EXPERIENCE FROM INTRODUCTION OF AVIATION BIOFUEL AT OSLO AIRPORT

Nordic Energy Research Seminar: Nordic Perspectives on the Use of Advanced Sustainable Jet Fuels for Aviation

Oslo, 01 SEPT 2016
• Avinor is responsible for Air Navigation Services (ANSP) and operate 46 airports in Norway

• Our modern society is totally dependent on aviation
WHY?
Traffic-growth % > Emission reductions %
AVINOR’S INVOLVEMENT IS ETHICALLY SOUND AND GOOD FOR BUSINESS
LONG TERM APPROACH AND ACTIVITIES

- The Norwegian aviation industry have been looking into sustainable jet biofuel since 2007
- Biofuel certified for use in civil aviation since 2009
- Major study in 2011-2013. Conclusion: Possible, but risky
- Avinor to invest up to MNOK 100 in jet biofuels (2013-2022)
- Demoflights to the ZERO conference 11 NOV 2014
- Fruitful collaboration with AirBP and airlines
- KLM/Embraer OSL-AMS campaign Q2 2016
- Several ongoing R&D projects
JAN 2016: OSL world’s first hub to offer jet biofuel to all airlines on a commercial basis

Cooperation with Air BP, SkyNRG, Neste and airlines

Thousands of bio jet flights have been carried out

This is the next step

Delivered to the main fuel farm and distributed through the hydrant and dispenser system

Important piece in the logistics puzzle for cost effective bio jet fuel distribution

EU ETS and domestic CO2-tax waived

Premium cost split between the project partners
FIRST BATCH (APPROX 600,000 LITRES)

- Based on Camelina from the ITAKA project in Spain
- Refined by Neste in Finland
- Shipped to Gävle in Sweden blended with fossil JetA1 (50/50) and stored there
- Transported to OSL by lorries
- Dropped into the fuel farm at OSL
- Distributed in the dispenser system

- Works very well
- No issues technically
- No issues with other airlines
- No issues with passengers
WAY FORWARD

• Avinor 2030 goal: 30 % of aviation fuel in Norway should be sustainable biofuel = Approx 400 mill litres
• Continued supply at OSL and possibly other airports
• Support national/Nordic production of sustainable jet biofuel
• Push for jet biofuel in Norway on several arenas
• Long term commitment
THE AVIATION INDUSTRY HAS DONE AMAZING THINGS BEFORE – AND WILL DO IT AGAIN

olav.mosvold.larsen@avinor.no