Austin, TX Joint Sustainability Commission
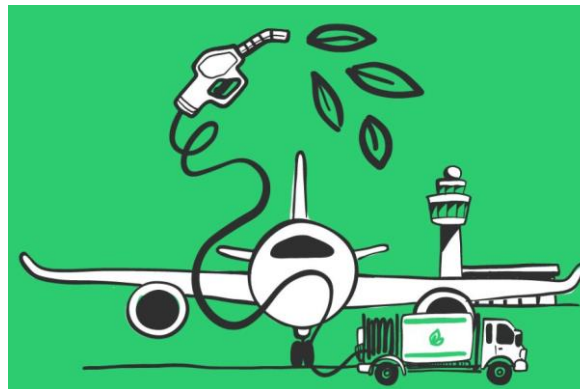
May 25th, 2022

20,000 ft

What is SAF?

SAF is...

- A blend of up to 50% petroleum-based Jet A and Jet A produced from a sustainable feedstock
    - Feedstock examples are fats and greases, tallows, woody bio-mass, Municipal waste
- Most common blend is 65%-70% Petroleum based Jet A, 30%-35% Sustainable Jet A
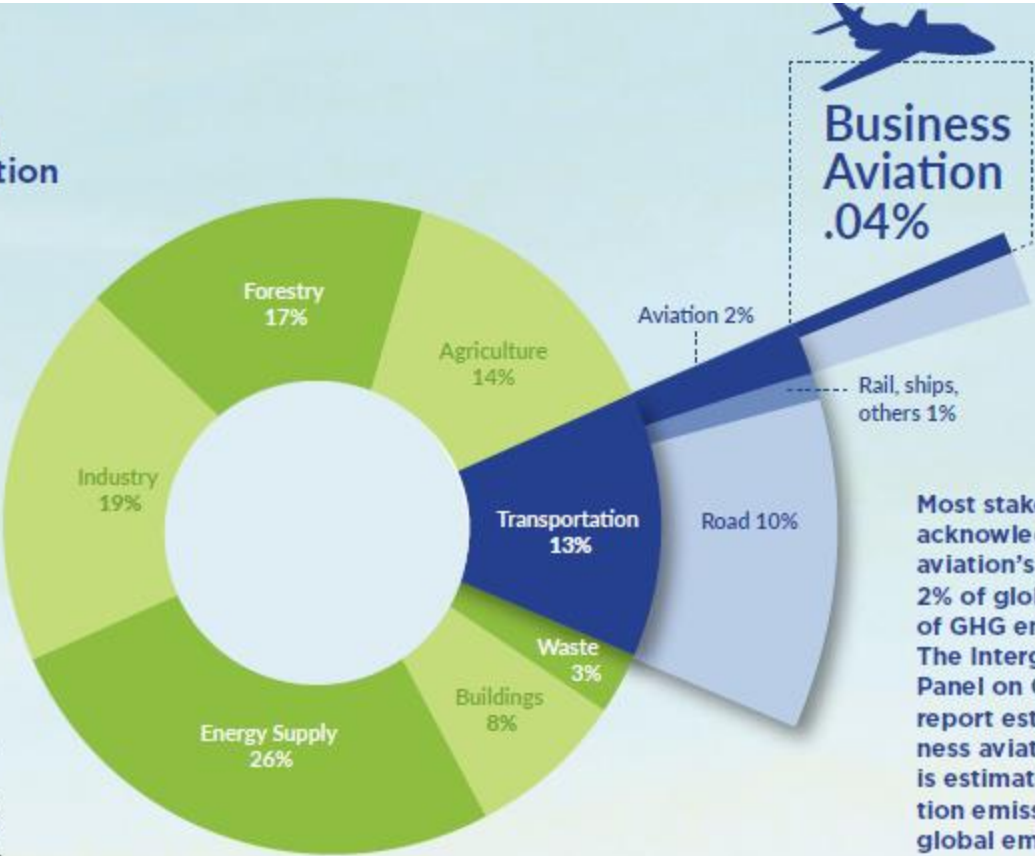
20,000 ft

What is SAF?

SAF is…

- A product that meets ASTM 1655 standards and is considered able to be dropped into any Jet supply with no changes in QC or negative effects on aircraft performance or systems

- has an overall reduced lifecycle Carbon Intensity (CI) over petroleum-based jet fuel:
    - Lifecycle is a quantification of the CO_2 emissions from beginning of production process to end including all transportation.

CO2 Impact across industries

Figure 1.
Business Aviation Sector's Contribution to Global GHG Emissions

Forestry 17%
Agriculture 14%
Aviation 2%
Business Aviation .04%
Rail, ships, others 1%
Industry 19%
Transportation 13%
Road 10%
Energy Supply 26%
Waste 3%
Buildings 8%

Source: IPCC (2014). Climate Change 2014: Mitigation of Climate Change . Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Most stakeholders acknowledge civil aviation's contribution of 2% of global CO_2 and 3% of GHG emissions, as per The Intergovernmental Panel on Climate Change report estimates. The business aviation contribution is estimated at 2% of aviation emissions or 0.04% of global emissions.

How is SAF Made?
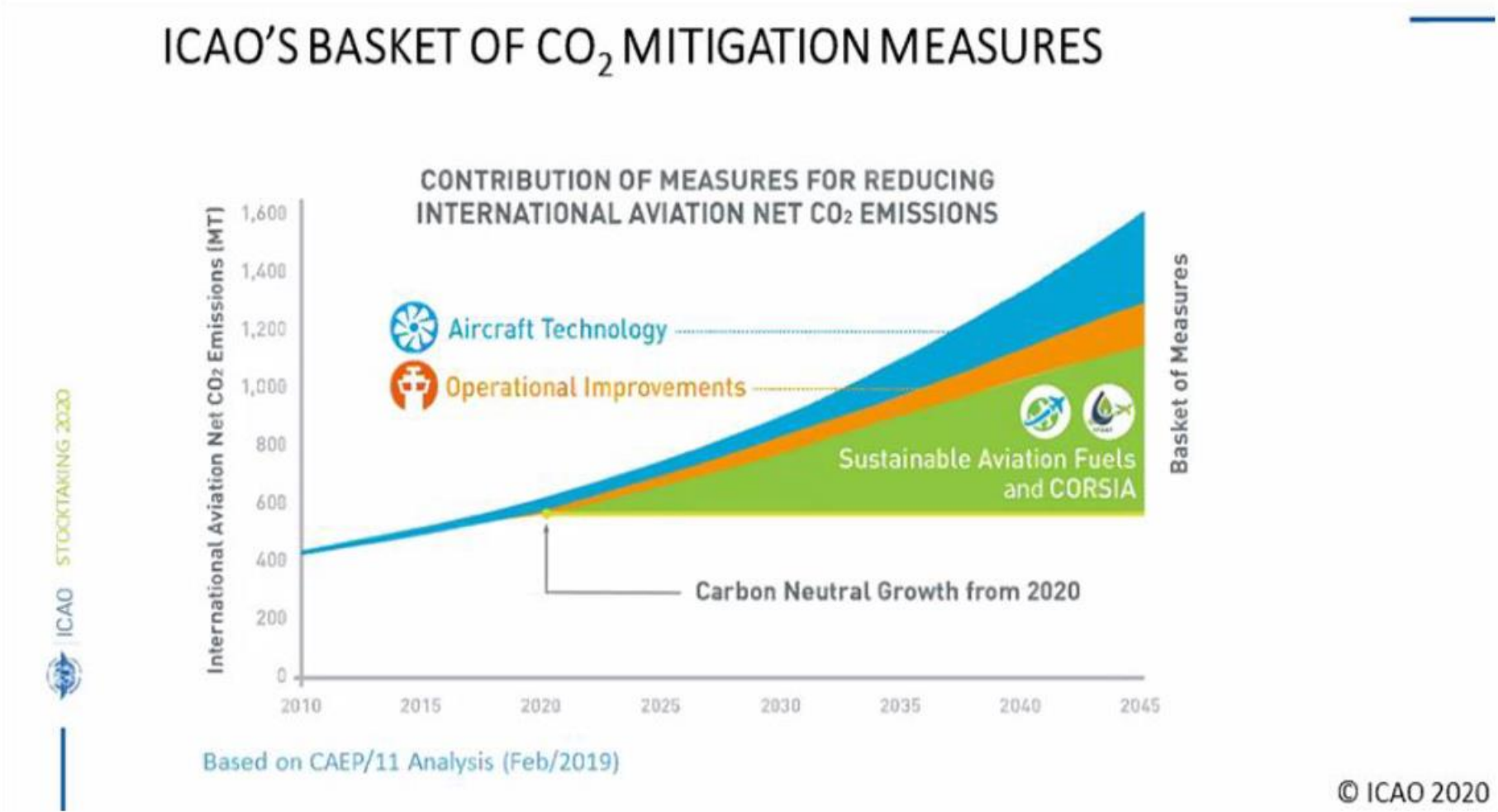
Global Targets

CORSIA: Carbon Offsetting and Reduction Scheme for International Aviation

- Adopted through ICAO Assembly Resolution 39-3
- The first global market based measure scheme for any industry sector

CORSIA is a global market-based measure designed to offset international aviation CO2 emissions in order to stabilize the levels of such emissions from 2020 onwards (CNG2020). Offsetting of CO2 emissions will be achieved through the acquisition and cancelation of emissions units from the global carbon market by aeroplane operators.

ICAO'S ASPIRATIONAL GOALS ICAO has agreed on two aspirational goals for the international aviation sector: • 2% annual fuel efficiency improvement through 2050 • Carbon neutral growth from 2020 onwards (CNG 2020) ICAO is also exploring a long-term goal.

How are we going to hit the target

ICAO'S BASKET OF CO_2 MITIGATION MEASURES

CONTRIBUTION OF MEASURES FOR REDUCING
INTERNATIONAL AVIATION NET CO_2 EMISSIONS

Physical Supply – Overall Plan/Status

- Current bases pumping SAF:
  - Available for retail sales: SFO, LTN, BFI, OAK, AUS, HOU,SJC, VNY, LGB,EGE, EDI,GLA
  - Pumping for wholesale customer: BFM
  - Production, Carrier/driver shortage impacting SAF availability

- As of the end of 2021, Signature has pumped more 6.5M gallons of blended SAF

- Book and Claim locations: available at select locations & at Corporate Account level

SIGNATURE
RENEW

SUSTAINABLE AVIATION FUEL

Signature
FLIGHT SUPPORT

SIGNATURE RENEW OFFERS A SOLUTION FOR OPERATORS

SUSTAINABLE FLIGHT OPERATIONS

1 **Sustainable Aviation Fuels**

Purchase low-carbon Jet A fuel at selected Signature FBO locations
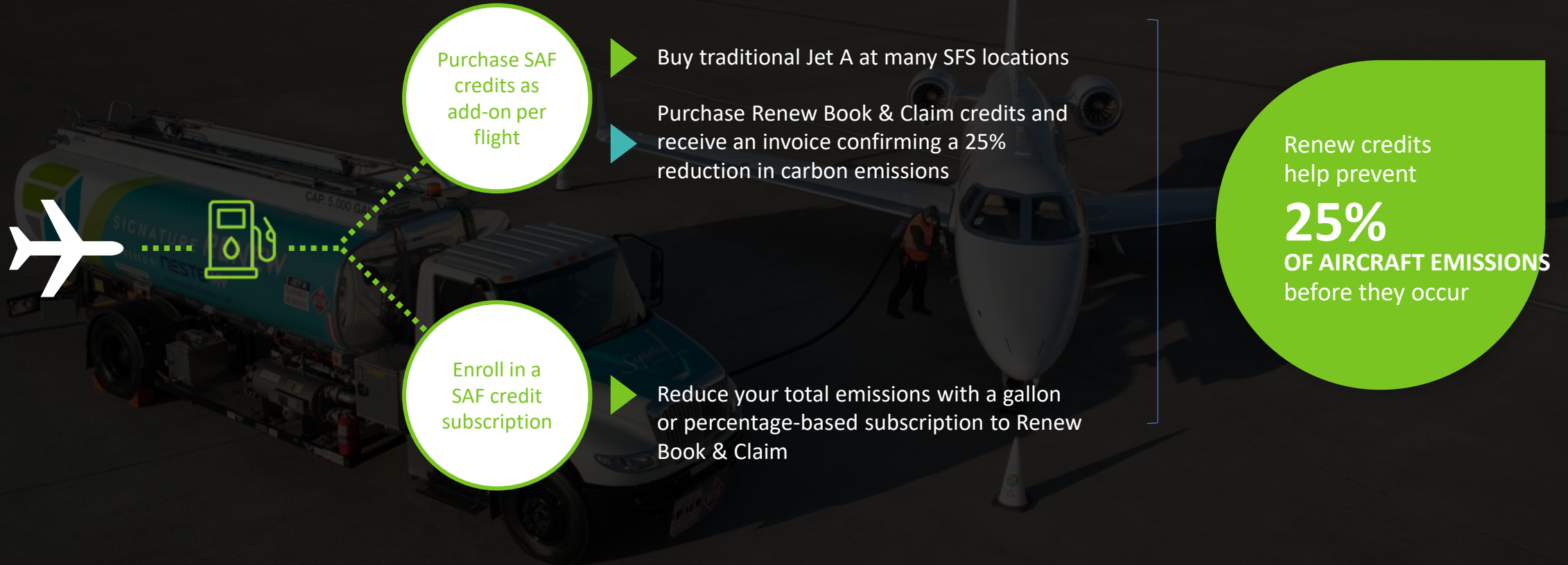
2 **Book & Claim**

Purchase SAF credits at any Signature FBO, generate reduced carbon globally

2 BOOK & CLAIM OFFERS AN ALTERNATIVE TO PHYSICAL FUEL

Purchase Book & Claim sustainable aviation fuel credits and confirm your carbon reductions

Purchase SAF credits as add-on per flight

Enroll in a SAF credit subscription

▶ Buy traditional Jet A at many SFS locations

▶ Purchase Renew Book & Claim credits and receive an invoice confirming a 25% reduction in carbon emissions

▶ Reduce your total emissions with a gallon or percentage-based subscription to Renew Book & Claim

Renew credits help prevent

25%
OF AIRCRAFT EMISSIONS
before they occur

ADDITONAL EFFORTS AT SIGNATURE FBOs

Sustainable Facilities

SUSTAINABLE DESIGN AND CONSTRUCTION

30 LEED-certified facility projects

Solar panel installations at or in progress (27 locations)

Electric vehicle charging stations (14 North American locations)

eVTOL skyport infrastructure

Vehicle Fleet Upgrades

NEWER, CLEANER TECHNOLOGIES & FUEL

Largest FBO purchaser of Lektro electric tow tractors (175 in service)

Hybrid or full-electric crew cars

Bio-diesel for fuel trucks, GPUs, and other ramp equipment

Tesla Model X for ramp transportation

GREATER IMPACT WITH INDUSTRY PARTNERSHIPS

AIRBUS

Mobile, Alabama assembly for new-build A320 series aircraft

BOEING

EPIC Fuels supplies Boeing 787 delivery flights

NESTE

Supplying 5M gallons of SAF to Signature FBOs

NETJETS

Committed to purchase up to 3M gallons of Signature Renew SAF

BUSINESS AVIATION COALITION FOR SUSTAINABLE AVIATION FUELS

Signature is a BAC-SAF Steering Committee member

OUR BUSINESS IS IN THE SKY.

LET'S GO GREEN TO KEEP IT BLUE.

SIGNATURE
RENEW™