



bioenergy2020+

Country Update Austria

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Biofuel production

- 9 biodiesel facilities with a combined capacity of 485 kt produced 295 kt in 2017 (all-time production high was in 2015 with 340 kt)
- 1 ethanol facility with a capacity of 191 kt produced 185 kt in 2017 (very stable production over the years)
- No capacity of HVO production
- Some plant oil and some upgraded biogas produced
- No advanced biofuel production operating, but one facility planned (see next slide)



AustroCel Hallein

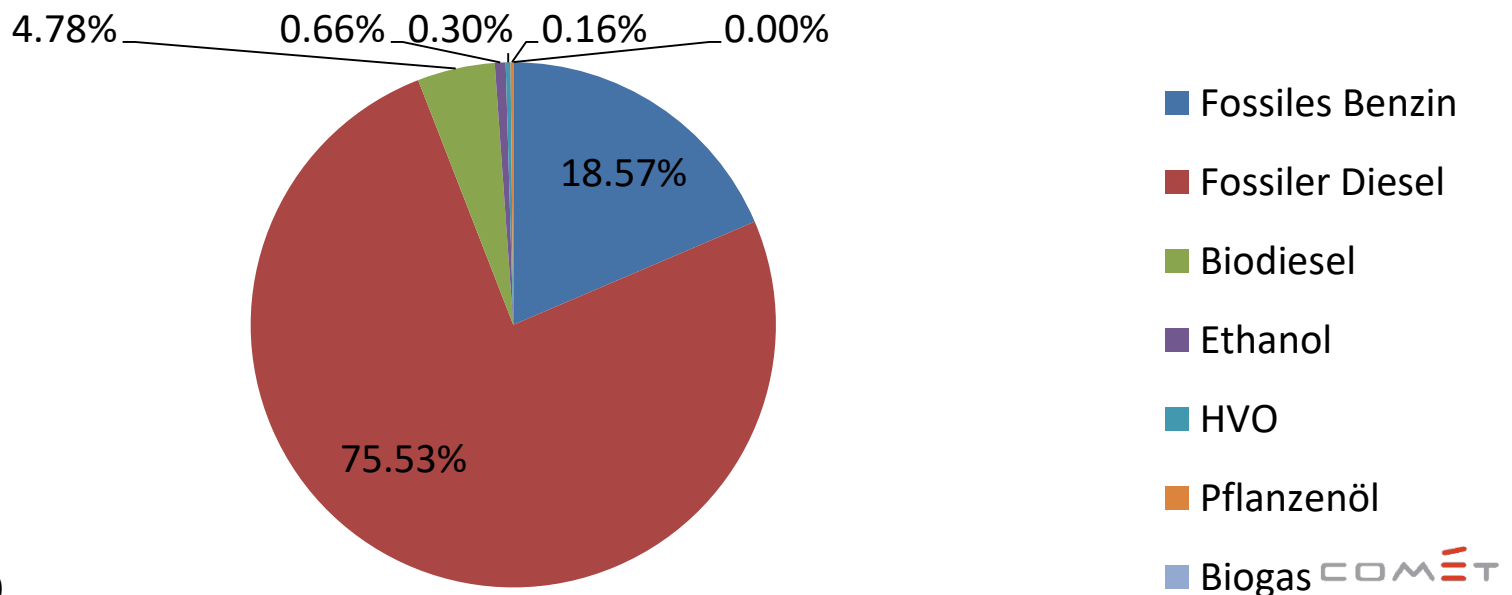
- Spruce-based pulp production for textile fibres, 155 kt/year
- Already provides green electricity and district heating
- Plans to ferment brown liquor to ethanol (same concept as Borregaard), currently performing detail engineering
- Planned capacity of 30 million litres of 2G ethanol





Biofuel consumption

- Main fuel grades are E5 and B7
- Currently marginal use of FAME and HVO in higher blends or pure, due to low price of fossil diesel
- Substitution of fossil fuels was 6.1% (energy) in 2017





Policy

- Will have to follow RED-II
- RED-II decreased the specific subtarget for advanced biofuels from the planned 0.5% in 2020 to 0.2% in 2022
- AustroCel Hallein production of 30 million litres of 2G ethanol corresponds to 0.17% (energy) of total transport fuel consumption in Austria
- Government published integrated climate and energy strategy in 2018 → might increase attention on biofuels again



Technology providers

- BDI:
 - Advancing bioCRACK technology
 - BDI BioLife Science started up 15 t/a astaxanthin production from algae in January 2019
- Vogelbusch continues (conventional) ethanol technology
- Aichernig Engineering (former Repotec) and Güssing Renewable Energy commercialize the Güssing gasification technology
- Ecoduna operates 1 ha demonstration facility for algae production; 788 m³ PBR → 100 t/year algae biomass