

Bio4Energy Partner in a Swedish National Initiative to Rid Airline Transportation of Fossil Fuel

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Background

- On January 26, 2017, the Swedish Government decided on a new strategy for airline transportation (dnr N2017/00590/MRT)
- Aims at decreasing of effects of aviation on environment and climate
- The Swedish Energy Agency initiated a program dedicated to R&D on sustainable aviation biofuels
- The program is running 2018-2020 and has a total budget of 100 MSEK

SwEA First Call for Projects

- The first call had a budget of ~40 MSEK of which 10 MSEK was dedicated to an innovation cluster project
- Funding during the period November 1, 2018 - December 30, 2020 for (a) an innovation project that should cover the whole value chain and include an analysis of the need for actions to support a transition to sustainable aviation fuels, and (b) a number of ordinary R&D projects
- Deadline on September 3, 2018
- Eleven projects received support amounting to a total of ~34 MSEK

Innovation Cluster FFT-2045

- Fossilfria Flygtransporter 2045 (FFT-2045)
- Consortium headed by RISE, Scandinavian Airlines, and Swedavia
- About 20 members (including Bio4Energy)
- Focus on sustainable biofuels for domestic aviation (~2.2 TWh annually)
- Aims
 - Roadmap for implementation of sustainable biofuels for aviation
 - Identify technical and market-related prerequisites for the transition
 - Disseminate knowledge and support competence development

FFT-2045 activities

- November 7, 2018
Support from SwEA officially announced
- Newsletter
- February 5, 2019
Matchmaking event in Stockholm
- February 6, 2019
Kick-off event in Stockholm
- April 15, 2019
Official project presentation and press meeting
with Swedish minister of enterprise, Ibrahim Baylan,
in Stockholm
- May 15, 2019
Trend scouting in Stockholm

Projects Supported, First Call

Except for the innovation cluster, 10 other projects received support:

- Skapa förutsättningar för hållbara flygtransporter (RISE et al.)
- Från flis till flygplan i Småland - FFS (RISE et al.)
- Flygbränsle från lignin (SU)
- ForestJet II - Hållbar produktion av flygbränsle med biokemiska metoder (SEKAB E-Tech et al.)
- Grönt jetbränsle från en integrerad katalytisk process (Chalmers)
- Genomförbarhetsstudie småskalig Gas-To-Liquid teknik för grönt flygbränsle från Sveriges skogar (Cortus, KTH)
- Carbofuel – utveckling och integrering av biodrivmedelsprocesser (LU, Kiram)
- Validering och demonstration av skogsbaserade bioflygbränslen, steg 1 (LTU et al.)
- Oljehaltiga jästsvampar för produktion av flygbränsle från sågverksrester (RISE Processum et al.)
- Genomförbarhetsstudie: Kraftvärmeintegrerad flygbränsleproduktion (Bioshare et al.)

Bio4Energy-Related Projects Supported Through the First Call

Från flis till flygplan i Småland - FFS

- RISE, FORES, KLM Royal Dutch Airline, Luleå University of Technology, SkyNRG B.V, Smaland Airport AB, Växjö Energi AB, Växjö kommun and Södra skogsägarna.
- Systems analysis with focus on local and regional conditions
- Project leader: Johanna Mossberg, RISE

Bio4Energy-Related Projects Supported Through the First Call, Cont'd

Validering och demonstration av skogsbaserade bioflygbränslen, steg 1

- Luleå University of Technology, BRA Sverige AB, Ineratech GmbH, ARVOS GmbH, Smurfit Kappa, Fly Green Fund, RISE Innventia AB, Sveaskog, Svenska Bioenergiföreningen and SAS AB
- Fischer-Tropsch technology for production of aviation biofuel
- Project leader: Fredrik Granberg, LTU

Bio4Energy-Related Projects Supported Through the First Call, Cont'd

Oljehaltiga jästsvampar för produktion av flygbränsle från sågverksrester

- RISE Processum AB, SEKAB E-Technology AB, and Umeå University
- Biochemical conversion of saw dust using a sugar platform process with oleagineous yeasts
- Project leader: Björn Alriksson, RISE Processum

SwEA Second Call for Projects

- The budget of the second call was ~55 MSEK
- Covers funding for R&D projects during the period June 1, 2019 - December 31, 2020
- Deadline on March 12, 2019
- There were 21 project applications applying for a total amount of ~115 MSEK
- The 21 applications included projects headed by RISE (2), LTU (2), RISE Processum (1), UmU (1), and SLU (1).
- Outcome expected in May 2019



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