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ICAO Global Aviation Partnerships on Emissions Reductions (E-GAP) Multiplying Environmental Action



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SkyNRG

Creating supply chains in consortiums

Presentation at ICAO E-GAP

September 16, 2015

Theye Veen



SkyNRG



KLM **Argos**
spring associates
SkyNRG founded by three complementary JV partners

SkyNRG Sustainability Board
Solidaridad WWF
Copernicus Institute Utrecht University

KLM Corporate BioFuel Programme
accenture DSM Schiphol Group TOMTOM
SIEMENS HEINEKEN LOYENS Loeff
NIKE PHILIPS FMO FrieslandCompagnie
Ahold CBRE GLOBAL INVESTORS PGGM Gemeente Amsterdam
PERRETTI RICOH

RSB
SkyNRG first operator capable of supplying RSB certified jet fuel into wing

New partnerships
Project Solaris
Carbon War Room
SkyNRG Nordic



SkyNRG supplied most commercial sustainable jet fuel flights up to date

First Green Route
Start weekly KLM SJF flights from JFK New York to Schiphol Amsterdam



BioPort Holland



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ICAO Global Aviation Partnerships on Emissions Reductions (E-GAP) Seminar
ICAO Headquarters, Montréal, 16 to 17 September 2015

ENV2015



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BioPort Holland



Ministry of Infrastructure and the Environment

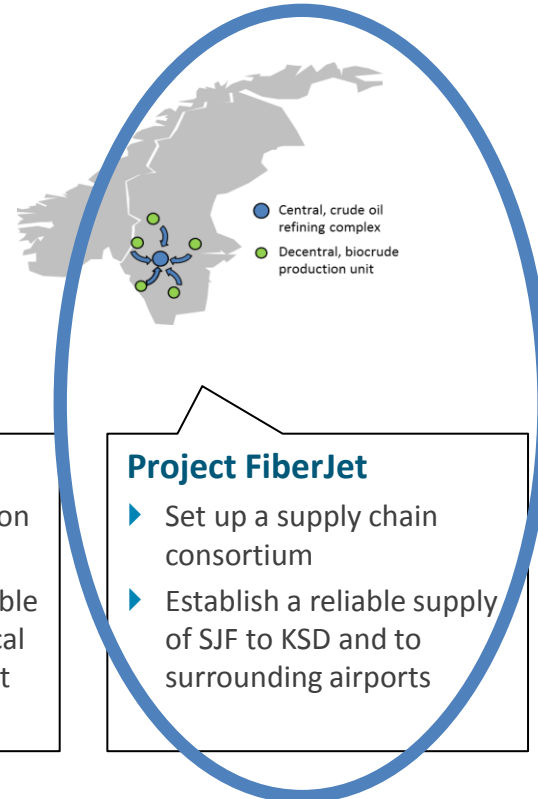


Ministry of Economic Affairs





SkyNRG Nordics teamed up with the actors in the Swedish forestry sector with the ultimate aim of realizing a SAF supply chain



Short term supply

- ▶ Permanent bio jet fuel tank installed at KSD
- ▶ Supplies commercial flights with SJF

Fly Green Fund

- ▶ Enables corporates to fly on SJF
- ▶ Funds will be used to enable green flights and drive local supply chain development project

Project FiberJet

- ▶ Set up a supply chain consortium
- ▶ Establish a reliable supply of SJF to KSD and to surrounding airports



FiberJet creates a regional supply chain based on forestry industry

Follow up discussions

- ▶ Presentation of high level techno-economics
- ▶ Gauge interests from stakeholders



Three potential supply chains selected

- ▶ Based on stakeholder inputs and initial techno-economic analyses (UU and SkyNRG), 3 potential supply chains were selected for more in-depth assessment:
 - Valorizing lignin from black liquor
 - Liquefaction at a pulp mill site
 - Stand-alone liquefaction



Initial workshop with potential supply chain partners

- ▶ Introduction on the renewable jet fuel market
- ▶ First joint discussions with the stakeholders



Set up core supply chain consortium

- ▶ Final consortium agreement ready to be signed by all parties
- ▶ Detailed project plan in place





Next steps:

Phase 1 **Concept development and partnership shaping**

- ▶ Key stakeholders consulted and engaged
- ▶ Project organization set up, including a dedicated team
- ▶ MoU/Lol signed by project partners

Phase 2 **In-depth assessment**

- ▶ In-depth techno-economic of the selected supply chains using real-life data
- ▶ Go/no-go decision
- ▶ Acquire funding to progress to a next phase in a consortium set up

Timeline

- ▶ 2015/2016

Phase 3 **Building the business case and acquire funding**

Phase 4 **Plant construction and commissioning**

Project Partners





Bioport Holland



FiberJet



Partners/friends

