



ANA's Decarbonization Journey

Satoru Togami
Manager

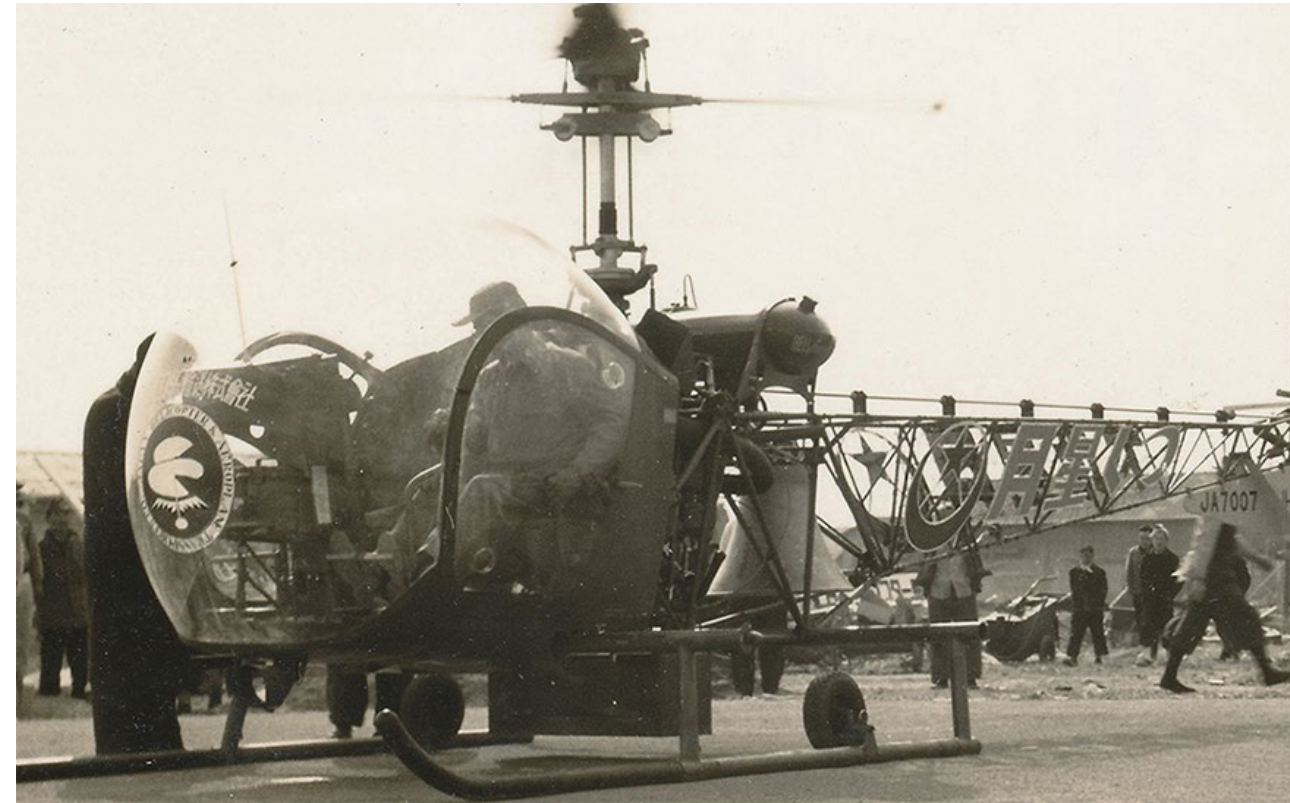
Decarbonization, Corporate Planning, ANA

ANA Holdings, Inc.

August 8th, 2024

1. Overview of ANA

Founded in 1952 (with two helicopters)



276 airplanes as of June 2023



Headquarters: Tokyo, Japan

Main Hub: Tokyo/Haneda, Tokyo/Narita

Number of Employees: 40,507 (Consolidated basis)

2. Transition Strategy for Net-Zero by 2050

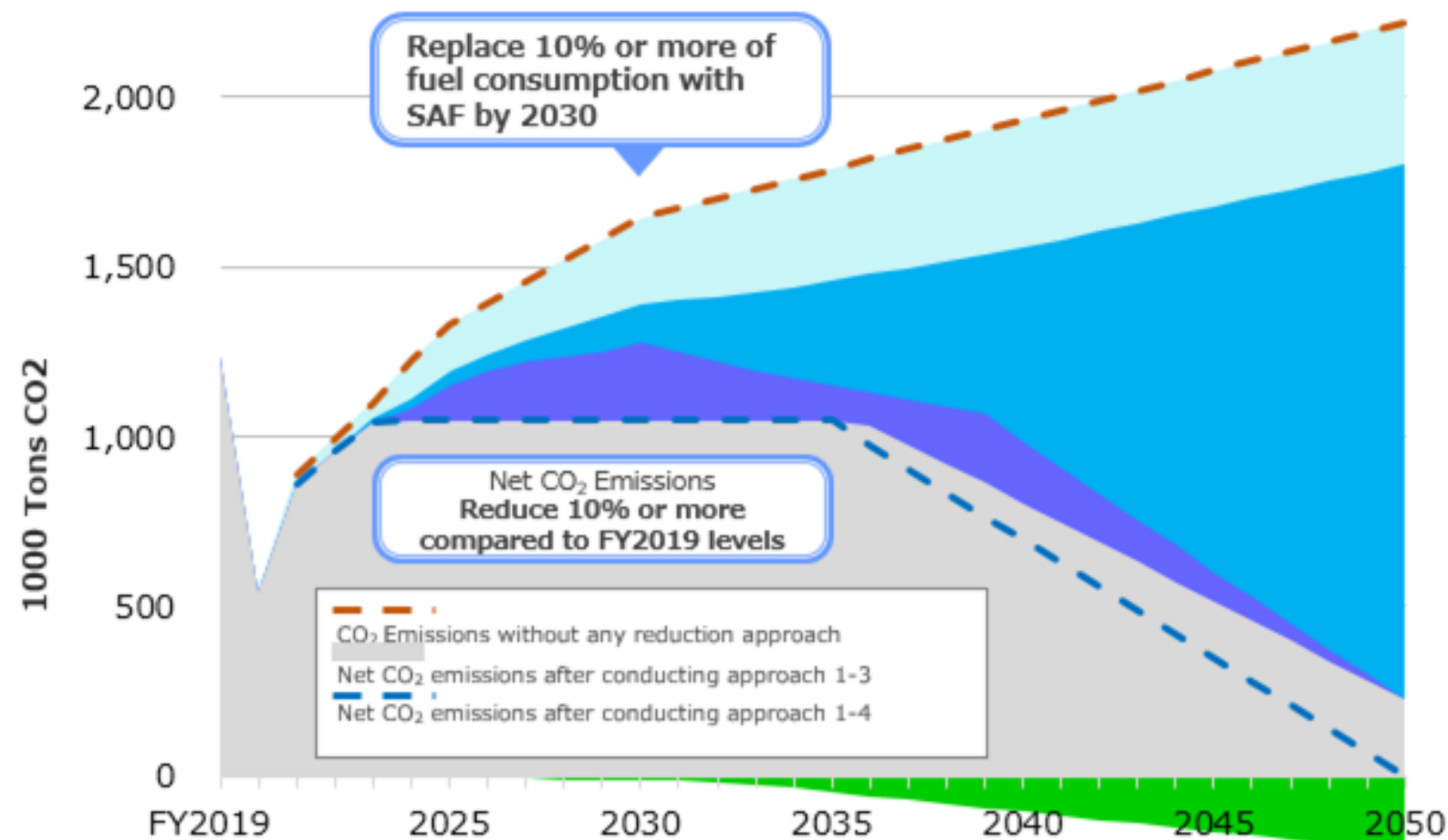
Our Commitment

SHORT-TERM
GOAL:

10% LESS CARBON EMISSIONS compared to FY2019
and
10% SAF USE by 2030

LONG-TERM
GOAL:

NET-ZERO CARBON EMISSIONS by 2050



4 measures to Net Zero

Fleet Renewal + Operational Efficiency

SAF

Carbon Offsetting

Carbon Removal

<CO₂ Emissions without any reduction approach>

The formulation is based on ANA Group business plan, the necessary airline capacity for 60 million inbound tourists as Japanese Government's target, and the Traffic Forecasts by ATAG. **

The Air Transport Action Group of which members such as IATA and aircraft manufacturers work together on sustainability issues.

3. ANA's decarbonization journey

Key Highlights

1st

Airline in the world to introduce the Boeing 787



1st

Airline to use SAF on regular flight departing from APAC airports



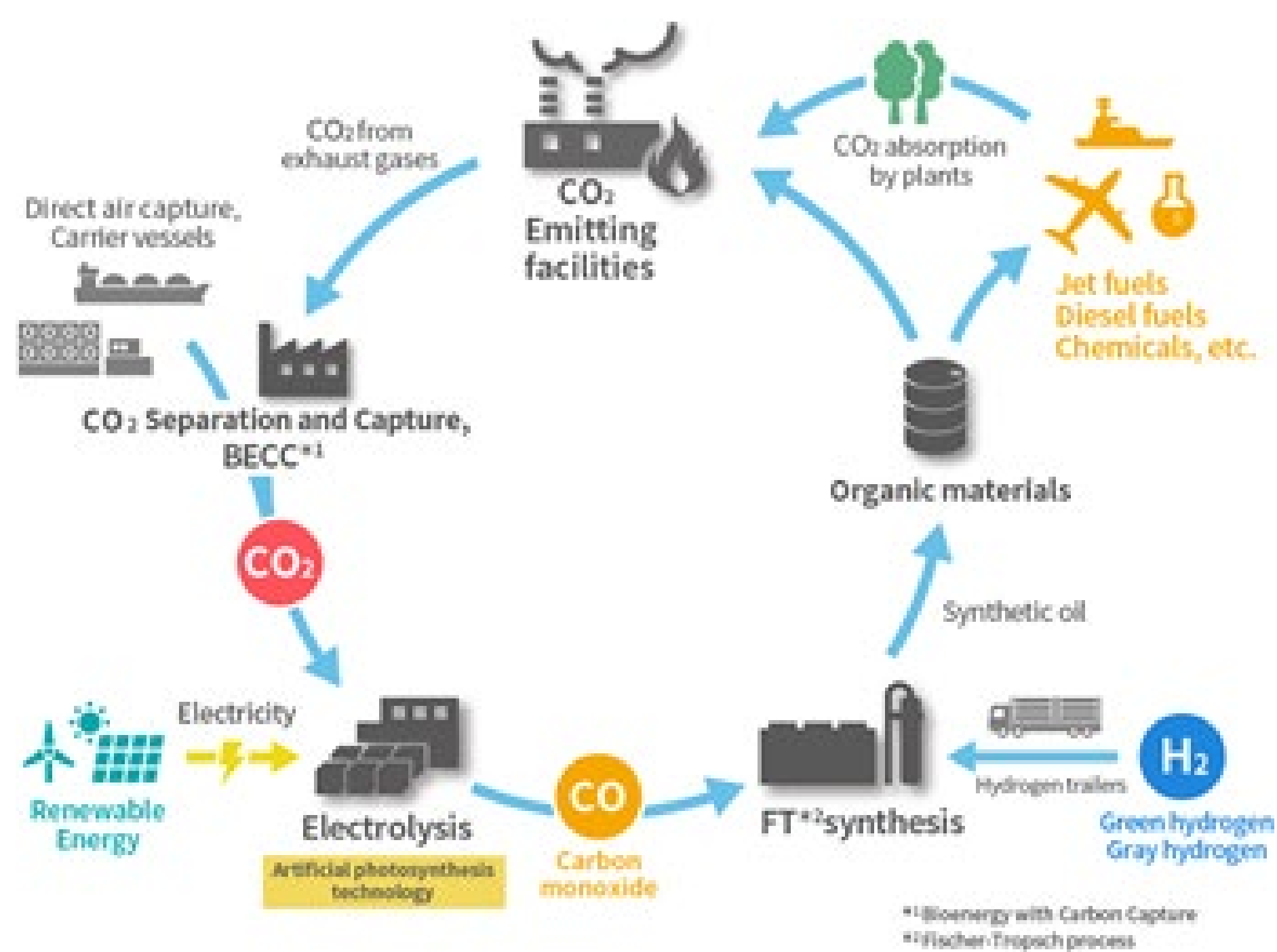
1st

Airline in the world to sign a DAC-derived CDR purchase agreement with a U.S. company



4. Participation in a national project for SAF production (e-fuel)

Project to promote the creation of circular carbon society model through CO₂ recycling



 **Ministry of the Environment**
Government of Japan



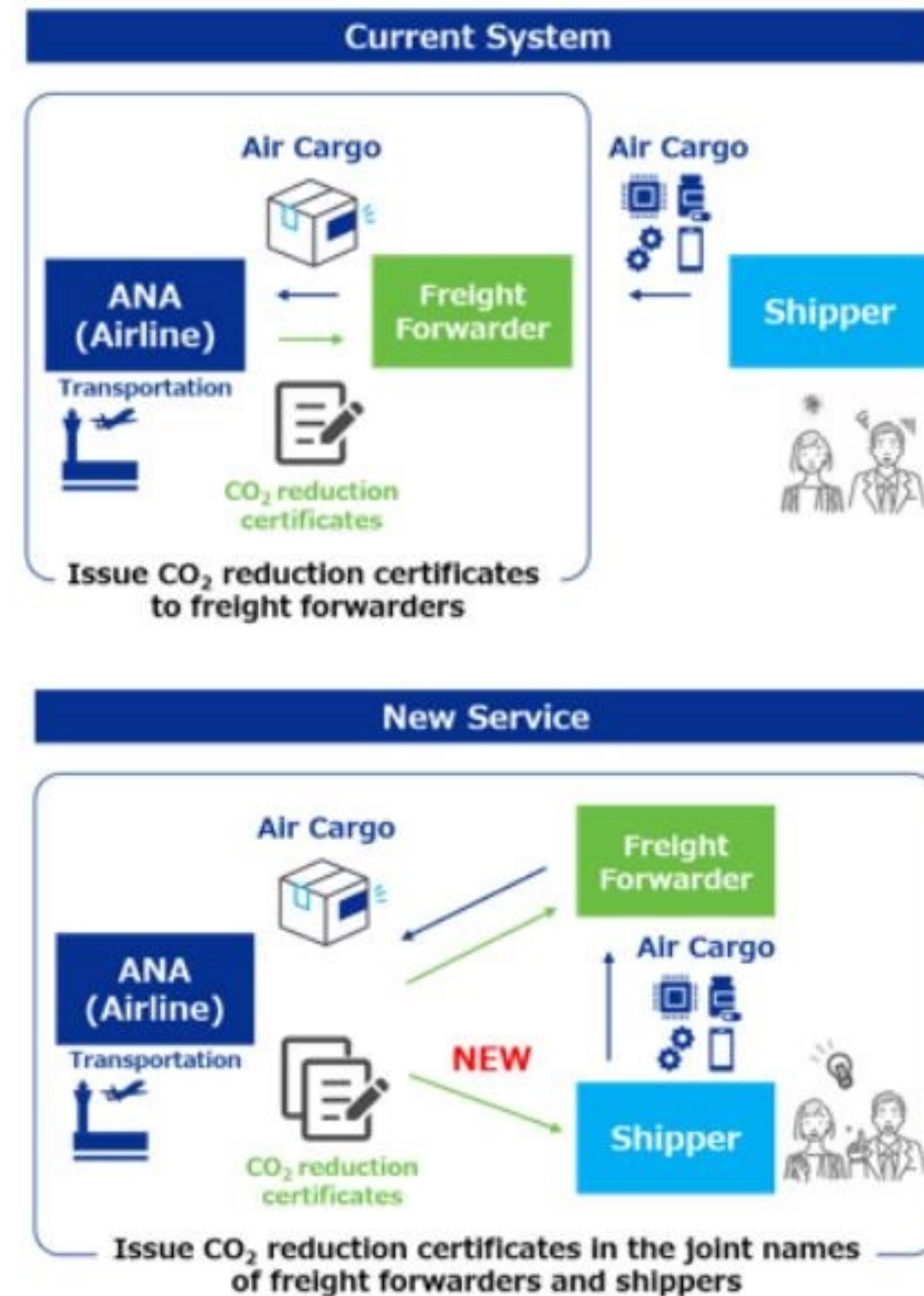
5. ANA's SAF Journey - Promote the use of SAF across industries

2021

Created 1st Corporate SAF Program in Asia

2023

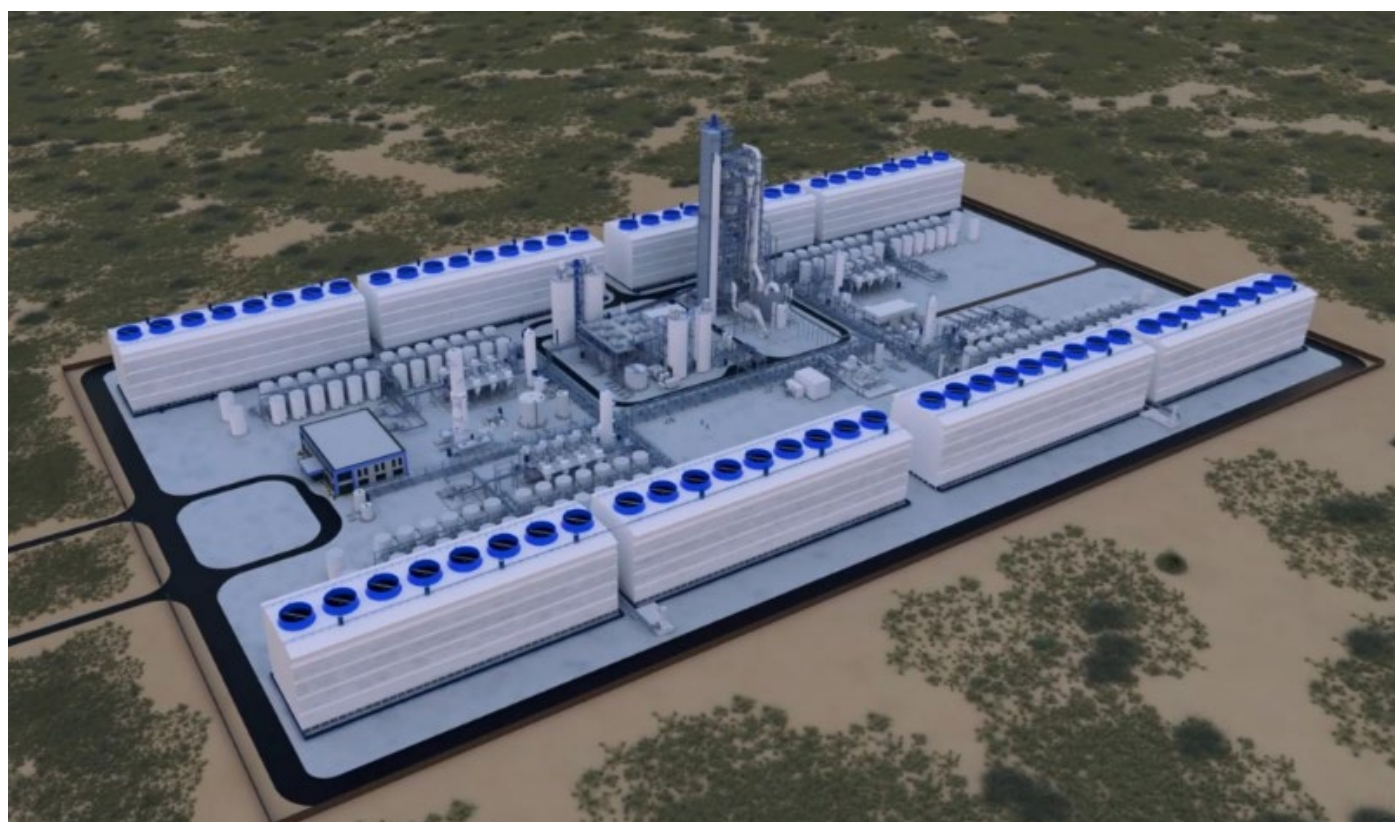
Expanded SAF Program to Air Cargo



6. Carbon Removal Technology

Why DAC?

- ✓ Diversify decarbonization measures
- ✓ Grow public acceptance
- ✓ Lower additionality risks
- ✓ Leverage advantages of technology-based solutions (scalability, permanence and transparency)



1PointFive's DAC facility image
<https://www.1pointfive.com/>

7. Efforts to raise social awareness about SAF

- ✓ Developed joint report with JAL on SAF
- ✓ Addressing the need and demand projections for SAF



- ✓ Cooperation among sectors, with a coalition expanded to 44 companies
- Original members: 16 companies



8. Public-Private communications in Japan

Japan's SAF public-private council established and kicked-off in 2022



The 4th Japan's SAF public-private council
<https://www.mlit.go.jp/koku/content/001600751.pdf>

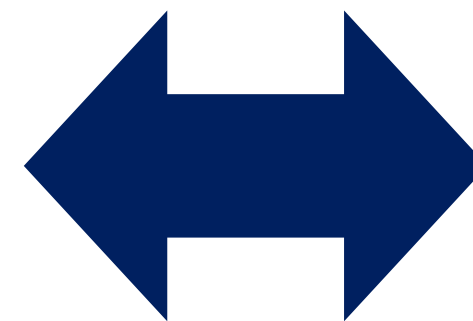
Council members

ANA, JAL, Scheduled Airlines Association of Japan
JCAB (MLIT), METI, MAFF, MOE
Oil refineries, Trading companies

Previous discussions and outcomes (as of 2023)

Demand side

- ✓ Demand Forecast: 1,710,000kl (452M gallons) in 2030
- ✓ Internationally competitive SAF price
- ✓ Reduce price gap between SAF and conventional fuel
- ✓ Support to avoid additional burdens



Supply side

- ✓ Maximum Supply Forecast: 1,920,000kl (507M gallons) in 2030
- ✓ Government subsidies for CAPEX: 337B JPY (2.2B USD) over 5 years
- ✓ Tax incentive: 30 JPY/Litre (0.76 USD/Gallon)
- ✓ TTL 60 JPY/Litre (1.52 USD/Gallon) package for suppliers

9. Challenges we need to overcome

- ✓ **Scale up** global SAF production and the supply of CORSIA Eligible Emissions Units (CEEUUs)
- ✓ **Ensure** CORSIA remains ambitious and the world's only scheme to decarbonize international aviation
- ✓ **Accelerate** the development of new technologies, such as CDR, on a global scale

10. Key Takeaways

- ANA is a **pioneer for decarbonization** of international aviation in APAC region
- We are committed to playing a leading role in **raising awareness** and **accelerating efforts towards decarbonization**
- To achieve decarbonization goals effectively, the industry should focus on prioritizing **cooperation over competition**
- Comprehensive government support** is required for the aviation industry, a hard-to-abate sector in decarbonization



ANA inspires our employees, customers, and society to explore endless possibilities with diverse connections that begin in the sky