any engineering is needed. Within several weeks after contract award, we can order equipment.
- Very short delivery times. Within 18 months after ordering the first pyrolysis oil is produced.
- Ready for full-scale commercial roll-out
- Bank loans possible with export credit guarantee from Atradius, backed by Dutch Government



Fast Pyrolysis Bio-Oil Applications

- Pyrolysis oil is densifying biomass and is connecting the biomass world with the chemical, petro-chemical and energy world.

- Following applications can be served via the pyrolysis oil platform:
  - Gasification of pyrolysis oil on an existing gasifier (ammonia, methanol, syngas, hydrogen, SAF, marine fuel, bio diesel)
  - Co-feeding in refinery via FCC to go to SAF, Marine Fuel, Biodiesel, Bio Gasoline.
  - Hydro-processing (BTG-NeXt technology) to make SAF, Marine fuel and Bio Diesel
  - Combustion to make renewable heat and steam.
  - Fractionation into Pyrolytic sugars and lignin to go to insulation material, asphalt, bitumen, resins, paint, impregnation of wood (bulk chemicals)
  - Fractionation using Alder technology to go to SAF.
  - Emulsification of pyrolytic sugars into HFO with Quadrise.



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we replace fossil fuels