Algae - Future Feedstock for Renewables
Highly productive algae

- Photosynthetic algae may be cultivated wherever there is water and sunlight, also in sea water and in land areas unsuitable for other types of cultivation

- Algae grow and divide very quickly → areal oil production potential is many times higher than that of oil crops

- The composition of algal cells can be modified by adjusting the growth conditions
Sustainability drives algae

- Low fresh water footprint
- Grown on non-arable land
- GHG emission savings

Sustainable cultivation utilising sea water
Efficient land use, high biomass yield, sustainable applications
Regulations in the US and EU support algae as low-emission feedstock for biofuels

CO-FUNDED BY BUSINESS FINLAND
Numerous lab and field experiments

Example projects:

- AlgaePARC (NL)
- Solar Biofuels Research Centre (AUS)
- EU Fuel4Me
- Lab experiments with several partners
- Ongoing Robust Algae Systems (ROBA) project with Finnish ecosystem partners

Driven by algal oil for feedstock growth

- Neste has understanding on the characteristics of different algae oils and their impact on fuel processing
- In-depth feasibility and sustainability (e.g. carbon intensity) calculations using primary data from experiments
Thank you

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