

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




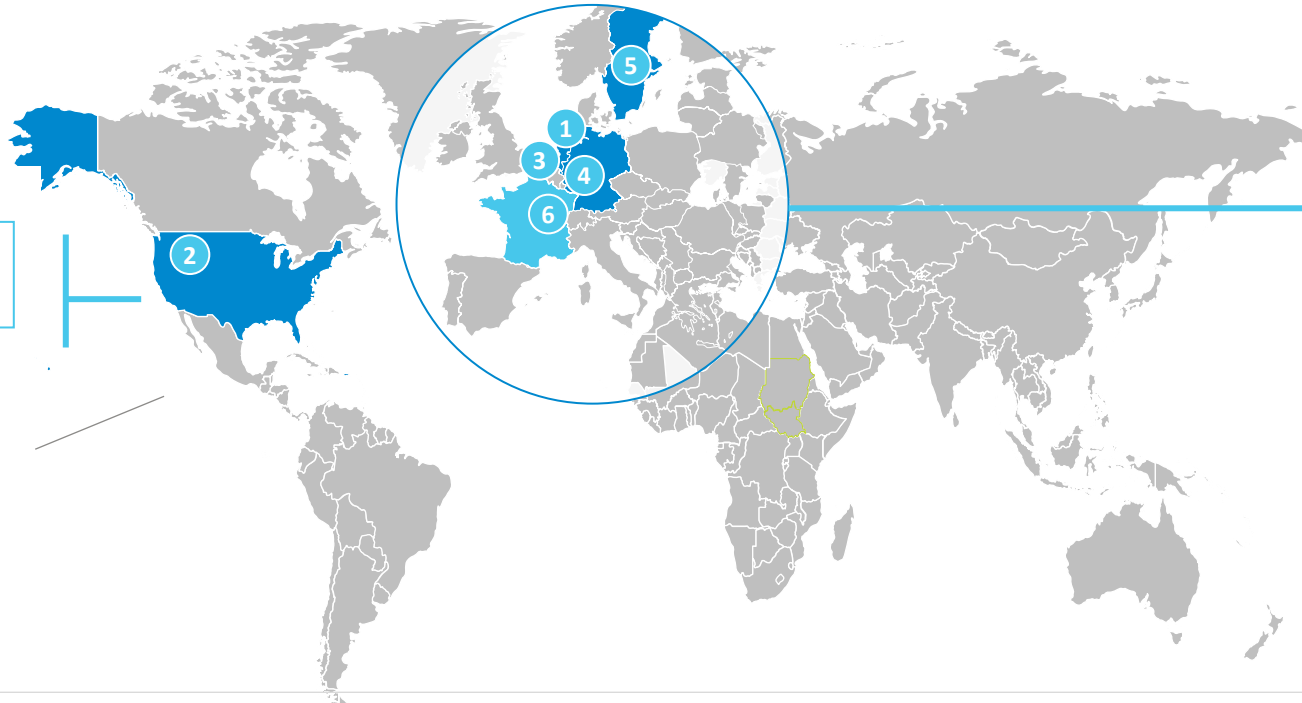
We do not compromise on sustainability








AT SKYNRG WE ARE COMMITTED TO MAKING SAF TH

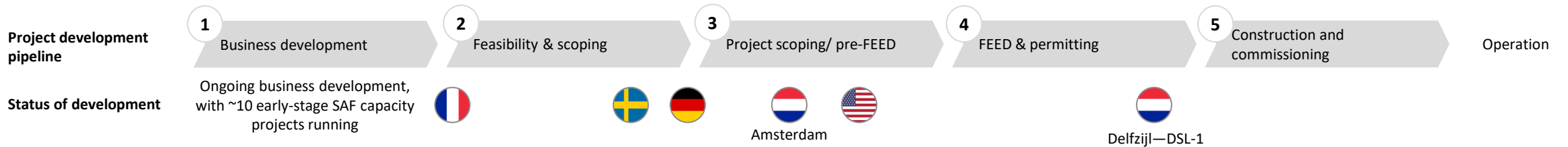
US SAF capacity project(s)

- 2  SkyNRG PNW, RNG to SAF, AtJ technology



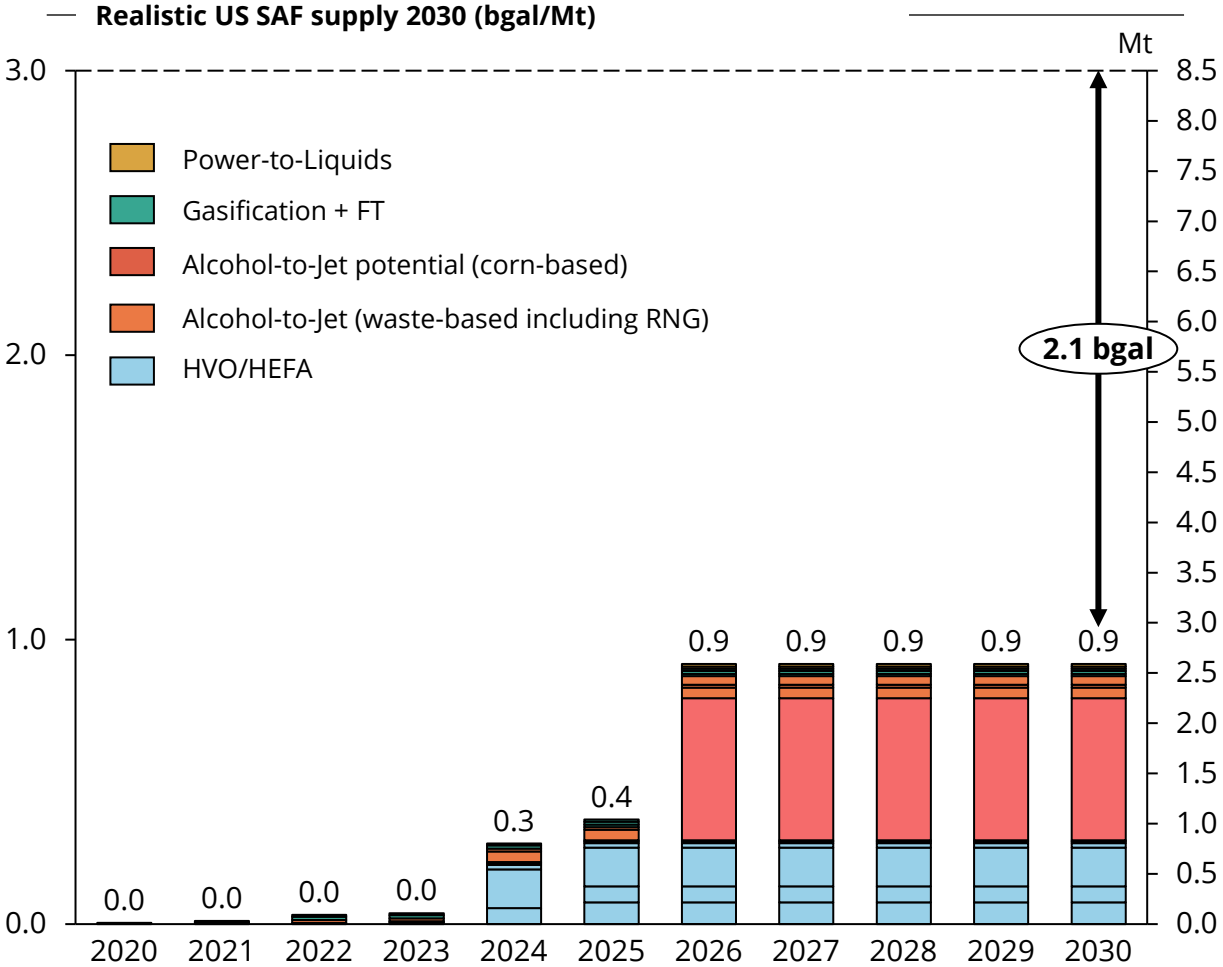
European SAF capacity projects

- 1  Delfzijl (DSL-1), HEFA technology + waste oils
- 3  Amsterdam, PtL technology
- 4  Germany, PtL technology
- 5  Sweden, FT technology + forestry residues
- 6  France, AtJ technology + agricultural residues



Abbreviations: = Hydroprocessed Esters and Fatty Acids; AtJ = Alcohol-to-Jet; FT = Fischer-Tropsch, PtL = Power-to-Liquids; FEED: Front-end engineering design

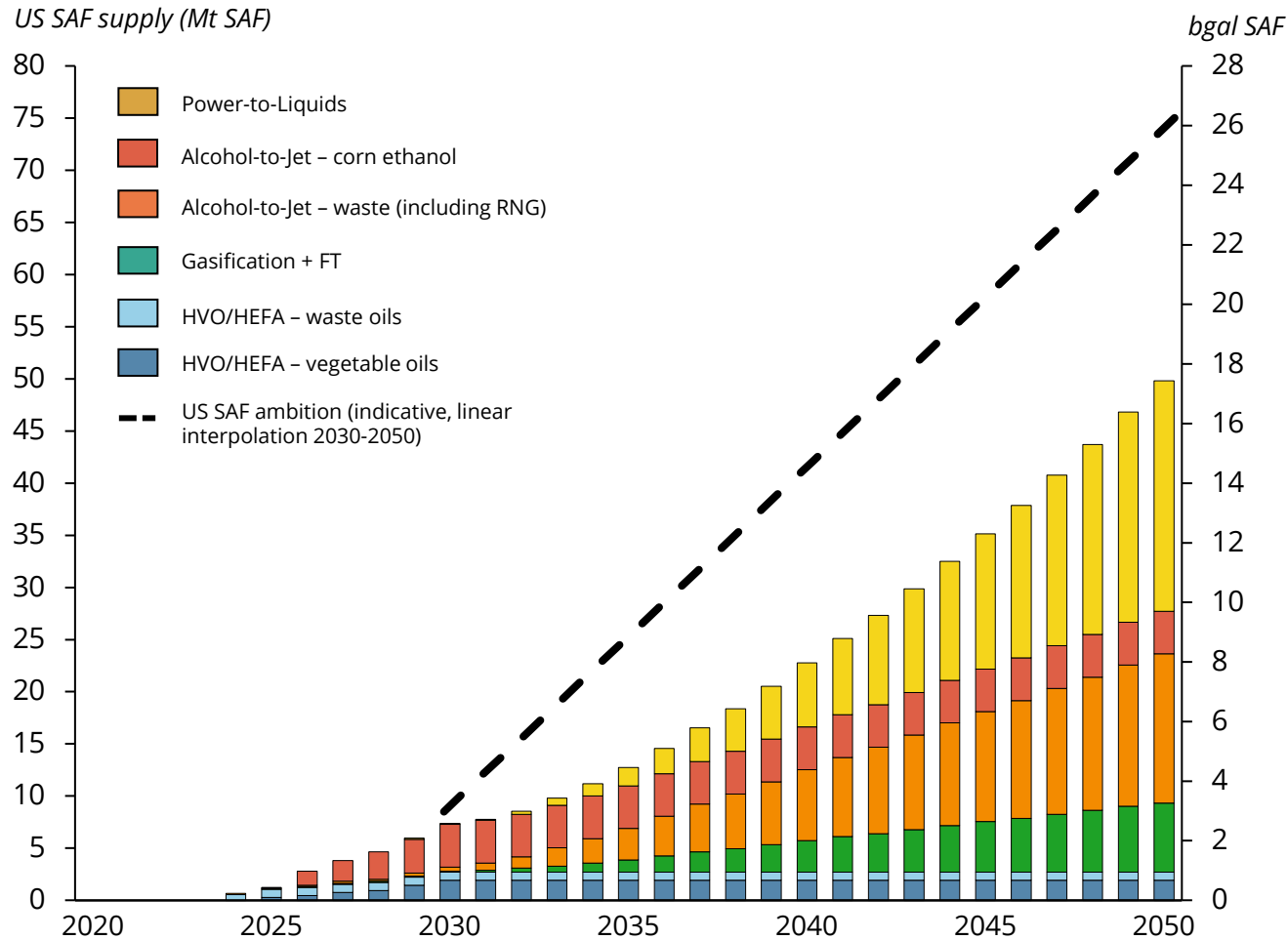
REALISTIC SAF PRODUCTION IN US IS EXPECTED TO BE SHORT OF AMBITION



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-based feedstocks

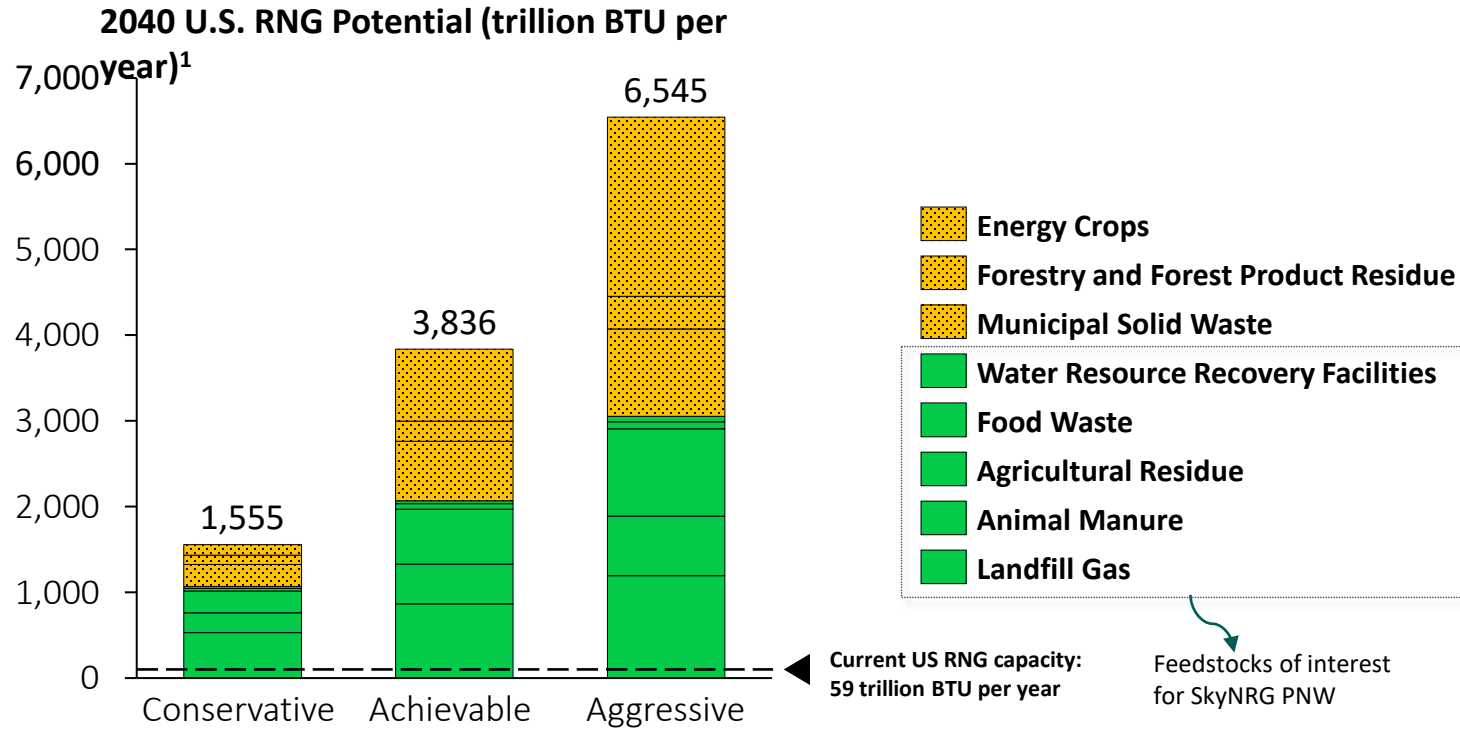
AFTER 2030, SAF GROWTH IN US WILL NEED TO ACCELERATE



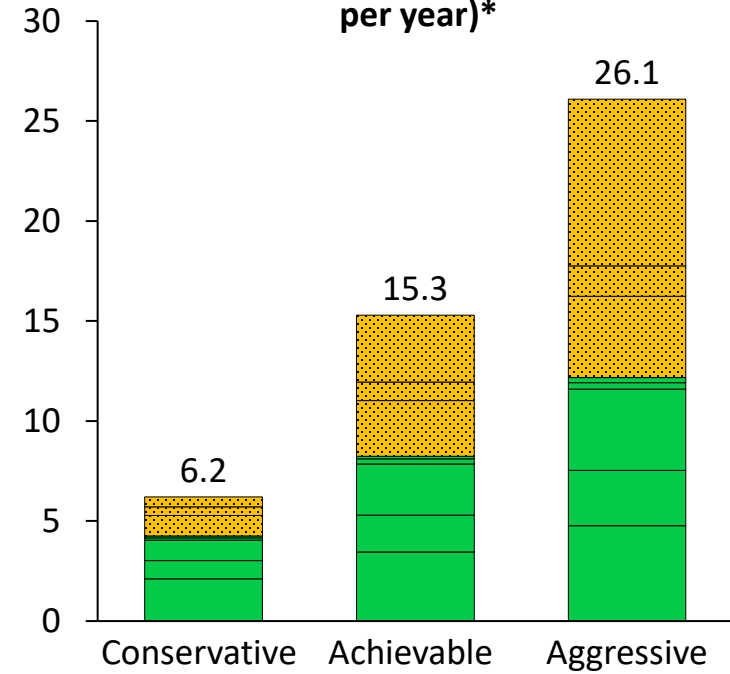
Key takeaways

- ▶ 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 U.S. ARE PLENTY



2040 Corresponding Sustainable Aviation Fuel (SAF) Production Potential (billion gallons of SAF per year)*



*Note: Assumes all RNG feedstock is converted into Sustainable Aviation Fuel. Uses yields from SkyNRG Americas' ProForma modeling of its 30 million gallon per year future facility.

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.

¹Source Data: ICF compilation from U.S. DOE 2016 Billion Ton Report, EPA LMOP, USDA Livestock Inventory, AgStar Project Database, Bioenergy Knowledge Discovery Framework.

An aerial photograph of a dense forest with trees in various shades of green and yellow, suggesting autumn. A large, dark shadow of an airplane is cast across the forest canopy, positioned in the upper left quadrant of the image. The shadow is clearly defined against the lighter-colored foliage.

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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