

Arcadia

eFuels

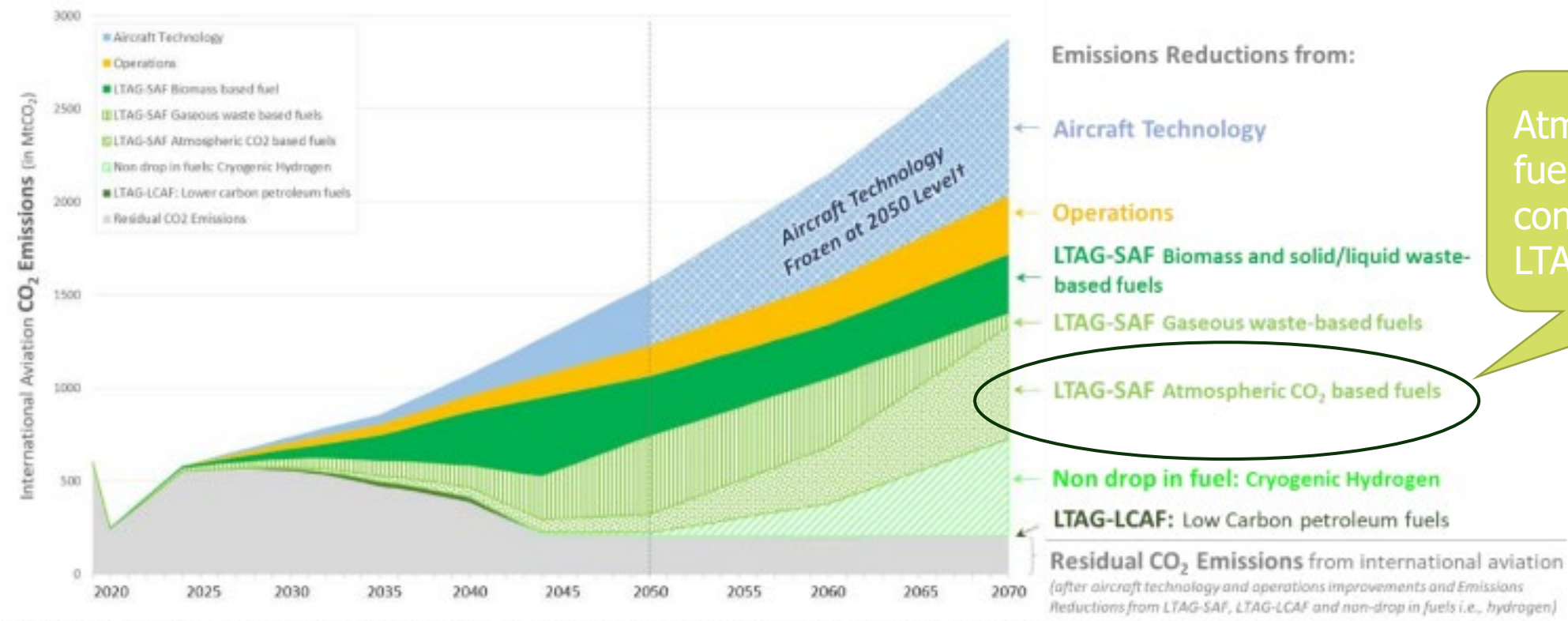
Producing the worlds' future fuels to protect our environment and power our world

**South Central Chapter of American
Association of Airport Executives**

August 9, 2023

Abatement will require an “all-hands” approach

ICAO Long Term Aspirational Goal Report, 2022



† Caution required with the interpretation of absolute CO₂ emissions levels after 2050 due to modelling assumptions e.g., frozen aircraft technology after 2050. Under these assumptions, CO₂ emissions are higher than in an alternative scenario (and modelling approach) where aircraft technology would continue to improve after 2050.

Source: ICAO LTAG Report



About Arcadia eFuels



Arcadia eFuels will produce eSAF, eDiesel, and eNaphtha



Arcadia eFuels will **operate** eFuels Plants as well as **market & sell** eFuels



Arcadia eFuels will **create net zero carbon fuels**



Arcadia plant production: **86,000 MT/year (100MM liters)**



New plants will **bring capital costs down**; through strategic design and global development in mind.



First plant in **Denmark to start in 2026** - followed by 1-2 plants per year



Roadmap to increase plant capacity to **above 20,000BPD around 2035**, when renewable electricity and electrolyzers have matured



Developing Mandates for Sustainable Aviation Fuels and specifically eSAF (eKerosene)

EU (ReFuelEU Aviation)*

2% SAF in 2025
 6% SAF in 2030 (incl. 1.2% eSAF)
 20% SAF in 2035 (incl. 5% eSAF)
 34% SAF in 2040 (incl. 10% eSAF)
 42% in 2045 (incl. 15% eSAF)
 72% in 2050 (incl. 35% eSAF)
 (Note: amendment from EU Parliament target more ambitious blending mandates targeting 100% SAF in 2050)

Germany

0.5 % eSAF from 2026 onwards
 1.0 % eSAF from 2028 onwards
 2.0 % eSAF from 2030 onwards

USA

Reduce GHG emissions by 20% in 2030
 3 billion gallons SAF by 2030
 Clean fuels tax credit (IRA)

UK (RTFO)

Proposed mandate of 10% SAF in 2030 and 75% in 2050

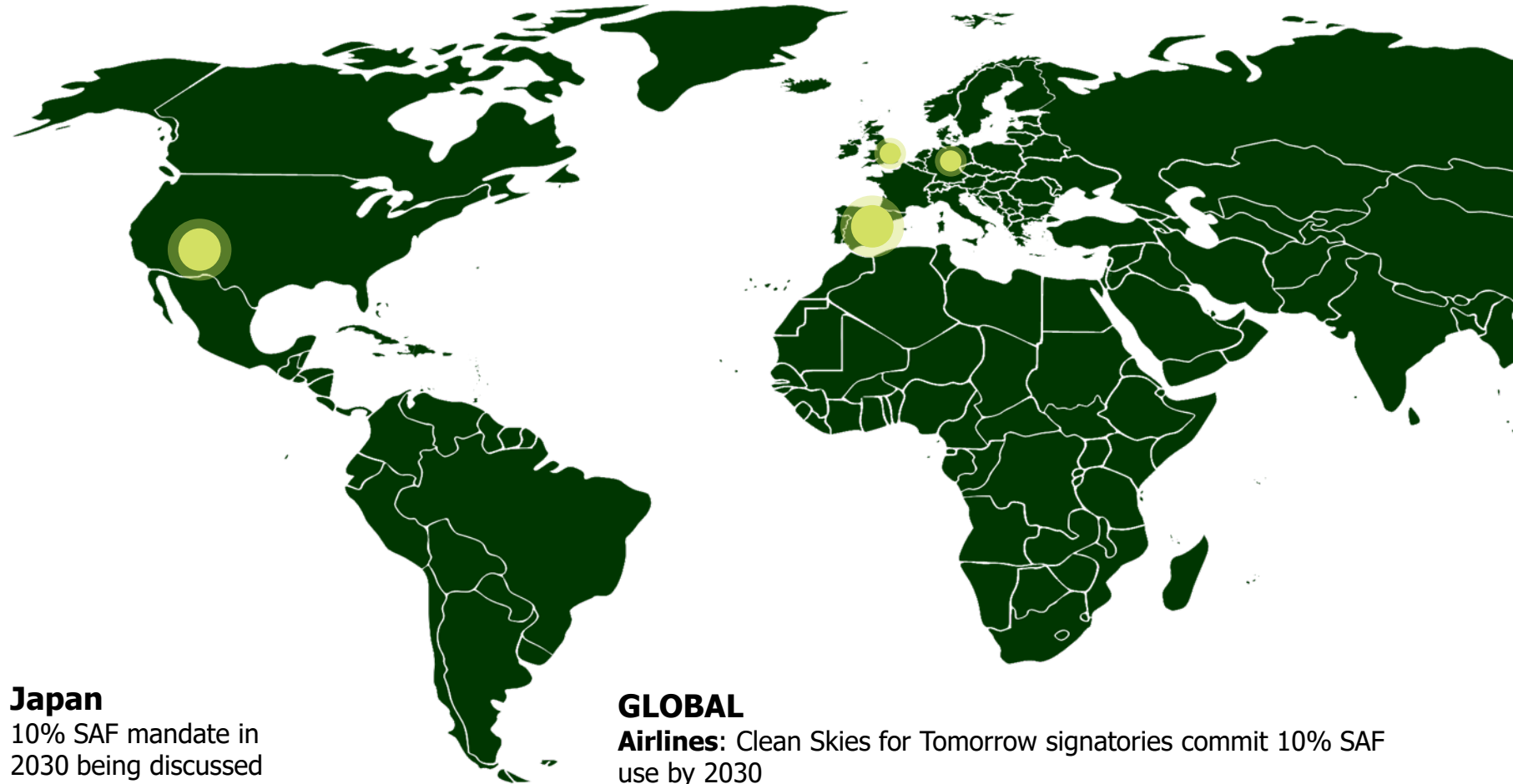
Japan

10% SAF mandate in 2030 being discussed

GLOBAL

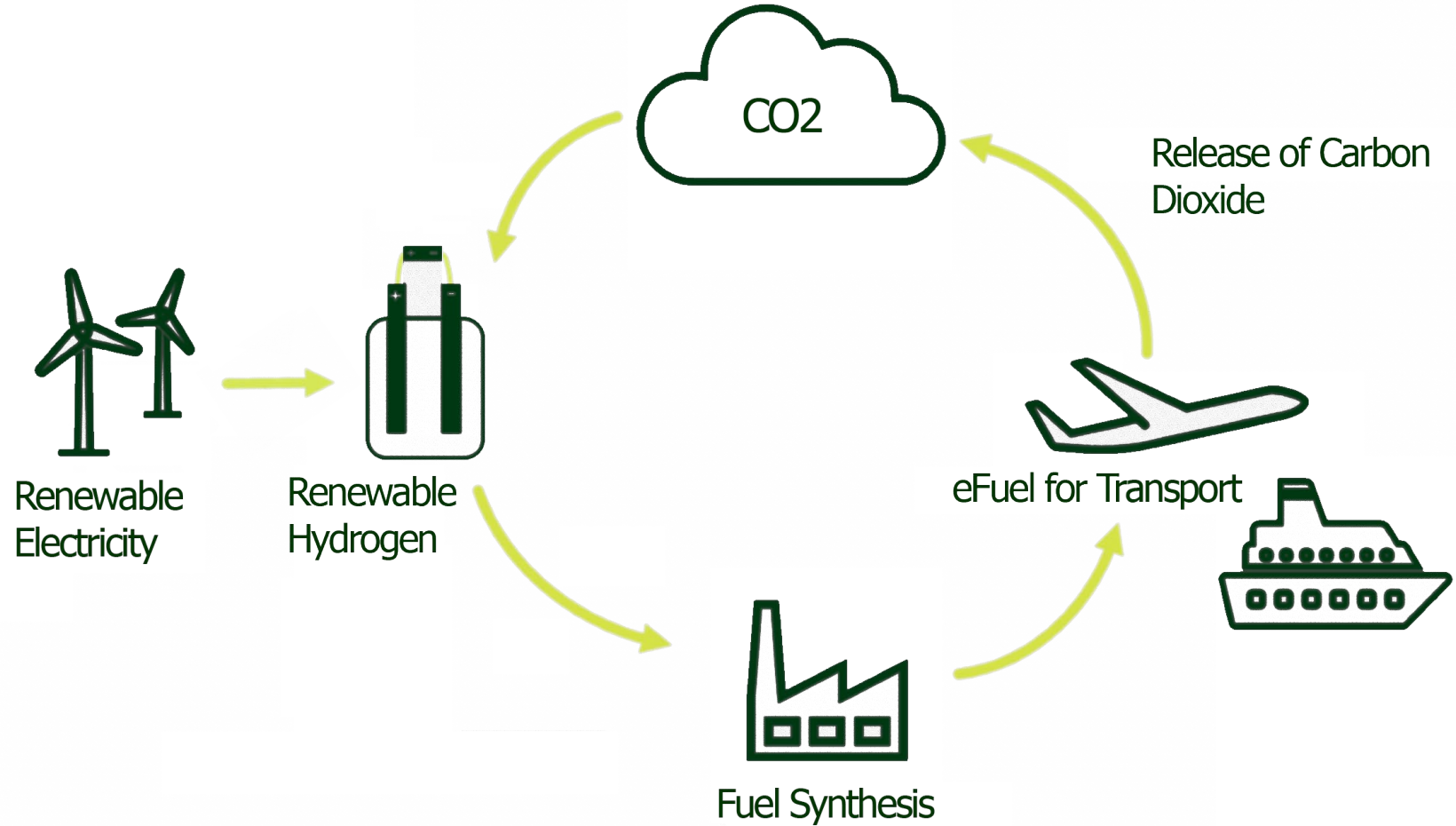
Airlines: Clean Skies for Tomorrow signatories commit 10% SAF use by 2030

CORSIA Initiative: Carbon-neutral growth from 2020 Long Term Aspiration Goal net zero by 2050



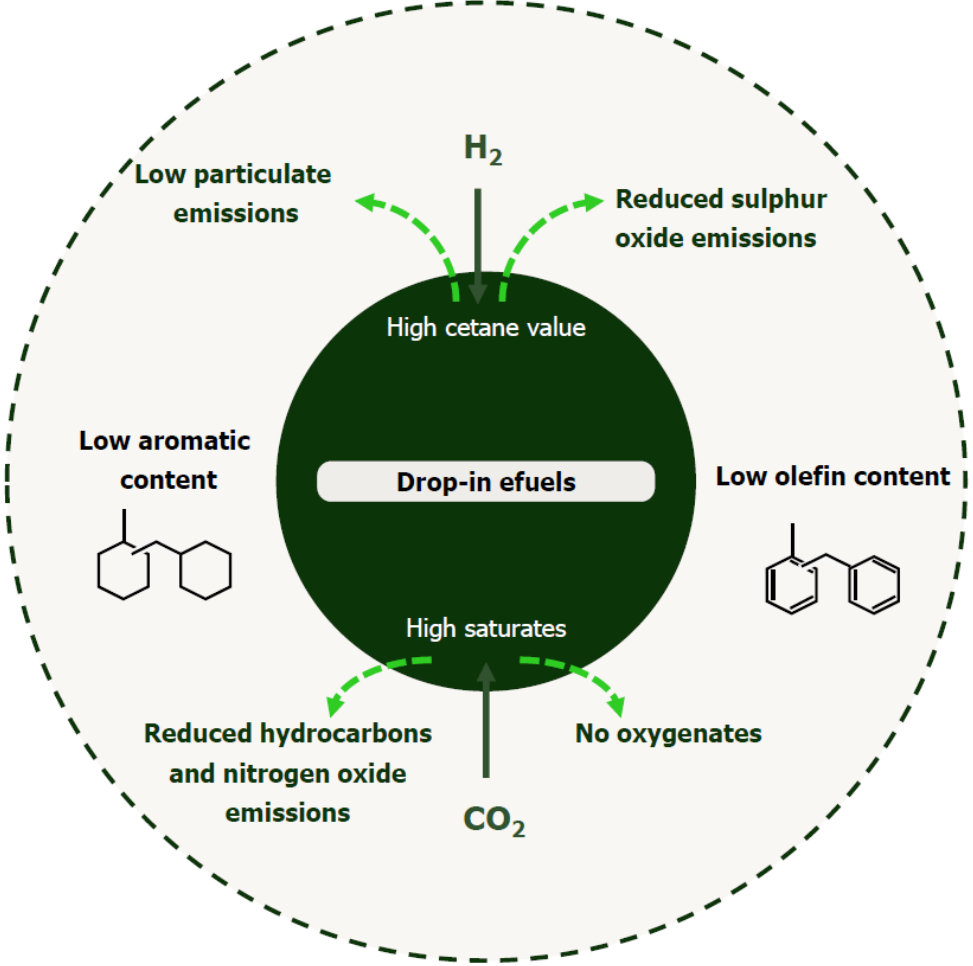
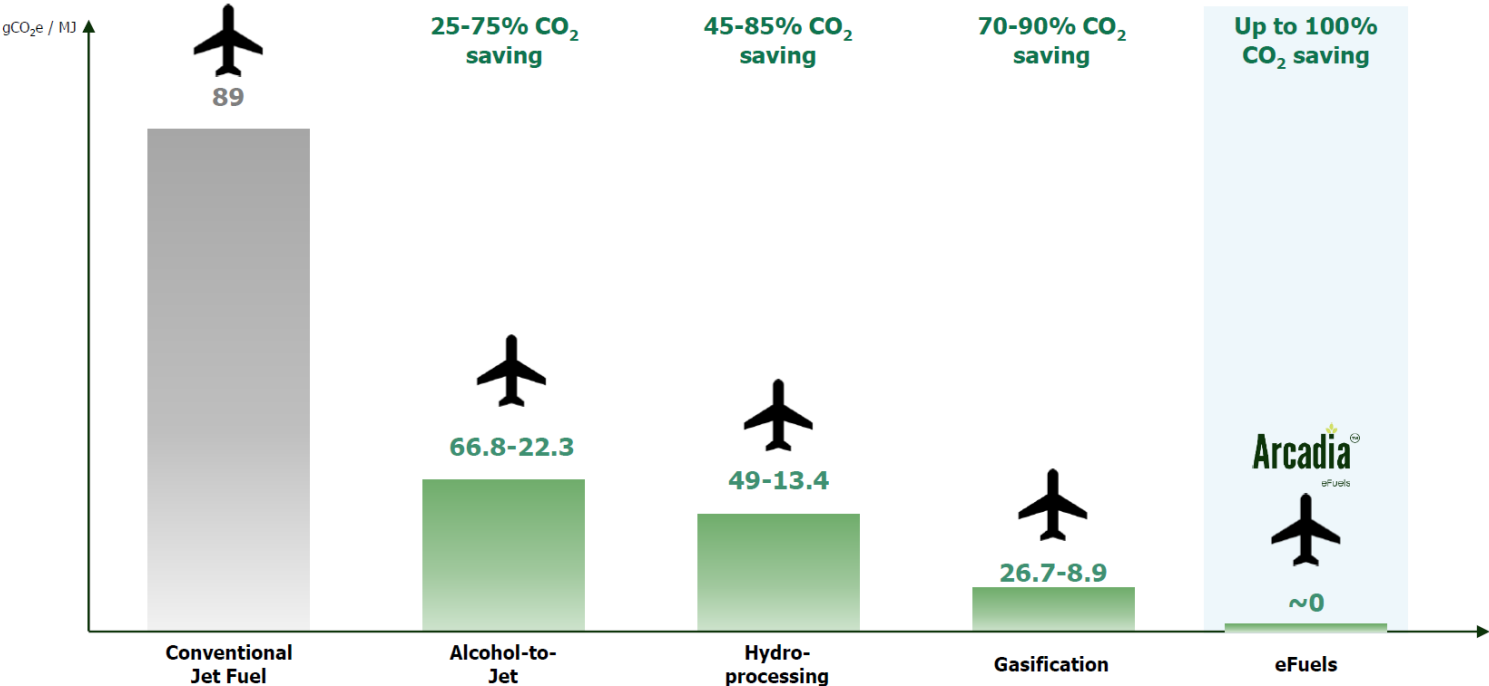
*Proposed by the EU Commission on July 14th, 2021, as part of "Fit for 55"

eFuels production uses captured carbon so full lifecycle is circular and net zero carbon emissions

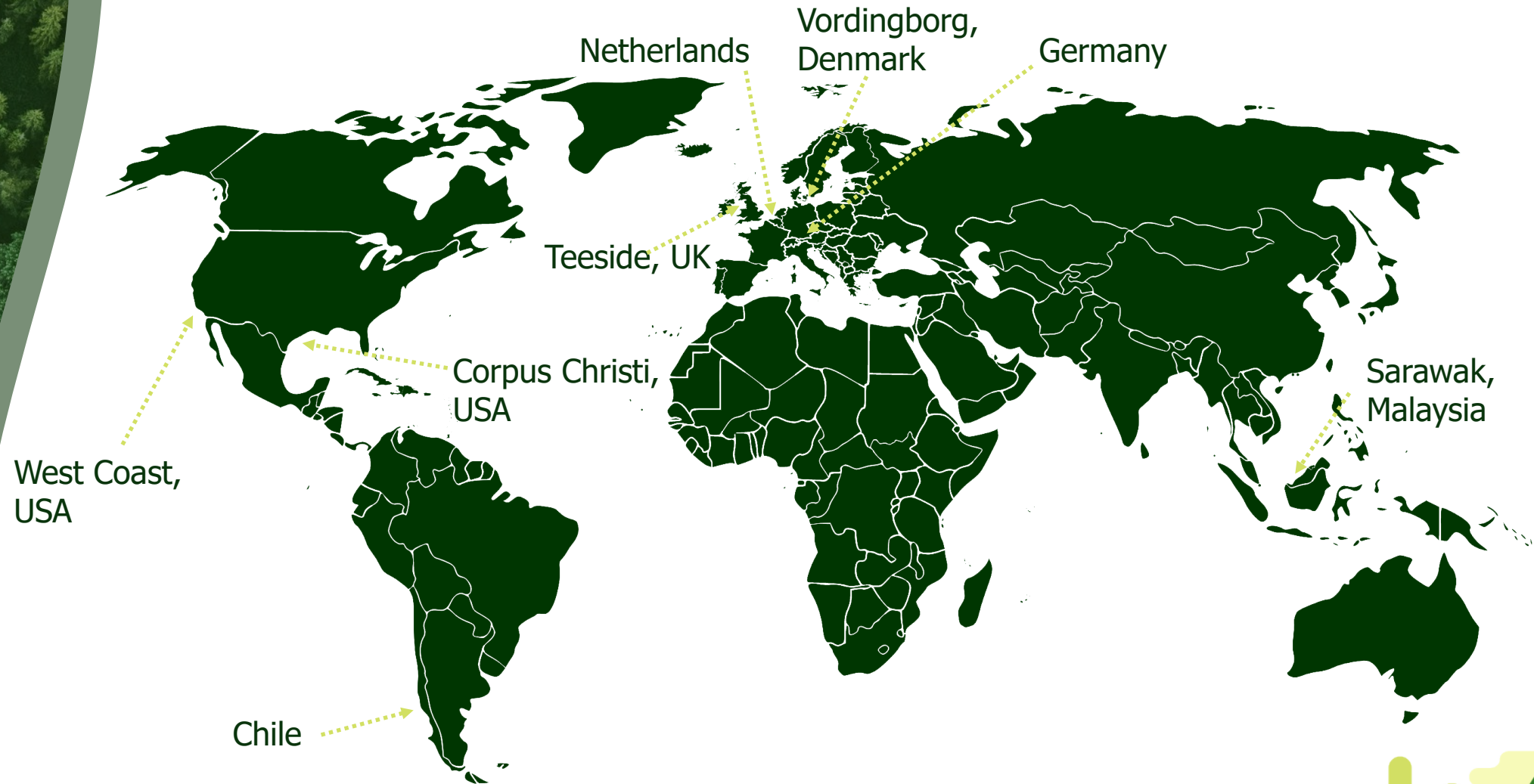


More than CO₂ Reduction, Drop-in eFuels Provide Many Benefits

CO₂ savings by technology



Arcadia's Fast Building Project Pipeline



To continue the conversation and follow along

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Arcadia eFuels: [here](#)

