State of the Airlines and Sustainable Aviation Fuel beyond Covid-19:

Sustainable Aviation Fuels Initiative – UAE

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Significant Covid impact on both pax (especially) & cargo

Cargo volumes down 18% yoy in June, passenger volumes down 87%

Source: IATA Economics
Global RPKs do not recover 2019 levels until 2024. The balance of risks and uncertainty remains tilted to the downside.

Source: IATA/Tourism Economics, Air Passenger Forecasts, July 2020 update
Unprecedented 2020 loss narrows but is not eliminated
Record $84bn net loss this year, with a further loss of $15bn in 2021

5 principles for re-starting aviation

Declaration: From the most recent IATA Board meeting

- Aviation will always put safety and security first
- Aviation will respond flexibly as the crisis and science evolves
- Aviation will be a key driver of the economic recovery
- Aviation will meet its environment targets
- Aviation will operate to global standards which are harmonized and mutually recognized by governments

Source: IATA Press Release
Industry CO\textsubscript{2} goals: the role of SAF?

AVIATION CO\textsubscript{2}

2.5 billion tonnes $40 billion USD*

The reduction challenge: 2000 – 325 = 1675 m/t

Emissions trajectory if we were still operating at the same efficiency levels as in 1990

Through new technology, improved operational measures and more efficient infrastructure, the industry has avoided 10 billion tonnes of CO\textsubscript{2} since 1990

Savings already achieved

2000 m/t

325 million tonnes

GOAL 2: CNG2020

Where emissions would be if efficiency does not improve from today.

With constant efficiency improvement through the pillars of technology, operations and infrastructure.

With gradual introduction of radical new technologies and sustainable alternative fuels.

Source: ATAG / IATA / ICAO estimates

*$16 USD/tonne mid range ICAO carbon offset estimate for illustration purposes
Will CORSIA help SAF deployment?

2.5b tonnes of CO₂ will be mitigated by 2035

$40b will be generated in climate finance by 2035

Carbon Offsetting and Reduction Scheme for International Aviation

The aim of CORSIA is to cap the net CO₂ from aviation to 2019 levels

Scheme is intended to operate from 2021-2035

85 States have volunteered for the pilot phase
250,000 flights

50+ million litres per annum
Continuous production since 2016. Production capacity being expanded globally.

< 1% SAF system penetration
2% by 2025 possible with policy support that incentivizes fuel for aviation over ground transport.

7 approved technical pathways

50%-100% CO₂ reduction
Emission reductions must be verified by an appropriate sustainability verification scheme. 70%-80% emission reduction factor (relative to conventional is targeted).

$6.5 billion in forward purchase agreements
From using dormant refineries to negative cost feedstocks to adapting and expanding existing renewable diesel production or targeting geographies with positive policy.
SAF beyond COVID:

- Will public momentum for sustainability change?
- Coalitions (SAFI etc) / Voluntary initiatives: CST / Waypoint 2050
- Government Policy, including ICAO
- Airline initiatives / strategy
- Supplier initiatives / strategy
Airlines have a chance to emerge from the crisis leaner and greener

But that will require governments to reduce the power of incumbents

TO SEE THE damage from covid-19 to aviation, look up. Where once a crisis-cross of vapour trails told of holidaymakers heading for the sun or executives keeping businesses on track, the wide yonder is now a brilliant blue. This year nearly 5bn passengers might have been expected to take to the skies, but the actual number is likely to be only half as big. A fragile recovery is susceptible to new waves of infection. Britain’s imposition this week of a quarantine on passengers returning from Spain is the latest setback. Traffic may not return to 2019 levels until 2024.

As the aviation industry grapples with recent events, there is an opportunity for a commitment to climate action. Eleven years after the Airport Carbon Accreditation declines in passenger traffic and revenues – airports worldwide are still sustainable air travel. The airport industry has recognised that timely: global and regional crises due to climate change – which in turn will be resilience. Underpinning the sustainability ambitions of the airport sec

State aid: Commission approves French plans to provide €7 billion in urgent liquidity support to Air France

The European Commission has approved, under EU State aid rules, a €7 billion French aid measure consisting of a State guarantee on loans and a shareholder loan to Air France to provide urgent liquidity to the company in the context of the coronavirus outbreak. The measures were approved under the State aid Temporary Framework adopted by

U.K. Announces ‘Jet Zero’ Plan to Drive Down Aviation Emissions

The U.K. aims to drive down greenhouse gas emissions from aviation to make carbon-free transatlantic flights possible within a generation, Transport Secretary Grant Shapps said on Friday.
The Aviation Energy Transition - SAF

CONSUMERS
- Individual Choices
- Political Influence

CORPORATIONS
- Direct Action
- Shareholders

GOVERNMENTS
- Fiscal Spending
- SAF Specific Policy

SAF Influencing Stakeholders

SAF Interest Level
- 2010: Headwind...
- 2020: Tailwind...

Key Entities:
- NGOs
- ATAG
- CAAFI
- H2020
- ICAO
- COP15
- IPCC
- JETZERO
- SAFI
- CST
- MEDIA
- COP/15
- IPCC
- SAFI
- CST
- MEDIA
Thank you

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