



Norwegian Centre
for Environmentfriendly
Energy Research

Bio4Fuels

Norwegian Centre for Sustainable Bio-Based Fuel and Energy



Sustainable Biofuels in a Norwegian context

Judit Sandquist and Duncan Akporiaye

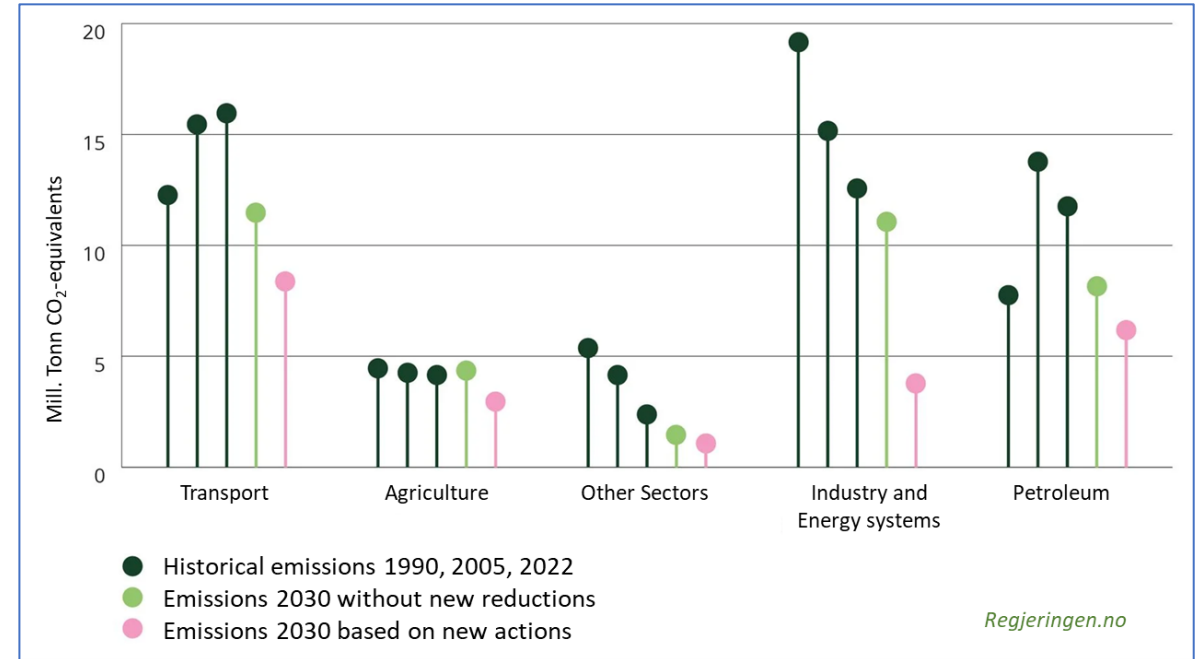
SINTEF



Sustainable Transport Fuels central to Norway's increased ambitions for 2030.

Norwegian Government has set increased ambitions for reduction of Norway's Climate gas emissions within 2030 - giving biofuels a central role

- Biofuels to contribute to 40% increased reductions – equivalent to 2.7 mill tonn of a total of 6.4 mill tonn CO₂ equivalents
 - Increase of blending mandates for biofuels towards 2030:
 - Road transport to 33%
 - Non-road vehicles to 28%
 - Marine transport to 18%
 - Aviation to follow same blending mandates increase as defined in ReFuelEU (6/0.7%).



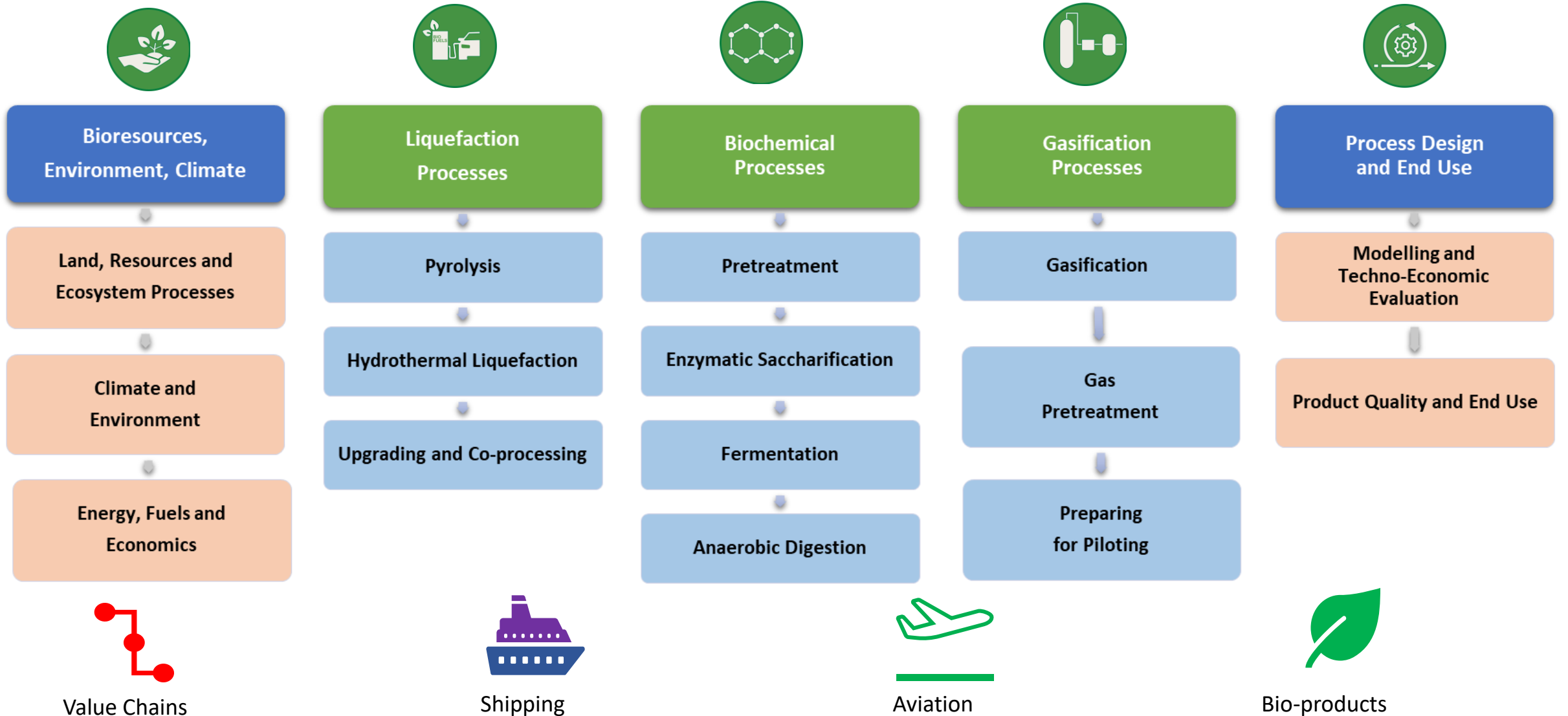
Focus on technologies relevant for Norway.



Demonstration and commercialization of different technologies by Stakeholders

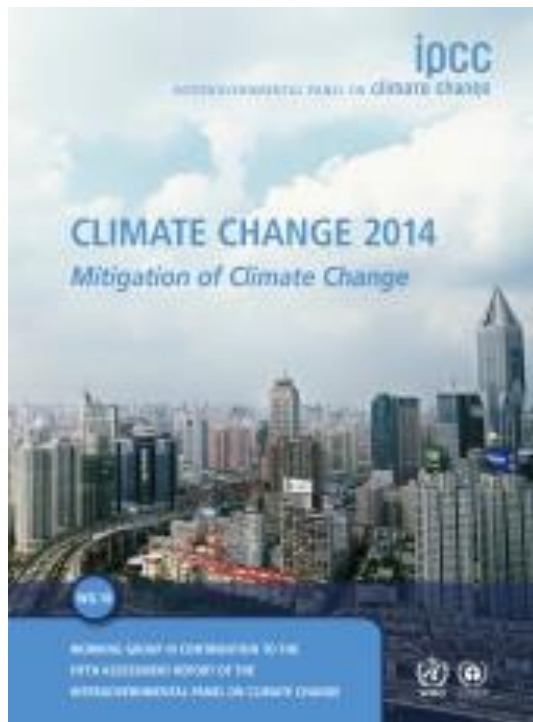


Value Chains for Norwegian Context

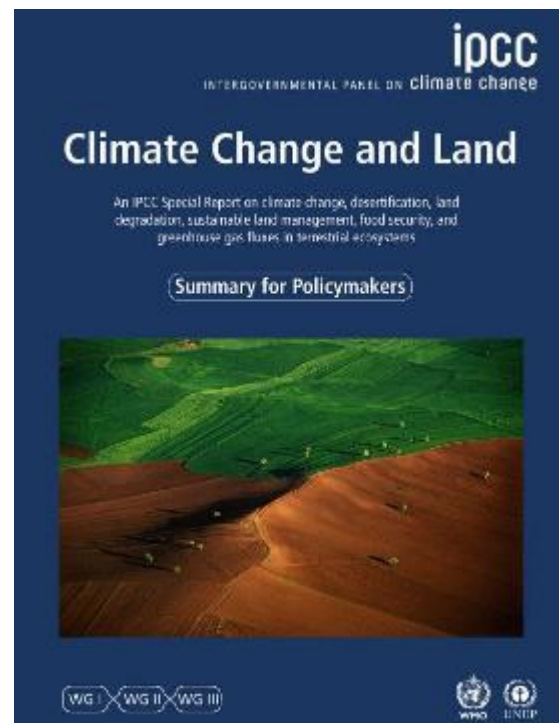


Contributing to IPCC and IPBES

2014



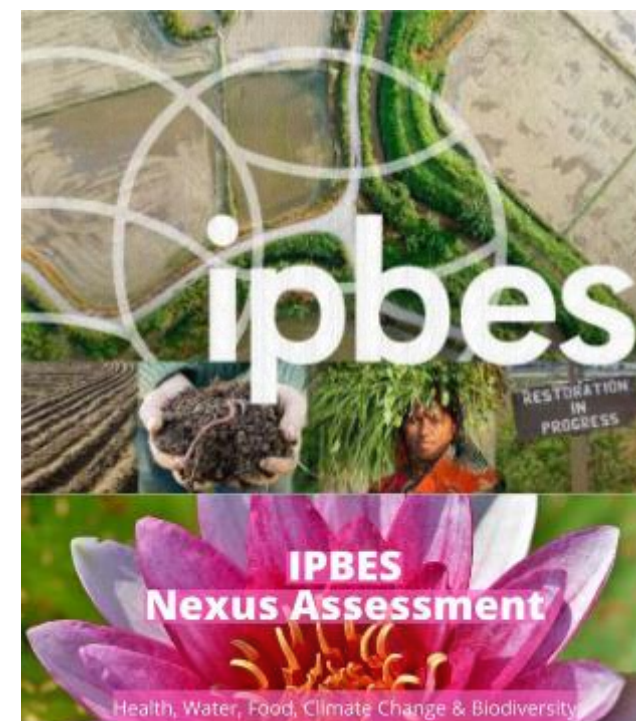
2019



2022



2024



Focus on Policy, Public engagement and Dissemination

Sintef (12.00-12.45) • Fysisk + streaming

Kortreist og bærekraftig biodrivstoff: Er det mulig?

SINTEF

MEDV'ND

BIO4 FUELS Webinar

Forest Resources

10 February 2023, 12:00 - 13:00, Central European Time

[TEAMS link to Webinar](#)

Program
12.00 Welcome and introduction, Duncan Akporiaye, SINTEF AS/ Bio4Fuels Centre Director
12.05 Biofuel in the context of LULUCF in EU's Fit for 55, NIBIO
12.20 The quantification and tracing of harvest leakage in the Northern Europe, NMBU
12.35 How to balance the use of forest for carbon storage and as feedstock for industry, NMBU
12:50 Q & A

SPEAKERS

- Gunnhild Sjøgaard**
Head of Research
Department of Forest Chains
Norwegian Institute of Bioeconomy Research, NIBIO
- Jinhui (June) Hu**
PhD Candidate
Faculty of Environmental Science and Natural Resource Mgmt
Norwegian University of Life Sciences, NMBU
- Per Kristian Renstad**
Associate Professor
Faculty of Environmental Science and Natural Resource Mgmt
Norwegian University of Life Sciences, NMBU

A Webinar Organized by Norwegian Centre for Sustainable Bio-based Fuels and Energy, Bio4Fuels, A Centre for Environment-Friendly Energy Research (FME)

For more information:
 Haldis Watson: haldis.watson@sintef.no
 Janne B. Utaker: janne.beate.utaker@nmbu.no

BIO4 FUELS Webinar

Advanced Biofuels and the EU Directives

24 August 2023, 09:00 - 10:00, Central European Time

[Click here to join](#)

Program
09.00 Welcome and introduction, Bio4Fuels
09.05 Biofuel in the Report "Klimatiltak i Norge mot 2030", Norwegian Environment Agency
09.25 The Transition from RED II to RED III, Schjødt
09:50 Q&A and end

SPEAKERS

- Mats Nordum**
Senior Advisor, Transport
Norwegian Environment Agency
- Torkjel K. Grendalen**
Partner
Schjødt
- Mari Cecilie Hansen**
Research
Schjødt

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BIO4 FUELS Webinar

Sustainable Aviation Fuels

27 April 2023, 09:00 - 10:00, Central European Time

[Click here to join](#)

Program
09.00 Short welcome and introduction, Duncan Akporiaye, SINTEF / Bio4Fuels Centre Director
09.05 Climate change impacts of e-fuels for aviation in Europe under today's conditions and future policies, NTNU
09.20 SAF - challenges and opportunities from an R&D perspective, SINTEF
09.35 Production of e-fuel at Hereya Industrial Park, Nordic Electrofuel
09:50 Q & A

SPEAKERS

- Duncan Akporiaye**
Centre Director
Bio4Fuels
- Vedant Pushpahas Ballal**
PhD Candidate
Department of Energy and Process Engineering
Faculty of Engineering, NTNU
- Bjorn Christian Enger**
Senior Research Scientist
SINTEF
- Bjorn Bringerdal**
Chief Technical Officer
Nordic Electrofuel

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BIO4 FUELS Webinar

Updates on anaerobic digestion - Perspective from the United States

15 September 2023, 08:00 - 9:00, Central European Time

[Click here to join](#)

Program
08.00 Welcome and introduction, Bio4Fuels
08.10 Transforming food and agricultural waste into bioenergy and bioproducts, UIC
08.35 Anaerobic co-digestion of food waste and sewage sludge at high organic loading rate, UHM
08:55 Q&A and end

SPEAKERS

- Svein Jarle Horn**
Professor / Deputy Director
Norwegian University of Life Sciences (Bio4Fuels)
- Ruihong Zhang**
Professor
University of California Davis (UC)
- Saim Kumar Khadwal**
Professor
University of Hawaii at Manoa (UHMM)

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BIO4 FUELS Webinar

What does it take to meet the Government's climate action plan (Grønn bok/Green book)

7 March 2024, 09:00 - 10:00, Central European Time

[Click here to join](#)

Program
09.00 Welcome and introduction, Bio4Fuels
09.05 What does it take to meet the Government's climate action plan
09:50 Q&A and end

Link to the Government's climate action plan [here](#) (Norwegian)

SPEAKERS

- Duncan Akporiaye**
Centre Director
Bio4Fuels
- Per Kristian Renstad**
Associate Professor
Norwegian University of Life Sciences (NMBU)

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BIO4 FUELS Webinar

CO₂ valorization using gas fermentation processes

15 February 2024, 09:00 - 10:00, Central European Time

[Click here to join](#)

Program
09.00 Welcome and introduction, Bio4Fuels and SFI IB
09.05 Biotech-based chemicals production from industrial CO₂, SINTEF
09.30 Single cell protein from CO₂ and hydrogen, Gas 2 Feed
09:55 Q&A and end

SPEAKERS

- Svein Jarle Horn**
Director
Bio4Fuels
- Håvard Sletta**
Centre Director
SFI Industrial Biotechnology
- Alexander Wentzel**
Chief Scientist
SINTEF
- Arild Johannessen**
CTO
Gas 2 Feed

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BIO4 FUELS Webinar

Novel applications of anaerobic digestion processes

15 June 2023, 09:00 - 10:00, Central European Time

[Click here to join](#)

Program
09.00 Welcome and introduction, Bio4Fuels/NMBU
09.10 Production of acids from organic residues for fish feed, SLU
09.30 Anaerobic Digestion Biorefinery, UB
09:50 Q&A and end, NIBIO

SPEAKERS

- Anna Schürer**
Professor
Department of Molecular Sciences, Swedish University of Agricultural Sciences, SLU
- Mohammad Taherzadeh**
Professor
Department of Resource Recovery and Safety Tech
University of British Columbia, UB
- Svein Jarle Horn**
Professor
Bio4Fuels Centre Director
Department of Resource Recovery and Safety Technology
Norwegian University of Life Sciences, NMBU
- Li-Ping Tseng**
Professor
Norwegian Institute of Bioeconomy Research, NIBIO

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BIO4 FUELS Webinar

Climate-Friendly Energy in the Norwegian Armed Forces and Norwegian Construction Site Engines

23 November 2023, 08:00 - 9:00, Central European Time

[Click here to join](#)

Program
09.00 Welcome and introduction, Bio4Fuels
09.05 Report on the Zero Emission Defence, FFJ
09.30 The Energy Situation among Norwegian Construction Site Entrepreneurs, MEF
09:55 Q&A and end

SPEAKERS

- Duncan Akporiaye**
Centre Director
Bio4Fuels
- Fredrik Tronhus**
Head of Communications
Maskinvesenningen Futura (MEF)
- Brynjør Arntinsson**
Senior Researcher
The Norwegian Defence Research Establishment (FFJ)

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