

CCU Conference – NOVA Institute

SkyNRG potential presentation abstract

General outline

In the presentation for the “Conference on CO₂ as Feedstock for Fuels, Chemicals and Fuels”, I can take various ‘view points’ on the Sustainable Aviation Fuels (SAF) market. From my previous discussions with several players in the CO₂ conversion industry, I discovered more and more interest in the SAF topic. However, I feel there is little knowledge on the opportunities that characterize this market as well as the challenges that come with certification of Aviation Fuels. From this point of view, I think a presentation building on these aspects would be very interesting for the various stakeholders in this field. I would propose to follow the following structure:

- Rationale for SAF
- SkyNRG experience
- Current SAF markets main challenges
- Opportunity for CO₂ based SAF

Potential structure presentation

Sustainable Aviation Fuels – Rationale

- The aviation industry is expected to grow 4.5% per year for the foreseeable future
- At the same time the industry has committed to ambitious sustainability targets
- De-carbonization options to reduce carbon emissions are limited in the sector
- Sustainable Aviation Fuels (SAF) are the only viable option in the short to medium term

SkyNRG experience - Create and accelerate development of a market for SAF

- SkyNRG is global market leader in supplying SAF, having supplied over 30 airlines worldwide
- SkyNRG is active in the downstream section of the supply chain, now developing conversion capacity
- SkyNRG has a sustainability board to make sure the SAF used/sold is sustainable throughout the supply chain

Current market – Challenges

- The price premium between SAF and Fossil AF is one of the key issues in the supply chain
- Airlines are limited in their capacity to pay a premium for SAF, therefore SkyNRG has developed several co-funding mechanisms to bridge the premium between SAF and Fossil AF
- Increase demand for truly sustainable feedstocks (biomass) leads to higher prices and slow scale-up
- SkyNRG is actively involved in several policy development tracks to create a competitive playing field for SAF production

Lack of production capacity – Opportunities for CO₂ based technologies

- There is only 1 SAF producing refinery in the world, AltAir Fuels
- Biomass to fuels development has been hampered by (sustainability) issues
- CO₂ based fuels could be a solution and could increase SAF capacity
- Still some challenges to overcome:
 - o Inclusion of CO₂ based fuels in European policy
 - o Level playing field with biomass based fuels
 - o Timely/Costly ASTM certification needed before CO₂ fuels can be used in aviation