



IEA Bioenergy Task 39

Virtual Business Meeting

2019-2021 Recap: Significant Achievements in the triennium

**Jim McMillan (NREL), Jack Saddler and
Mahmood Ebadian (UBC)**

8-9 November 2021

The IEA Bioenergy Technology Collaboration Programme (TCP) is organised under the auspices of the International Energy Agency (IEA) but is functionally and legally autonomous. Views, findings and publications of the IEA Bioenergy TCP do not necessarily represent the views or policies of the IEA Secretariat or its individual member countries.

Meeting Agenda

Monday, 8 November 2021

Task 39 Project Updates	
10 minutes	General Introduction; Update on Task 39 projects, activities, budget, ExCo, etc. (Jim McMillan)
20 minutes	Feedstock-to-biofuel(s) supply chain analysis. Focus on CAPEX and OPEX cost reduction opportunities for advanced biofuels (Ravi Gupta and Alok Satlewal)
20 minutes	Successes and lessons learned for conventional/advanced biofuels deployment: Inter-Task project (Tomas Ekbom and Franziska Müller-Langer)
15 minutes	Biofuels in marine shipping report/Issues affecting utilization of advanced biofuels in the marine sector (Sune Tjalfe Thomsen)
20 minutes	Biofuels Demonstration Plants (website, etc.) (Andrea Sonnleitner and Dina Bacovsky)
20 minutes	Overview of existing/proposed certifications used for oleochemical and lignocellulosic-based biofuels supply chains; certification scheme improvement opportunities (plus brief description of proposed project for next triennium) (Paul Sinnige)
15 minutes	LCA, sustainability of biofuels pathway to identify key metrics beyond GHG reduction, spanning both feedstocks and conversion technologies (plus update of IEA HQ led project) (Don O'Connor)

Meeting Agenda

Tuesday, 9 November 2021

Task 39 Project Updates, continued	
20 minutes	Biofuels production and use status in “emerging” economies (plus brief description of proposed project for next triennium) (Glaucia Mendes Souza and Rubens Maciel Filho)
15 minutes	Biojet fuel/SAF/decarbonization of the aviation sector (Susan van Dyk)
15 minutes	Progress in the production of drop-in biofuels /co-processing (Jianping Su, Susan van Dyk and Jack Saddler)
20 minutes	Implementation agendas report (compare-and-contrast of biofuels policies) (Mahmood Ebadian)
35 minutes	Brief discussion of proposed work for the next triennium (Group Discussion, led by Tomas and Glaucia)
10 minutes	Possible virtual/hybrid Task 39 business meetings in early 2022? (Group Discussion, led by Tomas and Glaucia) Newsletters to be published in 2021 and 2022: Second half of 2021 - Norway First half of 2022 - ??
5 minutes	Concluding remarks, wrap up and transition (Jim, Jack, Tomas and Glaucia)

2019-2021 Recap: Significant achievements (1)

Publications

Commissioned (completed) Reports

- “Progress in commercialization of biojet /Sustainable Aviation Fuels (SAF): Technologies, potential and challenges” (2021)
- “Progress towards biofuels for marine shipping” (2021)
- Update of demonstration plant database (2021)
 - 130 entries updated; 60 newly created (including SAF, HVO, some efuels, some older plants)
 - About 280 entries currently active
 - Website and database maintenance
- Compare and Contrast Transport Biofuels Policies- Implementation Agenda, 2018-2019 Update (2020)
- Comparison of biofuel life cycle analysis (LCA) tools, Phase 2, Part 2: biochemical second generation (2G or cellulosic) ethanol production and distribution (2020)

2019-2021 Recap: Significant achievements (1)

Publications- continued

Commissioned (completed) Reports

- Assessment of likely Technology Maturation pathways for biojet production from forest residues. The ATM Project, jointly sponsored by Boeing (2019)
- Drop-in Biofuels- The key role that co-processing will play in its production (2019)
- Comparison of Biofuel Life Cycle Analysis (LCA) Tools Phase 2, Part 1: FAME and HVO/HEFA (2019)

2019-2021 Recaps: Significant achievements (2)

Publications, continued

Peer-review manuscripts

- Biofuels policies that have encouraged their production and use: An international perspective: published in the ***Energy Policy*** journal (2020)
- Potential synergies of drop-in biofuel production with further co-processing at oil refineries: published in ***Biofuels, Bioproducts & Biorefining (Biofpr)*** (2019)
- Comparison of biofuel life-cycle GHG emissions assessment tools: The case studies of ethanol produced from sugarcane, corn, and wheat: published in ***Renewable and Sustainable Energy Reviews*** (2019)

Inter-Task Projects

Contribution to two IEA Bioenergy Inter-Task project reports (2020)

- Advanced Biofuels - Potential for Cost Reduction
- The Contribution of Advanced Renewable Transport Fuels to Decarbonizing Transport by 2030 and Beyond

2019-2021 Recap: Significant achievements (3)

Business meetings, joint workshops and webinars

- February 2021-through-August 2021: Three virtual Task 39 “brainstorming sessions”
- Task 39 business meeting, 19-21 April 2021 (virtual)
- Task 39 business meeting, 23-24 November 2020 (virtual)
- Task 39-Task 44 Joint Workshop, 25 November 2020 (virtual)
- Participated in BBEST 2020-21/Biofuture Summit II conference, May 2021 (virtual)
- Task 39’s presentation for the IEA Bioenergy Webinar entitled, “Sustainable Aviation Fuel/Biojet Technologies – Commercialisation Status, Opportunities and Challenges”, June 2021
- BC-SMART Biofuels Consortium/IEA B. Task 39-hosted panel discussion (virtual), Decarbonising the Marine Sector: Progress and Aspirations, 4 December 2020
- BC-SMART Biofuels Consortium/IEA B. Task 39-hosted panel discussion (virtual), Crystal ball gazing: How do we decarbonise long distance transport during/after COVID-19?, 30 June 2020

2019-2021 Recap: Significant achievements (4)

Business meetings, joint workshops and webinars

- Task 39 business meeting, 23 June 2020 (virtual)
- IEA B. Webinar: Advanced Biofuels – Potential for Cost Reduction, 24 April 2020
- Task 39 business meeting, 2 April 2020 (virtual)
- Task 39 business meeting, Stockholm, Sweden, 16-17 September 2019
- IEA Bioenergy Webinar: Drop-in Biofuels - The key role that co-processing will play in its production, 25 September 2019
- Task 39 business meeting in Ispra, Italy/Joint JRC-Task 39 workshop, Biofuels Sustainability - Focus on Lifecycle Analysis, 15-17 May 2019

2019-2021 Recaps: Significant achievements (5)

Task 39 newsletters

- (Upcoming) Issue #58, Feature article on biofuels-related developments in **Norway** (pending)
- Issue #57, Feature article on biofuels-related developments in **Ireland** (June 2021)
- Issue #56: Feature article, **India** biofuel economy roadmap - challenges & prospects (Dec 2020)
- Issue #55: Feature article, **Sweden** targets world's highest biofuel blending (Oct 2020)
- Issue #54: Feature article, Biofuels production and consumption in **Germany**: Status, advances and challenges (May 2020)
- Issue #53: Feature article, Biofuels Production and Consumption in **Denmark**: Status, advances and challenges (Dec 2019)
- Issue #52: Feature article, 'Poldering' a new climate agreement in **the Netherlands** (Aug 2019)
- Issue #51: Feature article, Biofuels production and consumption in **Brazil**: Status, advances and challenges (Apr 2019)

IEA Bioenergy Newsletters/Bulletins

- IEA Bioenergy Summary Series: Comparison of international life cycle assessment (LCA) biofuels models (07 2019)
- IEA Bioenergy Bulletin: Workshop Summary on joint workshop of Task 39 and the European Commission's Joint Research Centre, Ispra, Italy (Sept 2019)

Activities/expected deliverables by the end of the triennium

- Publish Task 39 newsletter with feature article on **Norway**
- Draft Task 39 reports that will be circulated for review:
 - **(draft circulated for internal review)** “Implementation Agendas: 2020-2021 Update - Compare and Contrast Transport Biofuels Policies”
 - “The status of biofuels production and use in non-IEA countries/emerging economies” (**Brazil lead**)
 - “Review of existing and proposed certifications for oleochemical and lignocellulosic-based biofuels supply chains; identify certification scheme improvement opportunities” (**Netherlands lead**)
 - “Feedstock-to-biofuel(s) supply chain analysis. Focus on ethanol” (**India lead**)
 - “Sustainability and LCA assessment of biofuels pathways” (**Canada lead**)
 - “Progress in the production of drop-in biofuels /co-processing” (**Canada lead**)
 - InterTask project, “Successes and lessons learned for conventional/advanced biofuels deployment” (**Sweden/Germany lead**)

Upcoming Webinar (1)



BC SMART Low Carbon Fuels Consortium



BC SMART Consortium/IEA Bioenergy Task 39 Panel Discussion:

“Decarbonizing the trucking sector using low carbon intensive fuels”

Monday, 22nd November 2021, 8:30-10:00 PST (17:30-19:00 CET)



Moderator

David Schick, Vice President of the Canadian Fuels Association



Panelist

Pierpaolo Cazzola, Advisor– Energy, technology and environmental sustainability, ITF



Panelist

Evan Dacey, Fleet Strategy and Asset Management, the City of Vancouver



Panelist

Neville Fernandes, Vice President, Corporate Affairs and Development for Renewable Energy Group, Inc.



Panelist

Don V. O'Connor President, (S&T)² Consultants Inc.

The event flyer and registration link are posted at IEA Bioenergy Task 39 Website/Events and Conferences: <https://task39.ieabioenergy.com/events-conferences/>

Upcoming Webinar (2)



etaflorence
renewable
energies

29 November - 9 December 2021

IEA Bioenergy Triannual Online Conference 2021

Bioenergy - A critical part of the path to carbon neutrality

This event features a series of online sessions spread over two weeks between **29 November** and **9 December 2021**. The central theme is the **role of biomass in the transition towards a carbon neutral society**.

There will be one or two sessions of 2 hours per day. Each day will be dedicated to a central topic, see the agenda at IEA Bioenergy Website:

<https://www.ieabioenergyconference2021.org/>

On-line participation is free of charge, but pre-registration is required.

Thanks for your attention!

Jim McMillan, Task leader,
jim.mcmillan@nrel.gov

Jack Saddler, Task co-leader,
jack.saddler@ubc.ca

Mahmood Ebadian, Task coordinator,
mahmood.ebadian@ubc.ca



IEA Bioenergy

Technology Collaboration Programme

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