PATHWAYS TO SUSTAINABLE AVIATION FUEL 2030 AND BEYOND
WE ARE SKYNRG

We are a SAF capacity developer

We supply SAF to airlines

We provide SAF solutions for corporate and individual travelers

We do not compromise on sustainability
AT SKYNRG WE ARE COMMITTED TO MAKING SAF THE

US SAF capacity project(s)

SkyNRG PNW, RNG to SAF, AtJ technology

European SAF capacity projects

1. Delfzijl (DSL-1), HEFA technology + waste oils
2. SkyNRG PNW, RNG to SAF, AtJ technology
3. Amsterdam, PtL technology
4. Germany, PtL technology
5. Sweden, FT technology + forestry residues
6. France, AtJ technology + agricultural residues

Project development pipeline

1. Business development
2. Feasibility & scoping
3. Project scoping/ pre-FEED
4. FEED & permitting
5. Construction and commissioning
6. Operation

Status of development

Ongoing business development, with ~10 early-stage SAF capacity projects running

Abbreviations: HEFA = Hydroprocessed Esters and Fatty Acids; AtJ = Alcohol-to-Jet; FT = Fischer-Tropsch; PtL = Power-to-Liquids; FEED: Front-end engineering design
REALISTIC SAF PRODUCTION IN US IS EXPECTED TO BE SHORT OF AMBITION

Key takeaways –

- About 0.9 bgal (2.6 Mt) SAF can be expected by 2026–2030 with current industry announcements.
- This means the US is currently set to be about 2.1 bgal (6 Mt) short of meeting its 2030 SAF ambition of 3 bgal.
- The majority of announced projects to date in the US will make use of food/feed inputs.
- Global market for SAF—ReFuelEU does not allow feed and food crop-cased feedstocks.
AFTER 2030, SAF GROWTH IN US WILL NEED TO COME FROM CELLULAR PATHWAYS

Key takeaways

- Between 500 - 750 SAF plants will be required to fulfil the expected US SAF ambition by 2050 (vs. ~15 dedicated plants currently announced)
- Rapid deployment of new technologies (AtJ/gasification + FT, PtL) and feedstock mobilization required to meet 2050 target
- Power-to-Liquids SAF could meet roughly a third of US SAF demand under constant jet fuel demand (75 Mt/27 bgal).
- US could become largest potential supplier of PtL in the world
RENEWABLE NATURAL GAS (RNG) RESOURCES IN THE US ARE VASTLY UNTAPPED

Cross-check from December 2020 study from Argonne National Laboratory and Energy Vision:
- The 157 operational projects currently producing RNG represent total production capacity of over 59,000,000 MMBtu/yr. Potential domestic RNG production is estimated to be between 590,000,000 MMBtu/yr and 1,180,000,000 MMBtu/yr.

*Source Data: ICF compilation from U.S. DOE 2016 Billion Ton Report, EPA LMOP, USDA Livestock Inventory, AgStar Project Database, Bioenergy Knowledge Discovery Framework.
Key Takeaways

- RNG provides scalable, sustainable pathway to SAF including PtL in the future

- Cellusic and PtL will be critical to meeting ambitious SAF targets

- US could be significant supplier of PtL if policy expands to include incentives for use of green H2 and CO₂
THANK YOU

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