IATA Workshop on Environment and Sustainability

Webinars

21 April 2021

Anti-trust guidelines

The following types of agreements are strictly prohibited:

- Any collective agreement concerning prices or charges for airline services;
- Any collective agreement allocating markets, territories, customers, suppliers or agents;
- Any collective agreement relating to prices or charges to be paid to suppliers, etc.
- Any agreement that is intended to, or in operation is likely to induce airlines or their suppliers or agents to engage in anticompetitive behavior, etc.

Anti-trust guidelines

The exchange of information of the following types of information is for example prohibited:

- Individual airline rates, charges or surcharges;
- Individual airline costs;
- An individual airline's intentions regarding increasing, reducing or reallocating aircraft capacity (including entering or exiting routes);
- An individual airline's intentions regarding charging for certain products or services or changes to the existing charges for such products or services;
- Information on individual airlines customers; and
- Any other sensitive commercial or proprietary information that the company would not disclose in the absence of an express or implied agreement to exchange such information for the purpose of reducing or restricting competition in the airline industry.

When not speaking, please:

- Mute audio
- Turn video off

Feel free to use the chat function to ask questions or make comments

Welcoming Remarks

Conrad Clifford,
Regional Vice President,
Asia-Pacific, IATA

Introduction

Michael Gill
Director, Aviation Environment
Member and External
Relationship
IATA

Agenda

1. Aviation and Climate Change
2. Introduction of Aviation Carbon Exchange (ACE)
3. Sustainable Aviation Fuel
4. Environmental Best Practice
5. AOB

Agenda Item 1
Aviation and Climate Change

Long-term Aspirational Goal

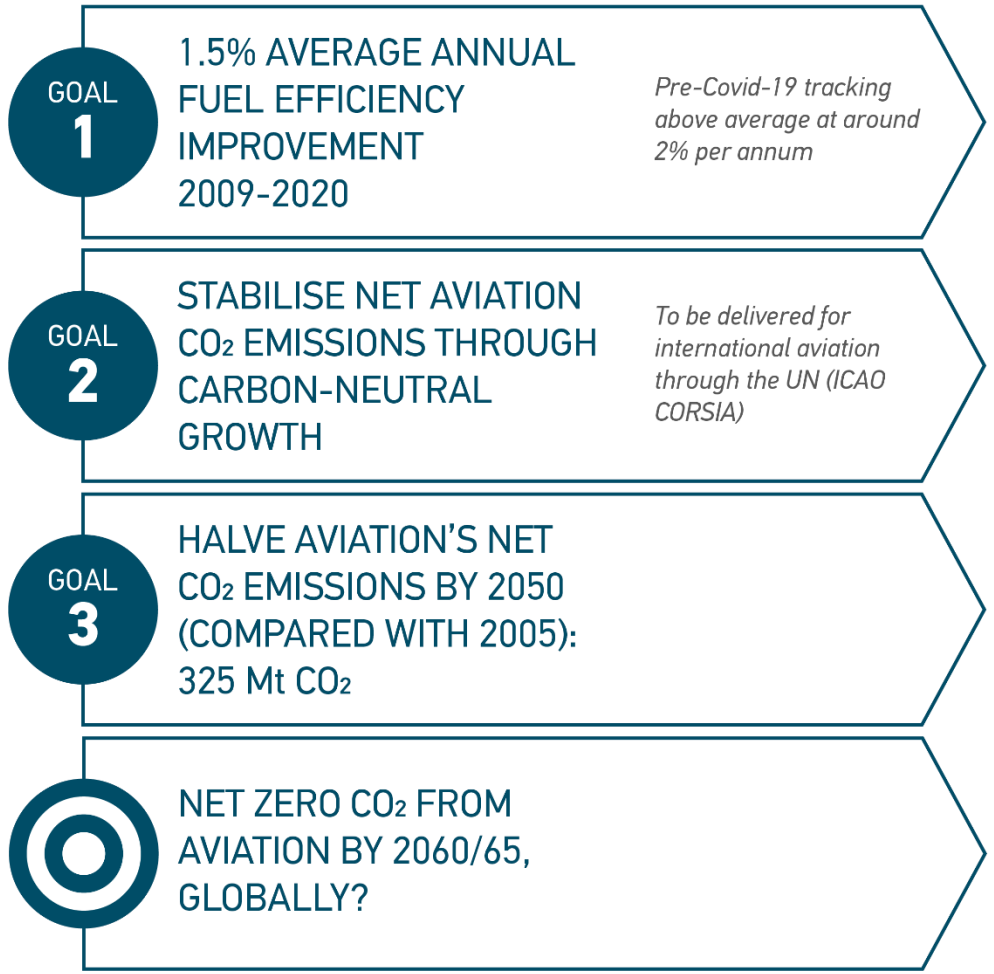
Current state of play

Air transport established sector-wide climate goals in 2009.

Waypoint 2050 provides details of the pathway to meeting the long-term goal.

Key takeaways:

- Aviation's long-term climate goal is in line with the Paris Agreement, is a significant challenge, but is achievable.
- Additionally, with the right government support and advances from the research community, net zero CO_2 from air transport at a global level is possible by around 2060/65 (some regions will be able to reach that point faster).



Scope of Waypoint 2050

	ICAO	UNFCCC Paris Agreement
Included in industry 2050 goal: emissions from the global (commercial) use of jet fuel	▪ CO_2 emissions from international aviation (fuel burn gate-to-gate)	▪ CO_2 emissions from domestic aviation (fuel burn gate-to-gate)
Emissions from military, government, general aviation and air taxi mobility services not included in the industry goals.		▪ Airport emissions ▪ Emissions from ground service equipment and road vehicles ▪ Terminals, maintenance facilities, offices ▪ Air traffic control

Existing aviation commitments to net-zero

2020

easyJet

DELTA

2040

jetBlue

2045

FINNAIR

2050

BRITISH AIRWAYS, IBERIA, LEVEL, vueling, Aer Lingus, CATHAY PACIFIC, American Airlines, JAL JAPAN AIRLINES

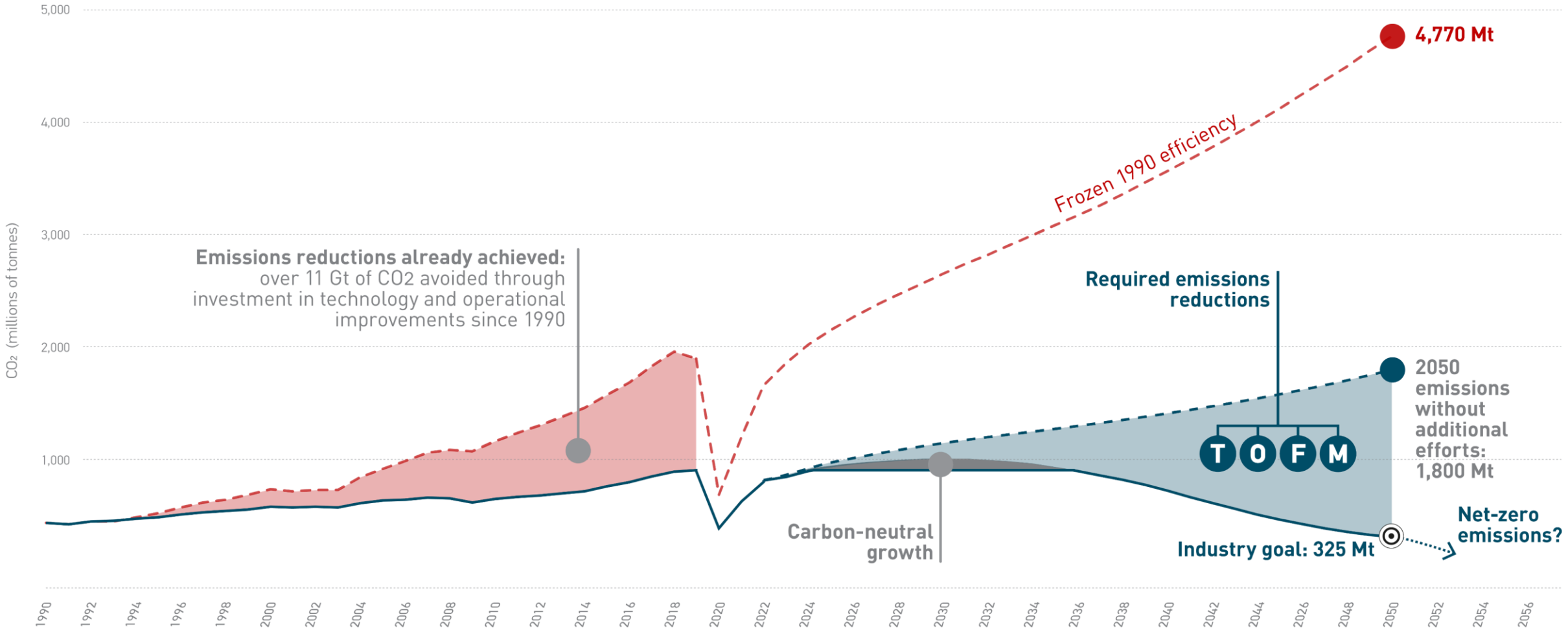
QANTAS, virgin atlantic, ETIHAD AIRWAYS, SriLankan Airlines, royal air maroc, ROYAL JORDANIAN, Alaska AIRLINES, S7 Airlines, QATAR AIRWAYS

DHL, UNITED, malaysia airlines, AIR NEW ZEALAND

200+ EU airports

ROLLS ROYCE, AIRLINES FOR EUROPE, oneworld, SUSTAINABLE AVIATION, ASD AeroSpace and Defence Industries Association of Europe, era european regions airline association, EBAA, european express association Delivering a competitive Europe

Charting a course for 2050, and net-zero globally



Development of the analysis

Experts in five working groups developed forecasts, scenarios, potential pathways

These were developed into consolidated scenarios to meet the industry goal

And then a look to how we can go beyond that

- Traffic forecasting
- T Technology developments
- O Operations and infrastructure
- F Sustainable aviation fuel
- M Offsetting (market-based measures)

Scenario 0

Scenario 1

Scenario 2

Scenario 3

Industry **2050** goal

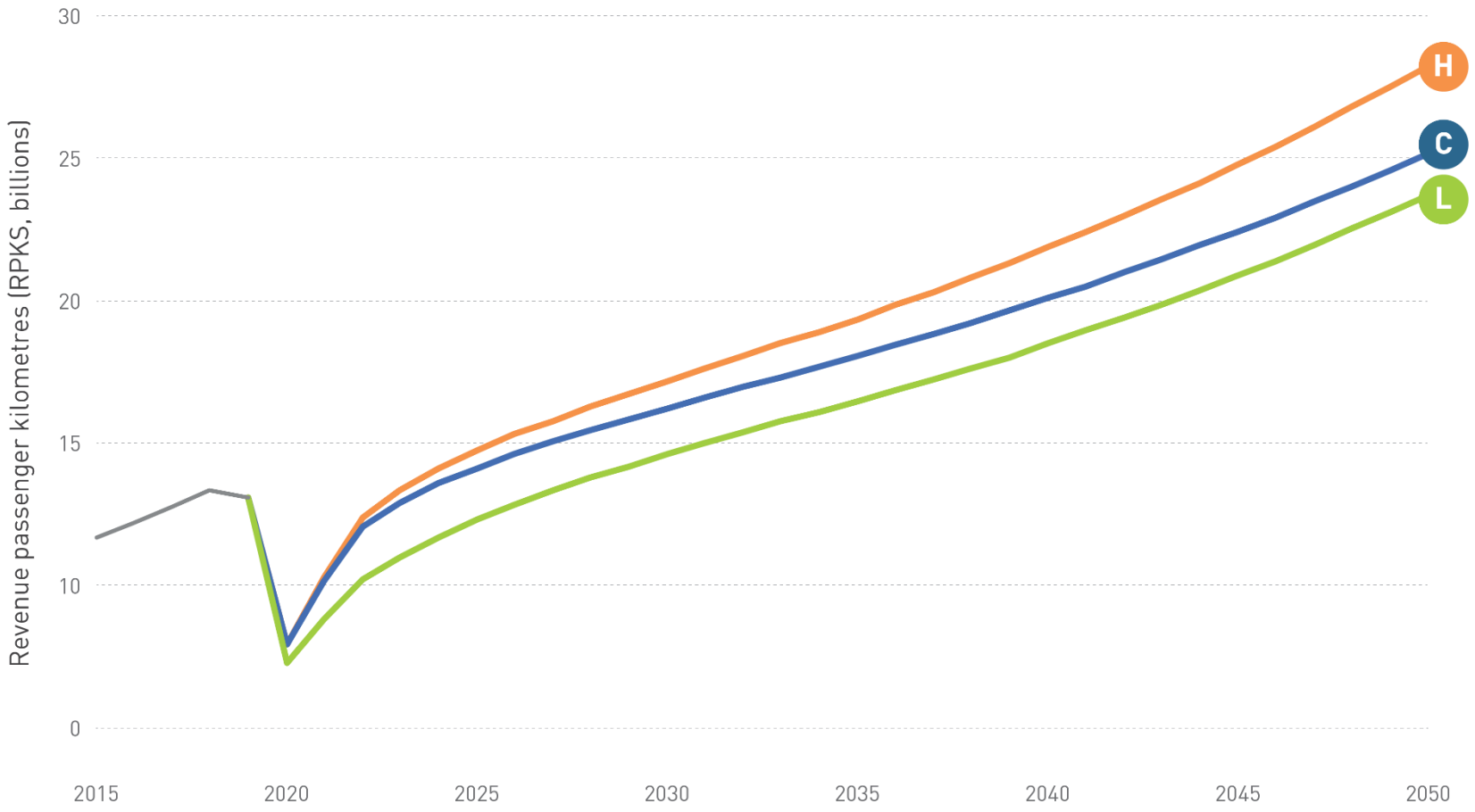
325 Mt CO_2

When is net-zero possible, globally?

Each of these generated many hundreds of individual pathways and possibilities. Representative scenarios were explored. The impact of the Covid-19 shutdown on air traffic was included in July 2020.

*Taking into account the **state of technology research**; the **timeframe** (i.e. can new technologies go through certification and entry-into-service in time?); **political considerations** (governments setting goals and helping achieve them); **investment likelihood**.*

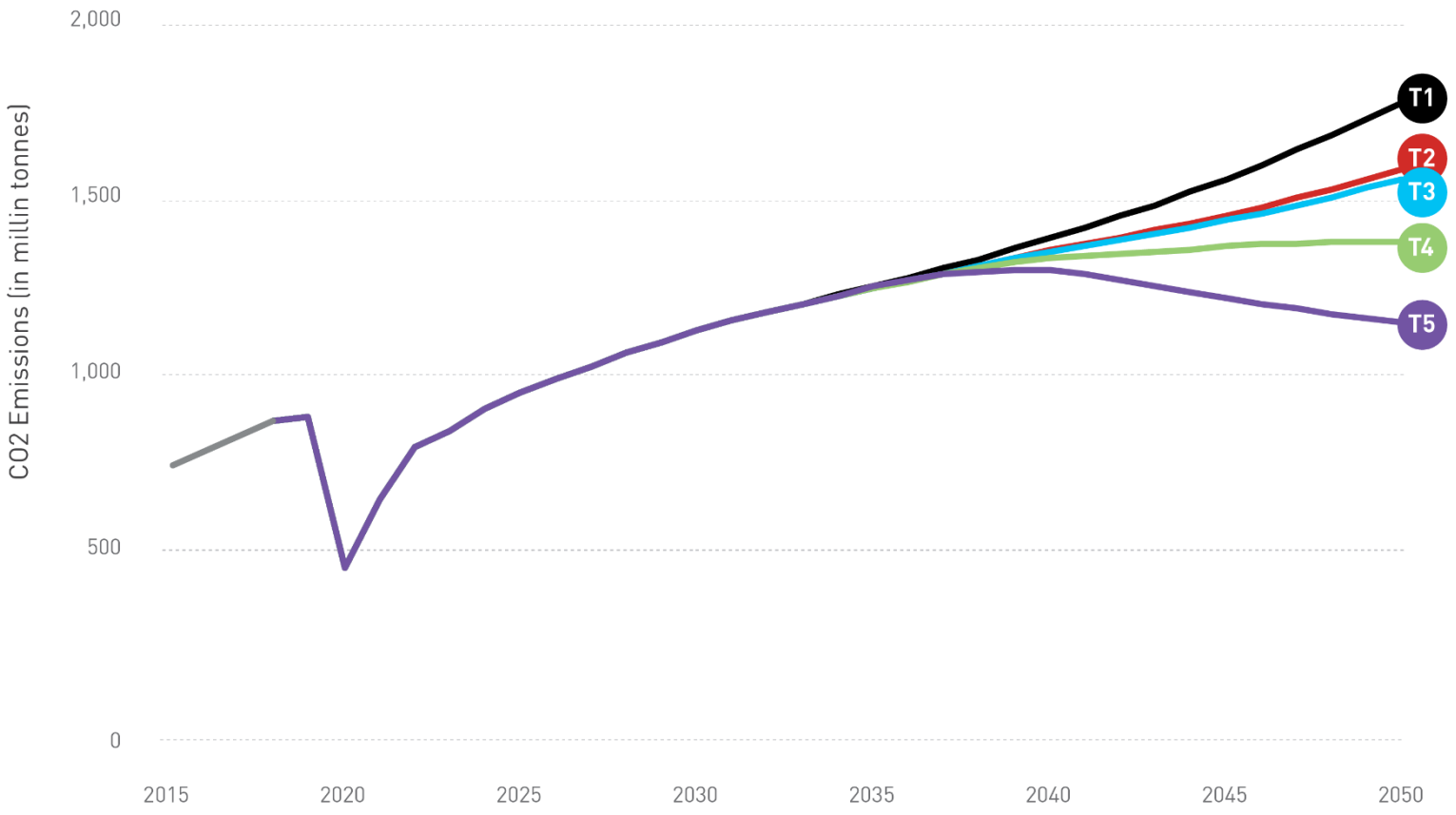
The Waypoint 2050 forecasts



Scenario	Description	2050 RPKs	CAGR
H High growth	Return to globalisation with a continuation of high growth trends seen in recent years, but from a revised base due to the impact of Covid-19.	23 trn	3.5%
C Central scenario	Continuation of historical trends, but a reduction compared with recent high-growth and taking into account the impact of Covid-19.	20 trn	3.0%
L Low growth	Protectionism deepens along with a reduction in mobility on top of Covid-19 impact.	19 trn	2.7%

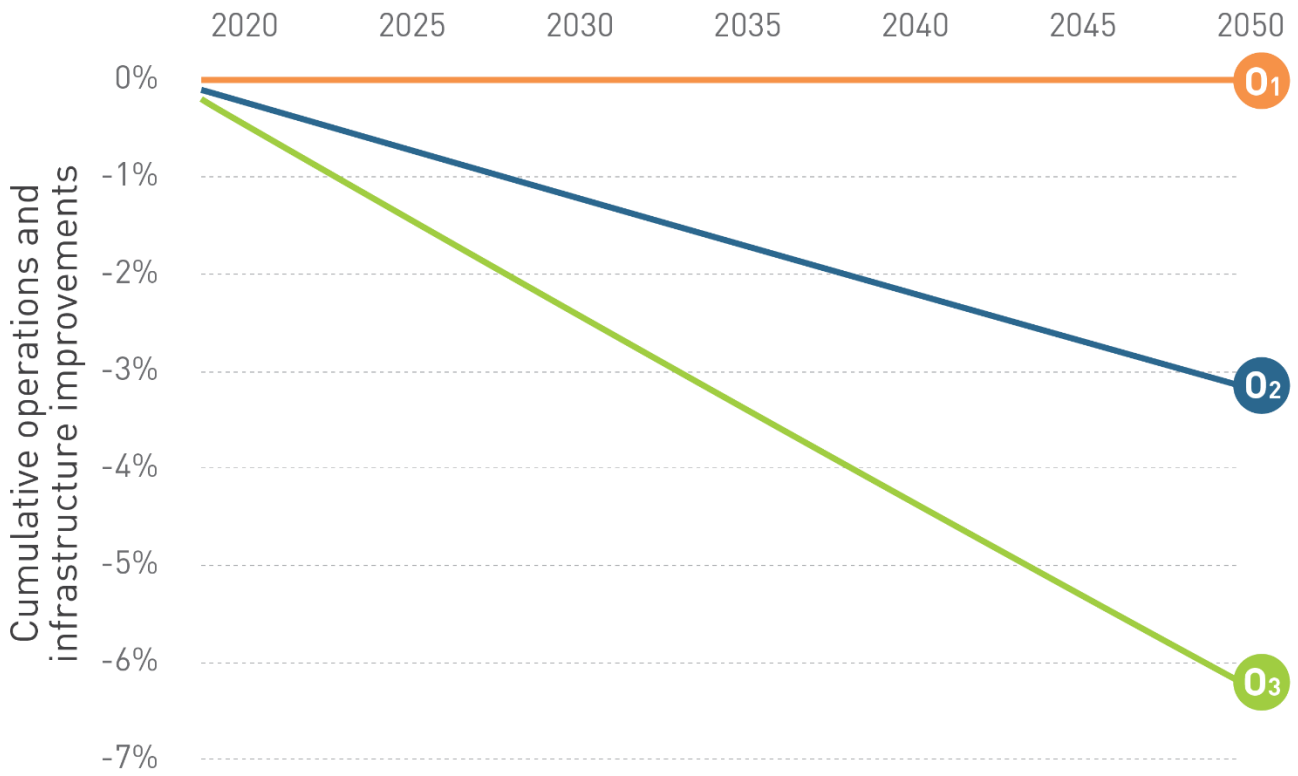
The **central scenario** was used for all Waypoint 2050 modelling work

How different technology scenarios can impact growth in CO_2



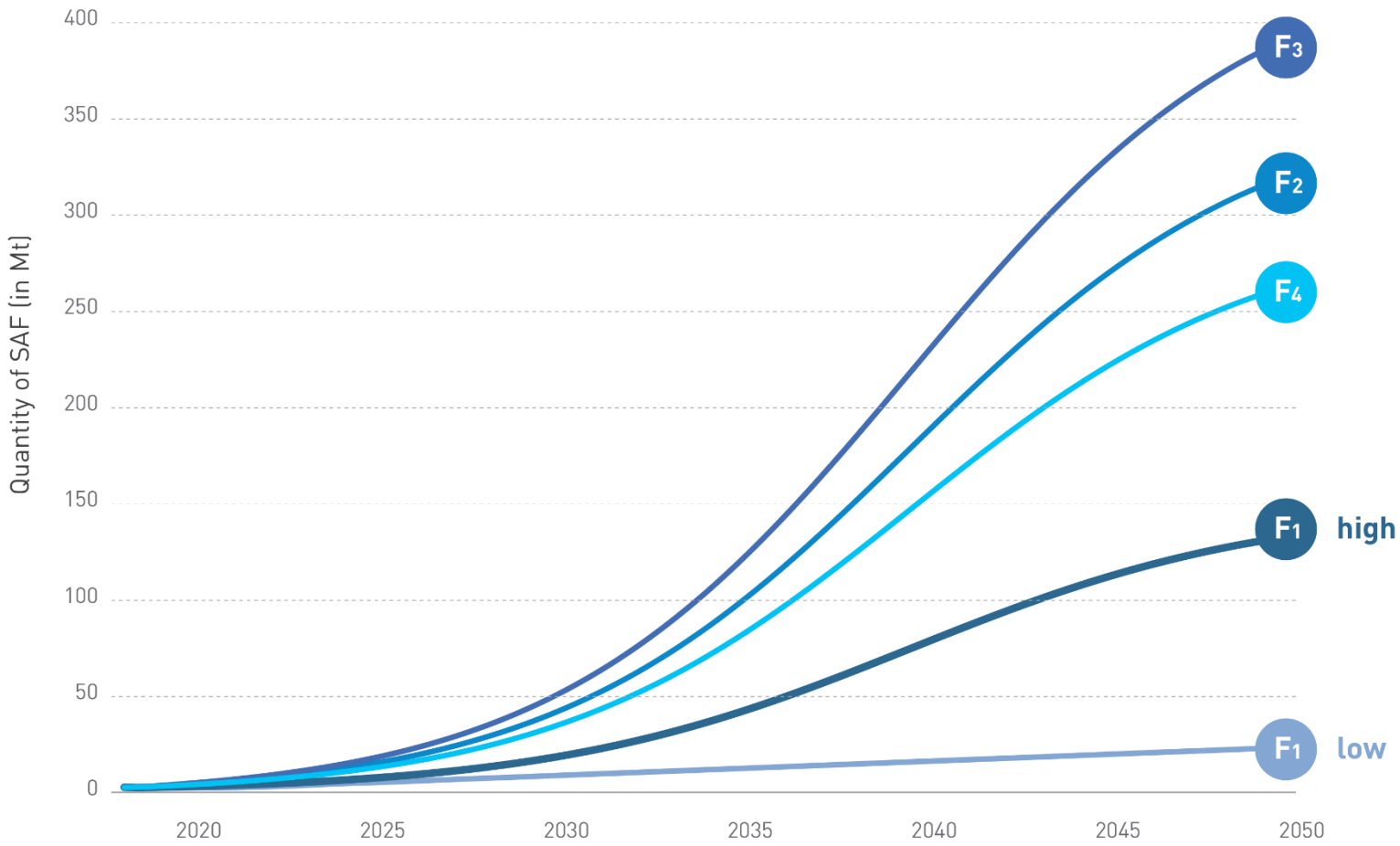
Scenario	Description
T_1 **Baseline**	Current fleet efficiency continues with slight improvement as older aircraft are replaced by today's most efficient new models. Not a realistic scenario.
T_2 **Conservative: evolutionary technologies only**	A new generation of aircraft follows current models, but just as an evolution of current configurations and propulsion.
T_3 **New configurations**	Revolutionary configurations of aircraft with new structural elements and new types of propulsion.
T_4 **Towards electrification**	Technology shift towards electric propulsion and hybrid systems. Entering the fleet from 2035-2040.
T_5 **Aspirational technology**	A revolutionary shift towards zero emissions aircraft for the narrowbody segment earlier (~2030) and for larger aircraft than the T4 scenario.

Operational efficiency scenarios for Waypoint 2050



Scenario	Description	Avg annual improvement
O1 Low improvement	Investments in operational and infrastructure efficiencies are counterbalanced by congestion increases. Despite what looks like no improvement, if investment in operational efficiency did not take place, increasing traffic would lead to a worsening situation.	0.00%
O2 Mid improvement	Substantial investments in operational and infrastructure efficiencies.	0.10%
O3 High improvement	Substantial investments in operational and infrastructure efficiencies.	0.20%

Waypoint 2050 forecasts for SAF



Scenario	Description	2050 Mt SAF	2050 % of fuel supply
F1 F1 **Current trends – baseline**	Continuation of current growth of SAF development	20-144	5 – 30%
F2 **Pushing technology and SAF**	**Backcast** with a ramp-up in SAF production	290-390	82%
F3 **Aggressive SAF**	**Backcast** with a priority placed on SAF investment by the industry	350-450	86%
F4 **Aspirational technology**	**Backcast** with SAF filling the gap following radical technology developments	235-340	77%

The role of offsetting in Waypoint 2050 scenarios

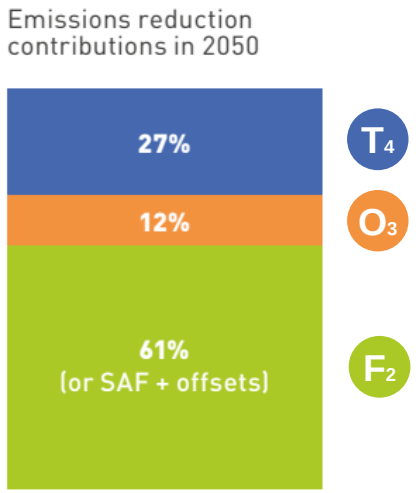
- Waypoint 2050 scenarios do not rely on offsetting as a central pillar of action:
  - Offsetting will be needed in the mid-term as new technologies are developed and SAF is scaled-up.
  - In the long-term, offsets will still be needed to deal with remaining residual emissions, or if they make more sense (economically or environmentally) than shifting to in-sector reductions.
  - However, the expectation is that both the 2050 goal and net-zero are achievable without large-scale offsetting as the core component of action.

Meeting the industry goal by exploring different levers

Scenario 1

Pushing technology and operations

Industry prioritises technology and operational improvements

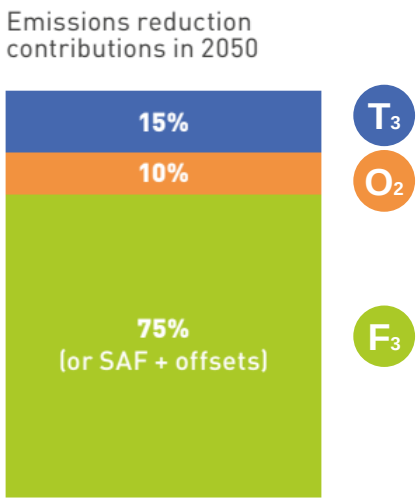


Electric and hybrid short-range (<100 seat) aircraft from 2035/2040. High-range operational improvements. 290-390 Mt of SAF by 2050.

Scenario 2

Aggressive sustainable aviation fuel deployment

Industry prioritises investment in sustainable aviation fuel over technology

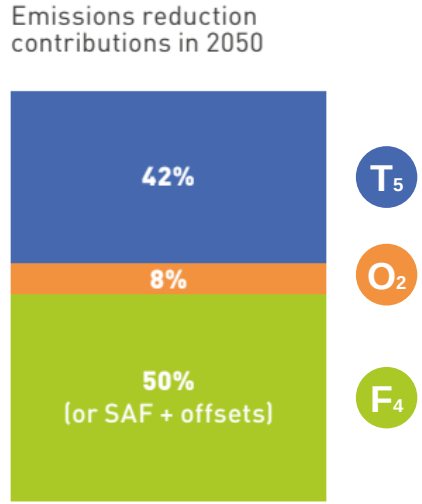


New airframe configurations such as blended wing body. Mid-range operational improvements. 350-450 Mt of SAF by 2050.

Scenario 3

Aspirational and aggressive technology perspective

Highly ambitious technology developments: electric and/or hydrogen for up to 200 seat aircraft before 2035

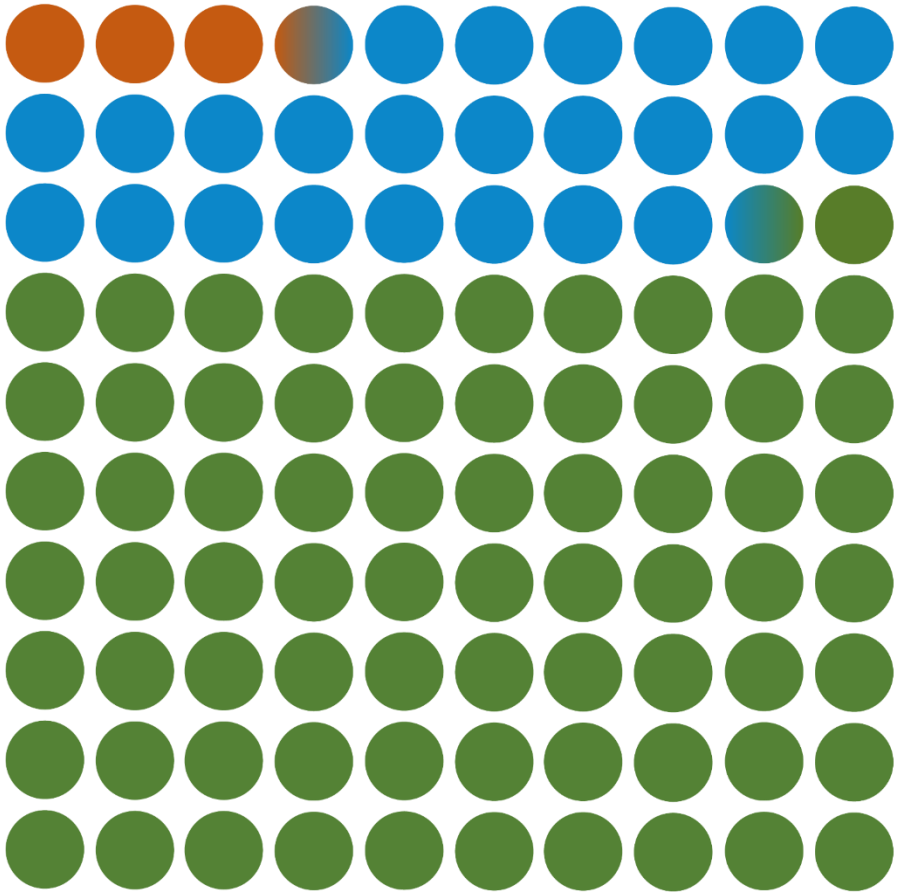


Very aggressive zero emissions aircraft (electric, hydrogen) by 2035-2040. Mid-range operational improvements. 235-340 Mt of SAF by 2050.

Indicative overview of where CO_2 measures could be deployed

	2020	2025	2030	2035	2040	2045	2050	
Commuter » 9-50 seats » <60 minute flights » <1% of industry CO_2	**SAF**	**Electric** and/or **SAF**	**Electric** and/or **SAF**	**Electric** and/or **SAF**	**Electric** and/or **SAF**	**Electric** and/or **SAF**	**Electric** and/or **SAF**	~27% of CO_2 emissions
Regional » 50-100 seats » 30-90 minute flights » ~3% of industry CO_2	**SAF**	**SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	
Short-haul » 100-150 seats » 45-120 minute flights » ~24% of industry CO_2	**SAF**	**SAF**	**SAF**	**SAF**	**Electric, hydrogen combustion** and/or **SAF**	**Electric, hydrogen combustion** and/or **SAF**	**Electric, hydrogen combustion** and/or **SAF**	
Medium-haul » 100-250 seats » 60-150 minute flights » ~43% of industry CO_2	**SAF**	**SAF**	**SAF**	**SAF**	**SAF**	**SAF**	**SAF** potentially some **Hydrogen**	~73% of CO_2
Long-haul » 250+ seats » 150 minute + flights » ~30% of industry CO_2	**SAF**	**SAF**	**SAF**	**SAF**	**SAF**	**SAF**	**SAF**	

SAF will remain a vital part of aviation decarbonisation



Even assuming highly optimistic use of **electric** and **hydrogen** energy for short-haul and some medium-haul operations in 2050, the vast majority of traffic (RPKs) will still rely on the use of **sustainable aviation fuel**.

2050 % of operations by energy source (indicative example)

ATAG schematic indication of potential energy use in 2050

Key conclusions of Waypoint 2050 research

1

Industry long-term goal of -50% net CO_2 from aviation globally by 2050 **is very challenging, but achievable.**

(there are several pathways to meeting the goal)

2

With the right policy support and advances in technology, **net-zero aviation** can be achieved **globally** by around 2060/65.

(in some regions earlier than this point)

3

We will need a **significant scale-up of sustainable aviation fuel**: to around 450-500 million tonnes a year by 2050.

(long-haul routes will rely on SAF)

4

New technology such as electric and hydrogen aircraft, **need accelerated research & development**

(could enter service around 2035 on short-haul routes)

5

Operations and infrastructure efficiencies are **vital for early action** and to maintain capacity efficiency in the future.

(mainly relates to air traffic management)

6

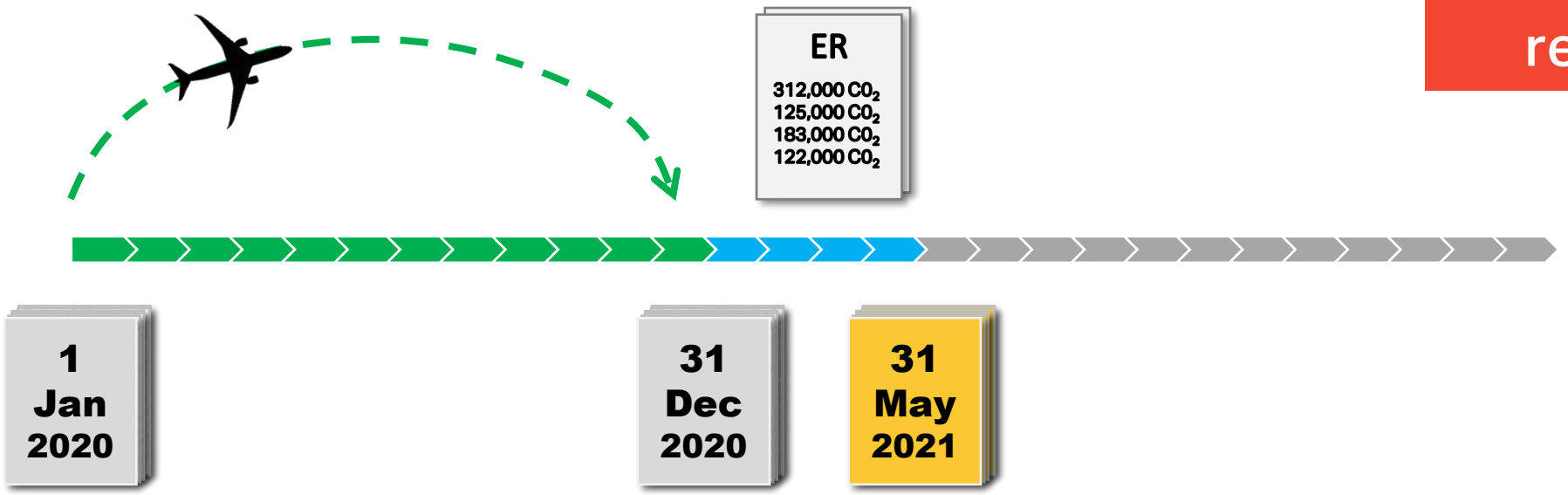
Offsetting important in the mid-term. Long-term goals should be achievable without offsetting playing a central role.

(by 2050, offsetting will mainly be in carbon removal opportunities)

CORSIA Implementation Status

Reporting of emissions

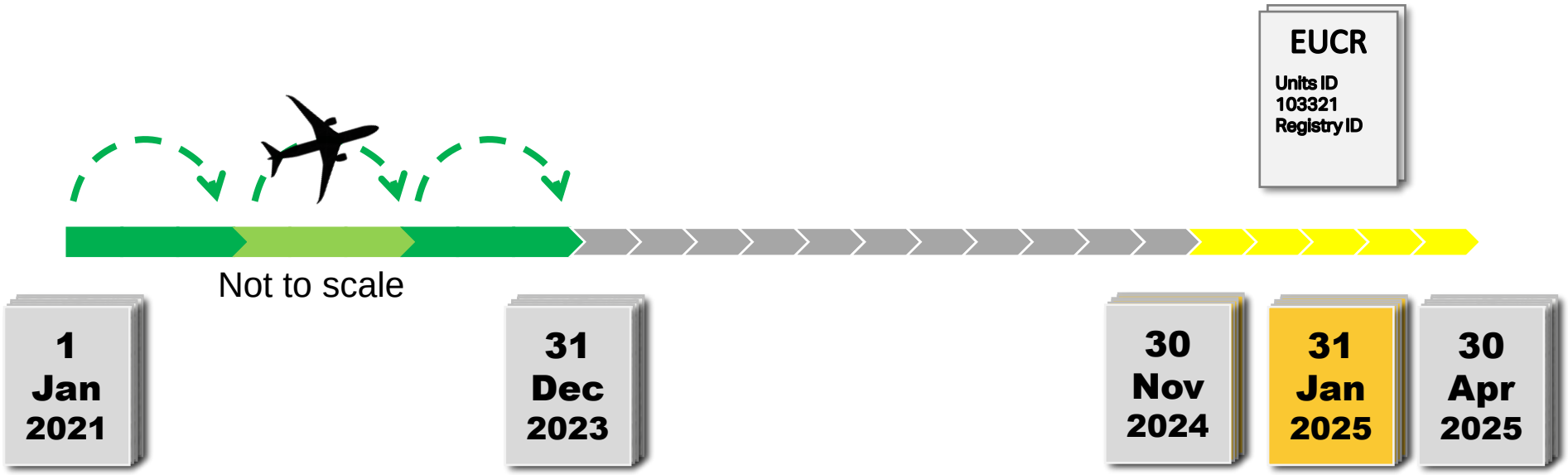
At the end of each year, airlines must submit a report with their CO_2 emissions from international aviation to their national authority



MRV for 2020 emissions remains mandatory

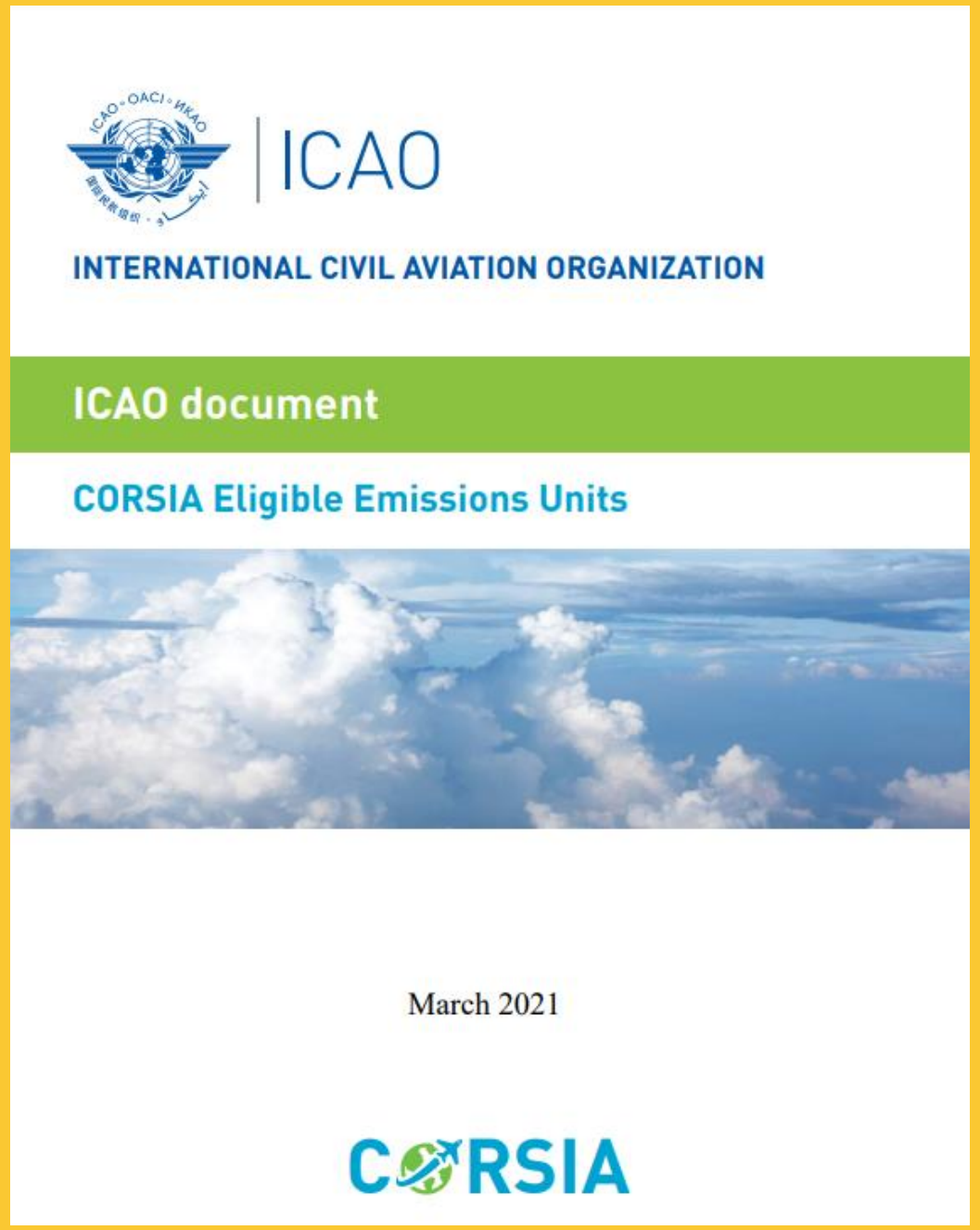
Offsetting

At the end of each 3-year compliance cycle, airlines will be required to complete their offsetting obligations for the cycle.



Preparing for offsetting requirements

Large uncertainty remains regarding recovery and, therefore, offsetting requirements in pilot phase



CORSIA Eligible Emissions Units

- American Carbon Registry (ACR)
- Architecture for REDD+ Transactions (ART)
- China GHG Voluntary Emission Reduction Program
- Clean Development Mechanism (CDM)
- Climate Action Reserve (CAR)
- Global Carbon Council (GCC)-Newly approved
- The Gold Standard (GS)
- Verified Carbon Standard (VCS)

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Latest Council decision of sustainability criteria for CORSIA eligible fuels

Themes 3-7

CAEP to develop further guidance on application of Themes 3-7 for Council's approval at its 224th session (end of 2021).

Themes 8-10

Themes 8-10 can be demonstrated to SCS by a national attestation from States.

Themes 11-12

Themes 11-12 will be reported to SCS on a voluntary basis.

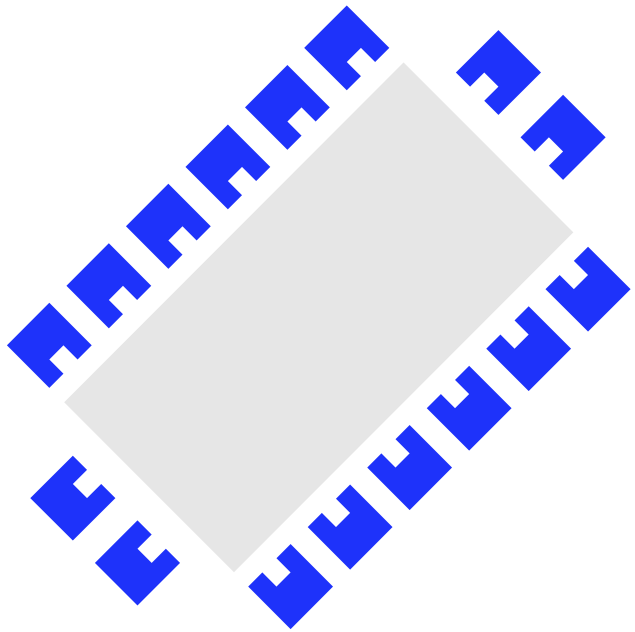
Note: The national attestation approach on demonstrating Theme 8-10 is to address concerns related to state sovereignty.

2020 Council decision on CORSIA baseline

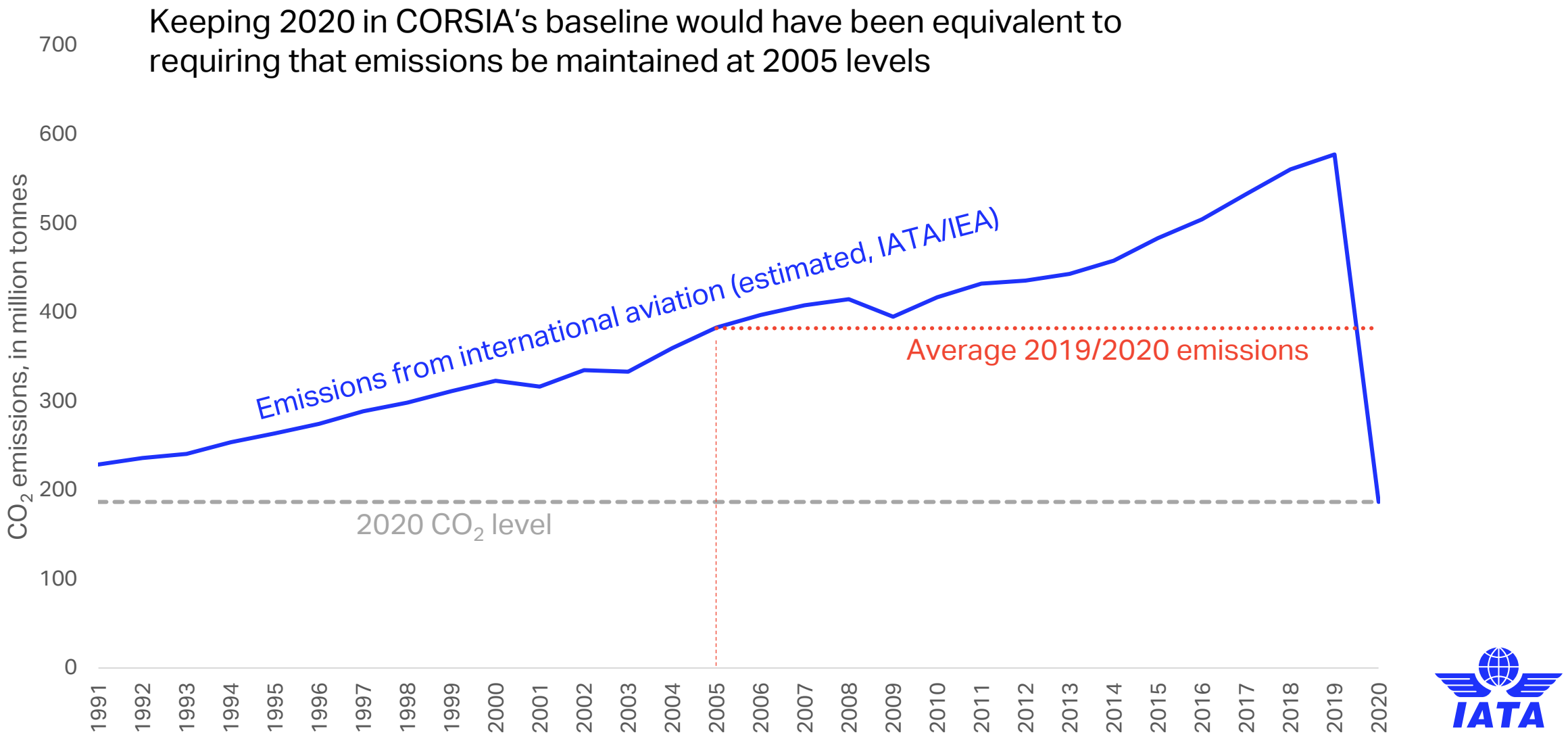
Actual 2020 emissions should not be used for any CORSIA design features

During the pilot phase, 2019 emissions will be used instead of 2020 emissions for CORSIA's baseline and other design elements

The Council will consider amendments to Assembly Resolution A40-19 to also use only 2019 emissions beyond the pilot phase. The amendments will be presented to the 41st session of the Assembly for decision



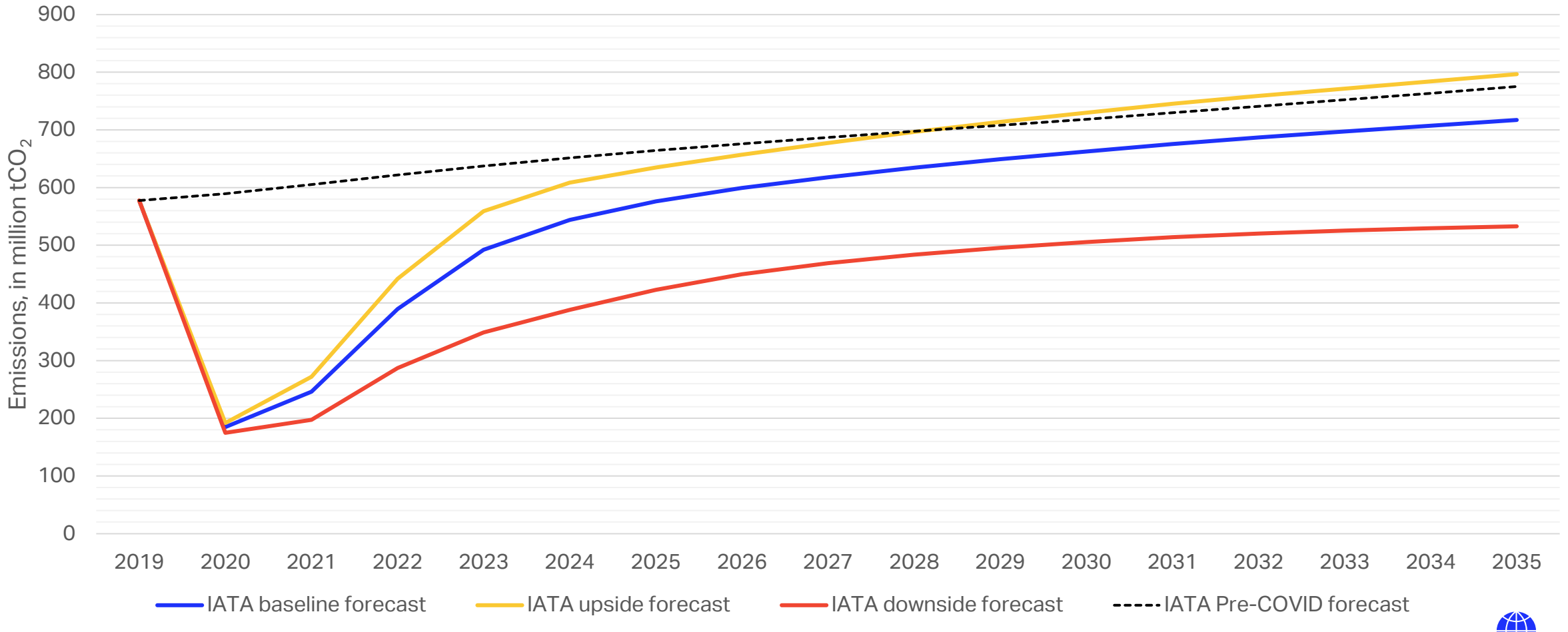
Emissions from international aviation fell below 200 mio tCO_2



2022 Review

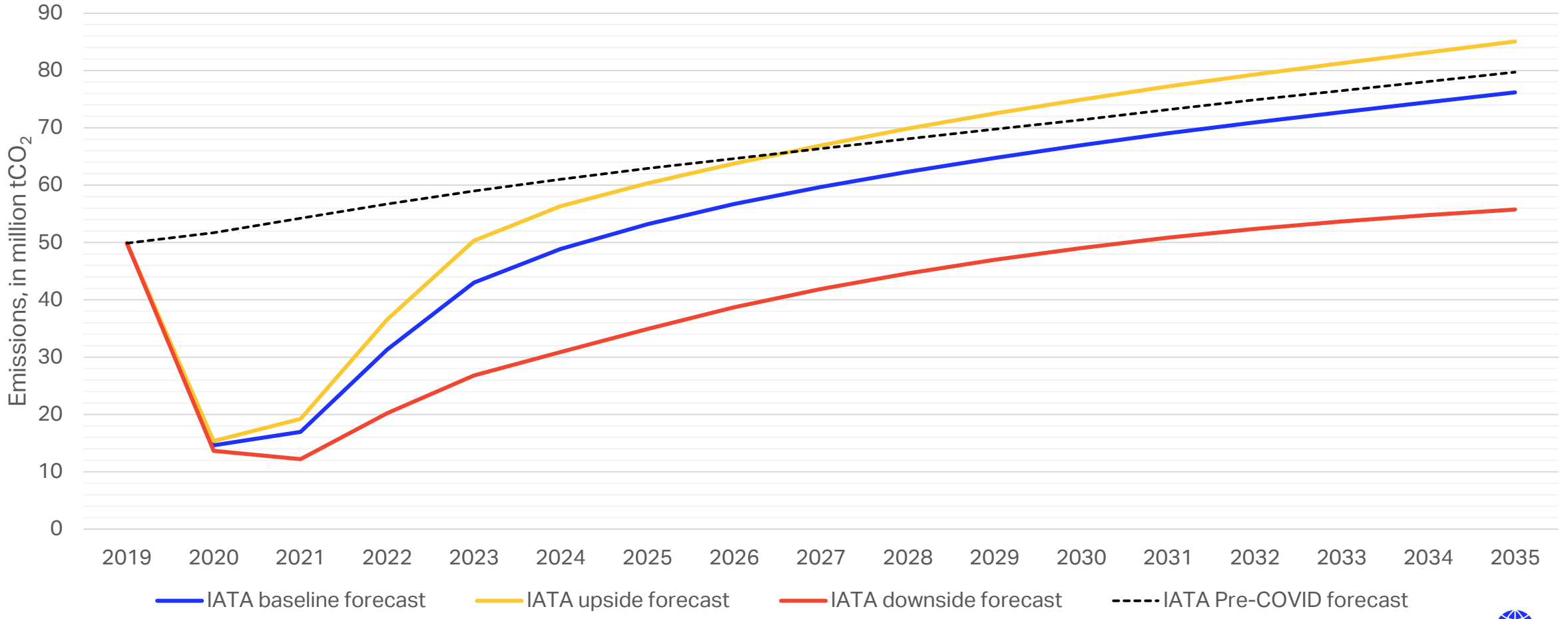
- Baseline post pilot-phase
- Proposals to change other design-elements are likely to be put forward by a few States
- 2022 Assembly to also consider long-term aspirational goal

Total emissions from international aviation

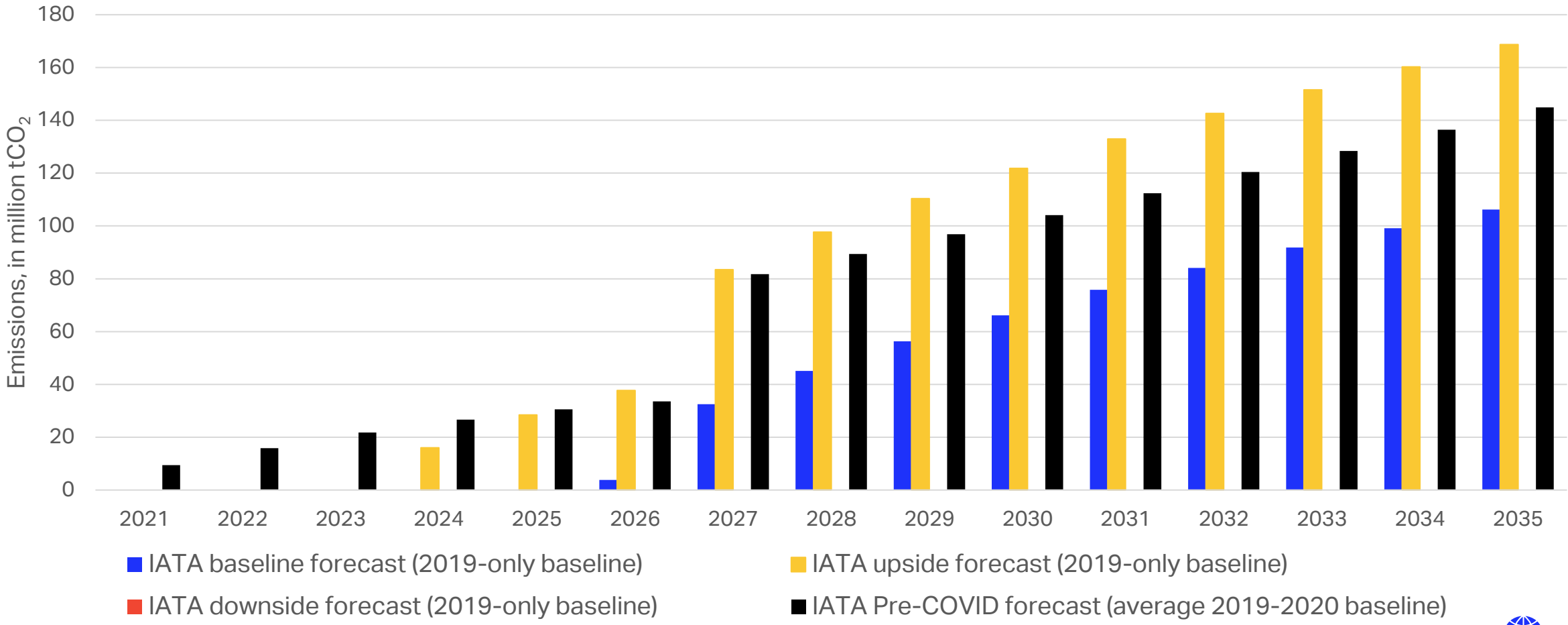


Regional forecast:

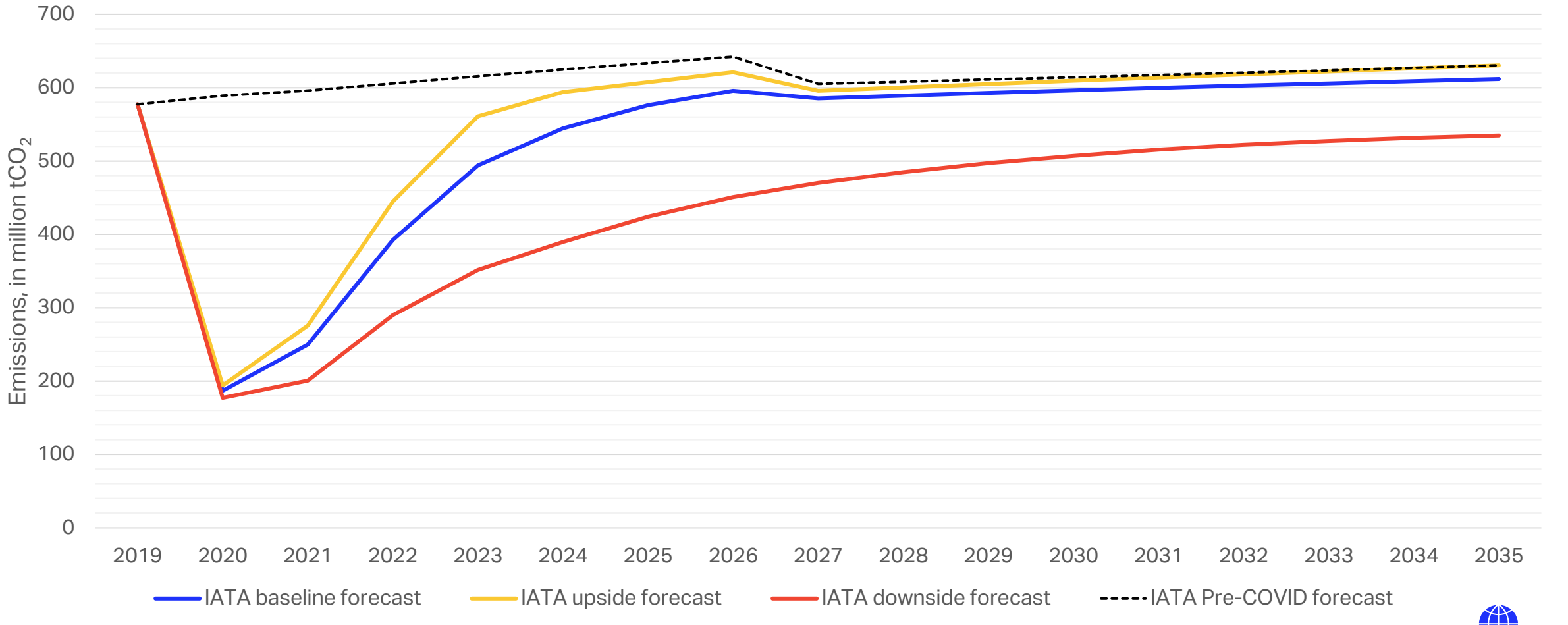
International flights departing Southeast Asia

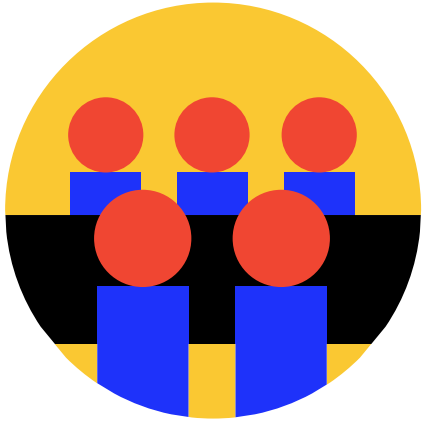


Offsetting requirements



Net emissions from international aviation





Questions?

Agenda Item 2 Introduction of Aviation Carbon Exchange (ACE)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ACE
INTRODUCING THE AVIATION CARBON EXCHANGE

Requirement to invest in carbon credits

Only carbon credits that meet all environmental eligibility criteria under CORSIA can be used for compliance.

Existing complexities:

- Lack of carbon market experience
- Where and what to buy? Type of credits?
- Where to find CORSIA eligible credits?
- Complex bilateral agreements
- Lots of players in the market
- Lack of price transparency
- Financial counterparty risk, what are my guarantees?

CORSIA Compliance Obligations

Aviation and Environment

Airlines have made firm and public commitments to offset emissions (e.g., net-zero)

Questions to be answered:

- When to invest? Now or later?
- With whom to invest?
- Which projects to invest in? Where can I find high quality projects that meet public acceptance?
- Carbon pricing, what's the magnitude of my $ investment?
- What should I do with a surplus of carbon credits?

Voluntary Commitments

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Numerous parties selling carbon credits…

Banks, brokers, retailers, intermediaries, offset project developers…

…and what are the issues when contracting?

- Complex bilateral agreements.
- Minimum volume uptake requirements.
- High mark-up and hidden costs.
- Lack of visibility in terms of project availability and choice.
- Limited choice or availability of credits.
- Financial risk - e.g., no guarantee credits are CORSIA compliant.

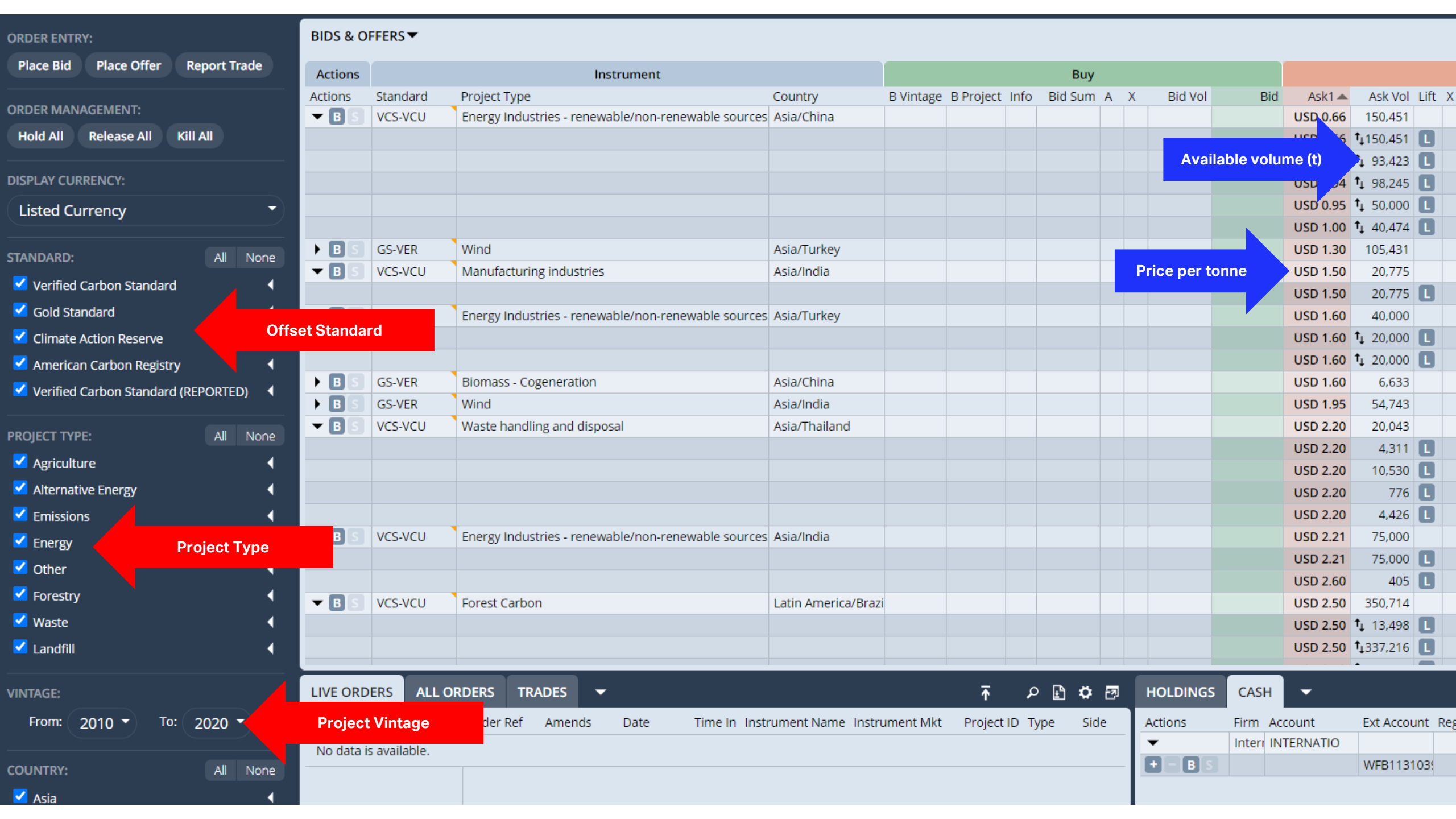
What does an exchange solution can offer instead?

- **Digital Contracts:** eliminates paper, special agreements and reduces cost.
- **Price transparency:** price per tonne by offset standard, type and location.
- **Market overview:** transparency in terms of availability of credits by project type.
- **Access:** to different project types and geographical location of choice.
- **Buy & Sell:** possibility to resell credits, e.g., in case of surplus or in case of price change opportunities.
- **Impactful:** contract directly with offset project developers, and more effective climate financing.
- **Reduce costs:** create your own portfolio, remove fees and markups.

Aviation Carbon Exchange -ACE

In November 2020, IATA officially launched the ACE in partnership with CBL Markets.

The ACE is a **centralized marketplace** where airlines can identify, select, and transact voluntary and CORSIA eligible emission units, via a **simple, secure electronic interface**.


ORDER ENTRY:
Place Bid
Place Offer
Report Trade
ORDER MANAGEMENT:
Hold All
Release All
Kill All
DISPLAY CURRENCY:
Listed Currency
STANDARD:
All
None
Verified Carbon Standard
Gold Standard
Climate Action Reserve
American Carbon Registry
Verified Carbon Standard (REPORTED)
Offset Standard
PROJECT TYPE:
All
None
Agriculture
Alternative Energy
Emissions
Energy
Other
Forestry
Waste
Landfill
Project Type
VINTAGE:
From: 2010
To: 2020
Project Vintage
COUNTRY:
All
None
Asia
BIDS & OFFERS
Actions
Instrument
Buy
Actions
Standard
Project Type
Country
B Vintage
B Project
Info
Bid Sum
A
X
Bid Vol
Bid
Ask1
Ask Vol
Lift
VCS-VCU
Energy Industries - renewable/non-renewable sources
Asia/China
USD 0.66
150,451
150,451
93,423
98,245
USD 0.95
50,000
USD 1.00
40,474
Available volume (t)
GS-VER
Wind
Asia/Turkey
USD 1.30
105,431
VCS-VCU
Manufacturing industries
Asia/India
USD 1.50
20,775
Price per tonne
USD 1.50
20,775
Energy Industries - renewable/non-renewable sources
Asia/Turkey
USD 1.60
40,000
USD 1.60
20,000
USD 1.60
20,000
GS-VER
Biomass - Cogeneration
Asia/China
USD 1.60
6,633
GS-VER
Wind
Asia/India
USD 1.95
54,743
VCS-VCU
Waste handling and disposal
Asia/Thailand
USD 2.20
20,043
USD 2.20
4,311
USD 2.20
10,530
USD 2.20
776
USD 2.20
4,426
VCS-VCU
Energy Industries - renewable/non-renewable sources
Asia/India
USD 2.21
75,000
USD 2.21
75,000
USD 2.60
405
VCS-VCU
Forest Carbon
Latin America/Brazi
USD 2.50
350,714
USD 2.50
13,498
USD 2.50
337,216
LIVE ORDERS
ALL ORDERS
TRADES
der Ref
Amends
Date
Time In
Instrument Name
Instrument Mkt
Project ID
Type
Side
No data is available.
HOLDINGS
CASH
Actions
Firm
Account
Ext Account
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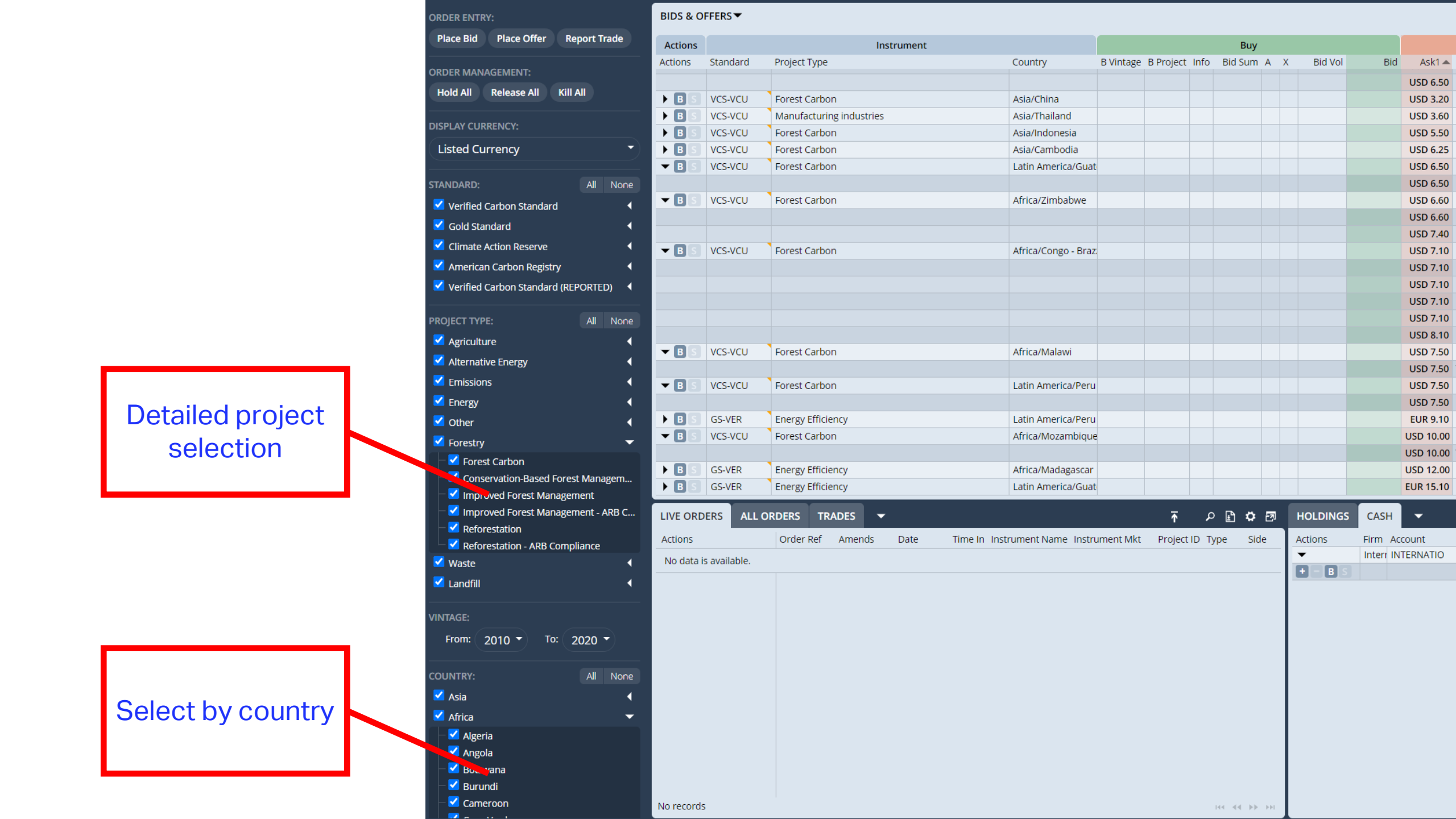
Detailed project selection
Select by country
ORDER ENTRY:
Place Bid
Place Offer
Report Trade
ORDER MANAGEMENT:
Hold All
Release All
Kill All
DISPLAY CURRENCY:
Listed Currency
STANDARD:
All
None
Verified Carbon Standard
Gold Standard
Climate Action Reserve
American Carbon Registry
Verified Carbon Standard (REPORTED)
PROJECT TYPE:
All
None
Agriculture
Alternative Energy
Emissions
Energy
Other
Forestry
Forest Carbon
Conservation-Based Forest Managem...
Improved Forest Management
Improved Forest Management - ARB C...
Reforestation
Reforestation - ARB Compliance
Waste
Landfill
VINTAGE:
From: 2010
To: 2020
COUNTRY:
All
None
Asia
Africa
Algeria
Angola
Burundi
Cameroon
BIDS & OFFERS
Actions
Instrument
Buy
Actions
Standard
Project Type
Country
B Vintage
B Project
Info
Bid Sum
A
X
Bid Vol
Bid
Ask1
VCS-VCU Forest Carbon Asia/China USD 6.50
VCS-VCU Manufacturing industries Asia/Thailand USD 3.20
VCS-VCU Forest Carbon Asia/Indonesia USD 3.60
VCS-VCU Forest Carbon Asia/Cambodia USD 5.50
VCS-VCU Forest Carbon Latin America/Guat USD 6.25
USD 6.50
VCS-VCU Forest Carbon Africa/Zimbabwe USD 6.50
USD 6.60
USD 6.60
USD 7.40
VCS-VCU Forest Carbon Africa/Congo - Braz USD 7.10
USD 7.10
USD 7.10
USD 7.10
USD 7.10
USD 8.10
VCS-VCU Forest Carbon Africa/Malawi USD 7.50
USD 7.50
VCS-VCU Forest Carbon Latin America/Peru USD 7.50
USD 7.50
GS-VER Energy Efficiency Latin America/Peru EUR 9.10
VCS-VCU Forest Carbon Africa/Mozambique USD 10.00
USD 10.00
GS-VER Energy Efficiency Africa/Madagascar USD 12.00
GS-VER Energy Efficiency Latin America/Guat EUR 15.10
LIVE ORDERS
ALL ORDERS
TRADES
Actions
Order Ref
Amends
Date
Time In
Instrument Name
Instrument Mkt
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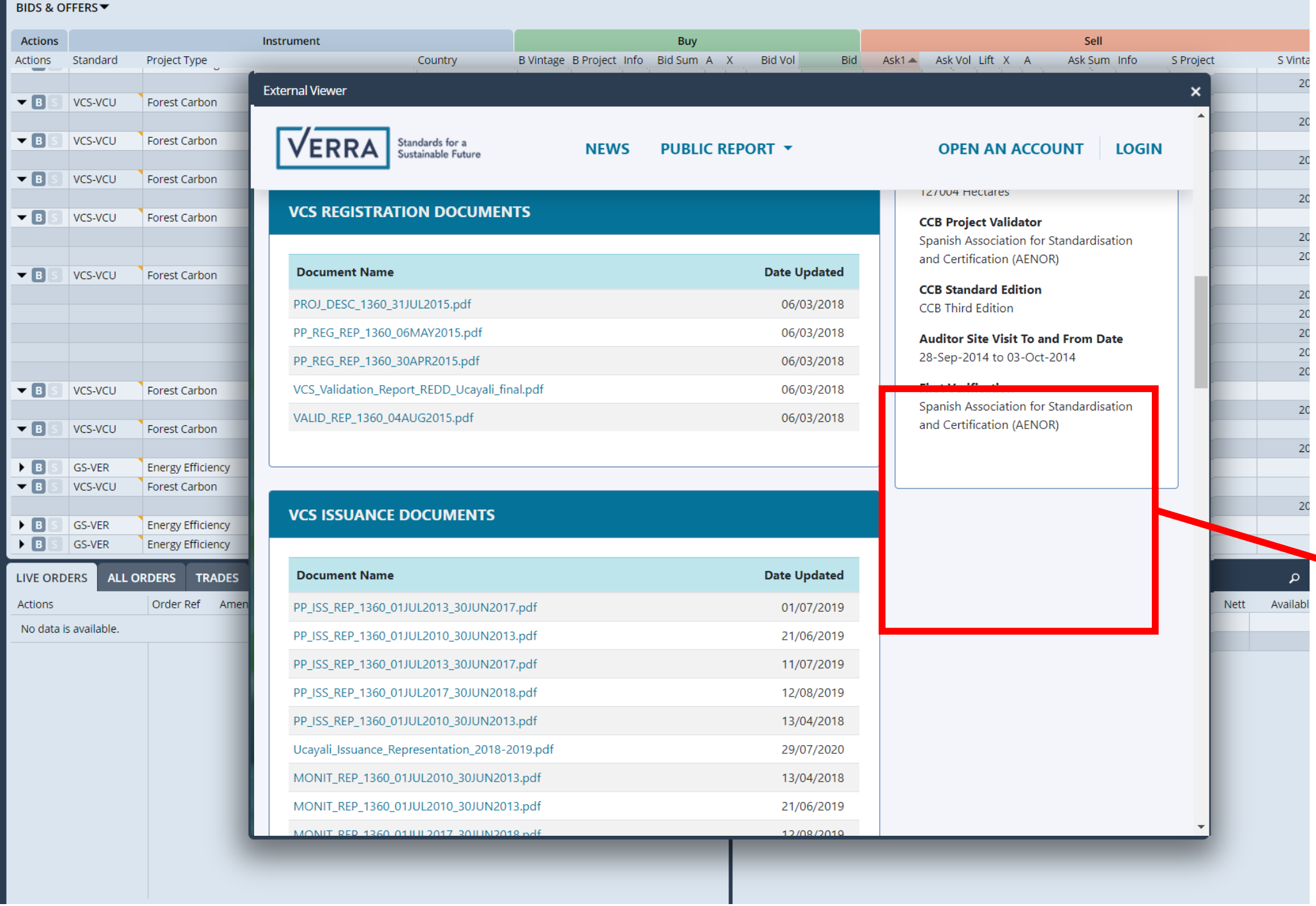
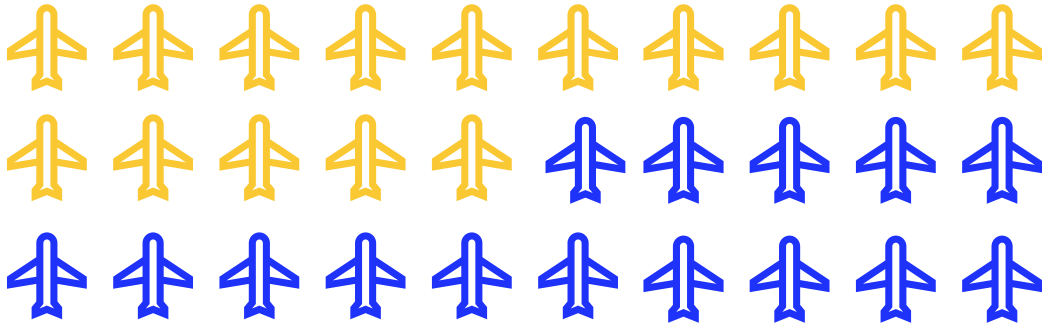


Retrieve detailed project information and conduct your own project due diligence.

What is the status of ACE?

- Partnership agreement was signed in early 2020
- ACE was officially launched at the IATA AGM
- First official trade – Jet Blue
- >50 webinars were conducted
- Cooperation & support from local/regional offices
- First very large trade (1.4mt) was conducted in Dec 2020
- Strong interest in general, mainly triggered by voluntary commitments
- System integration with ICH in progress

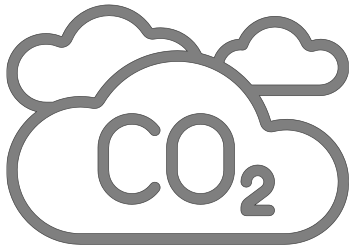


15 out of 30 of the world's largest airlines have accepted an invitation by IATA to join the ACE Pilot program.

30% of airlines

have made voluntary commitments including; carbon neutrality for domestic as well as global emissions. This accounts for ~80 million tCO2e.

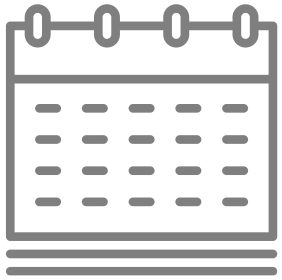
Via ACE, Airlines can source voluntary and CORSIA emission units.



ACE Member Airlines account for more than

300+ million

tCO2e emitted annually.

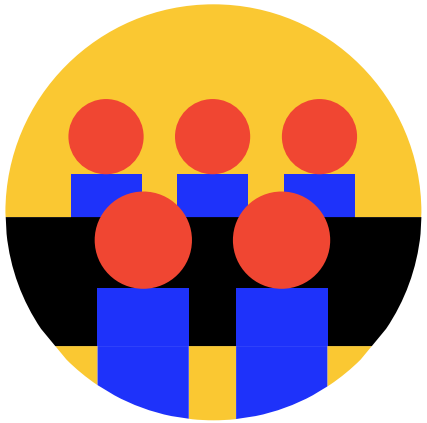


Many of the commitments have already started.

Now

Why Airlines are joining the ACE

- **ACE is free for Aviation Stakeholders to join**
- **ACE is intuitive and simple to use**
- **ACE offers price discovery**
- **ACE removes the barriers of entry associated with carbon markets**
- **ACE can be used by airlines to prepare for CORSIA compliance**
- **ACE can be used to meet your voluntary offset commitments**
- **ACE has transparent fees (per transaction based).**



Questions?

Agenda Item 3
Sustainable Aviation Fuel

1. SAF Fundamentals

2. Airlines – get prepared

3. Policy momentum

What do we mean when we say ‘SAF’?

SUSTAINABLE

Meets sustainability criteria

AVIATION

Meets technical certification requirements for use in commercial aircraft

FUEL

Uses alternative to crude oil feedstock

Some of the SAF feedstock options

Amazing variety of feedstock






Current most common options → Most likely mid-century

- Waste oils
- Municipal solid waste / industrial off-gasses
- Wood processing and forestry waste
- Agricultural waste
- Oil and cellulosic crops
- Power-to-liquid sources

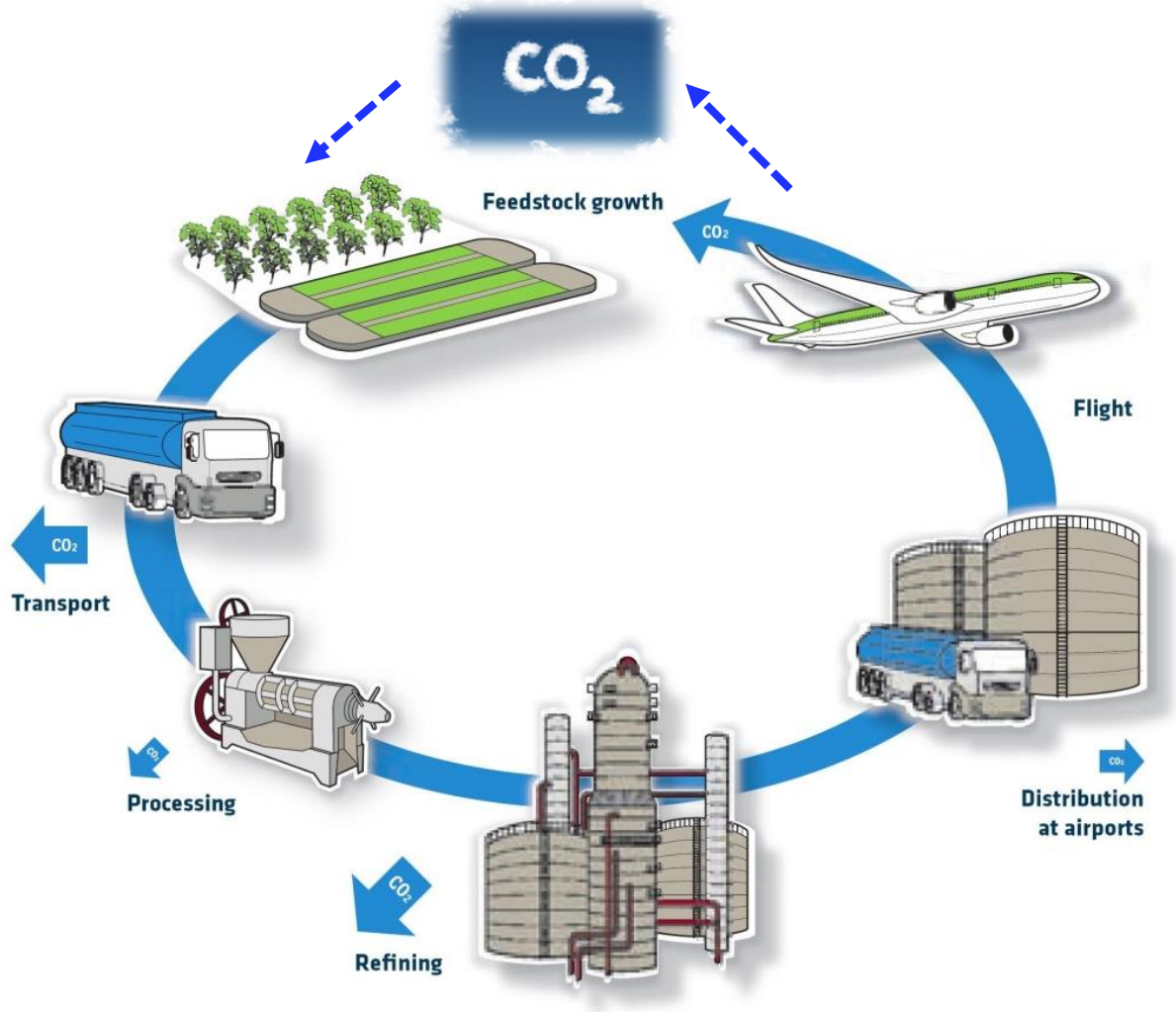
Understanding sustainability:

SAF can reduce lifecycle emissions by 80% compared to fossil fuel

Crops grown on high carbon stock land

Don't threaten food / water security

High carbon alternative sources



Sustainability is globally important

SAF Facts in 2021 – moving at a fast pace

350,000 flights

2016: 500 flight

2025: 1 million flights

100+ million litres per annum

2016: 8 million litres

2025: around 5 billion litres

36 Countries with SAF policy

2016: 2 countries

2025: potentially a global agreement

7 technical pathways

2016: 4 technical pathways

2025: 11 technical pathways

60%-100% CO_2 reduction

2016: approx 60% reduction

2025: approx. 80% reduction

$7 billion in forward purchase agreements

2016: $2.5 billion

2025: > $30 billion

**2025 figures are IATA Environment estimates*

Airlines – are you SAF ready?

Understanding SAF will be strategically important as the energy transition accelerates

<u>SAF Variables:</u>

- SAF feedstocks, efficiency improvements and prices
- Carbon price
- Oil price
- Regulatory changes
- Corporate expectations
- Intangible benefits

SAF: How to get started..

Build internal expertise:

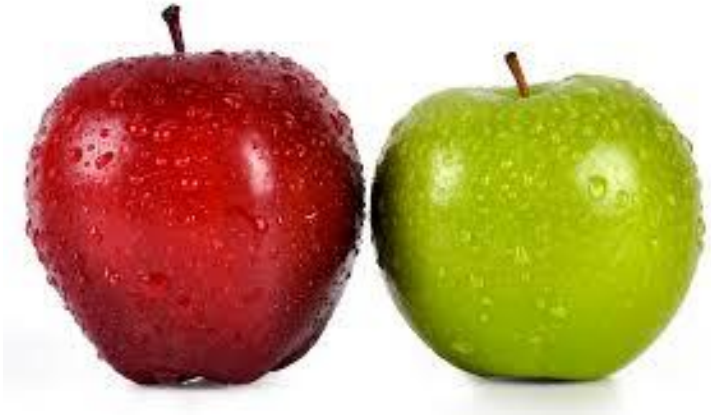
- ✓Technical
- ✓Sustainability

- A project can be useful
- Go alone or partner? Pros and cons
- Demonstrations flights
- Research flight series
- Common use project e.g. an airport SAF day
- Offtake or investment

How can IATA help?

- Publications including SAF best practice
- Regulatory (inc. ICAO) knowledge
- Tailored workshops
- Strategic modelling
- Consulting
- www.iata.org/whatwedo/environment

How to think about price?



OR

What are we comparing?

Offtake? Volume? Timeframe? equity investment? Fixed price or risk sharing conditions? Sustainability quality (ERFs)

Future outlook: Oil price, regulation, price of carbon, business strategy – customers / corporates / investors

A 'competitive' SAF offtake agreement may not imply exactly the same nominal price for the fuel

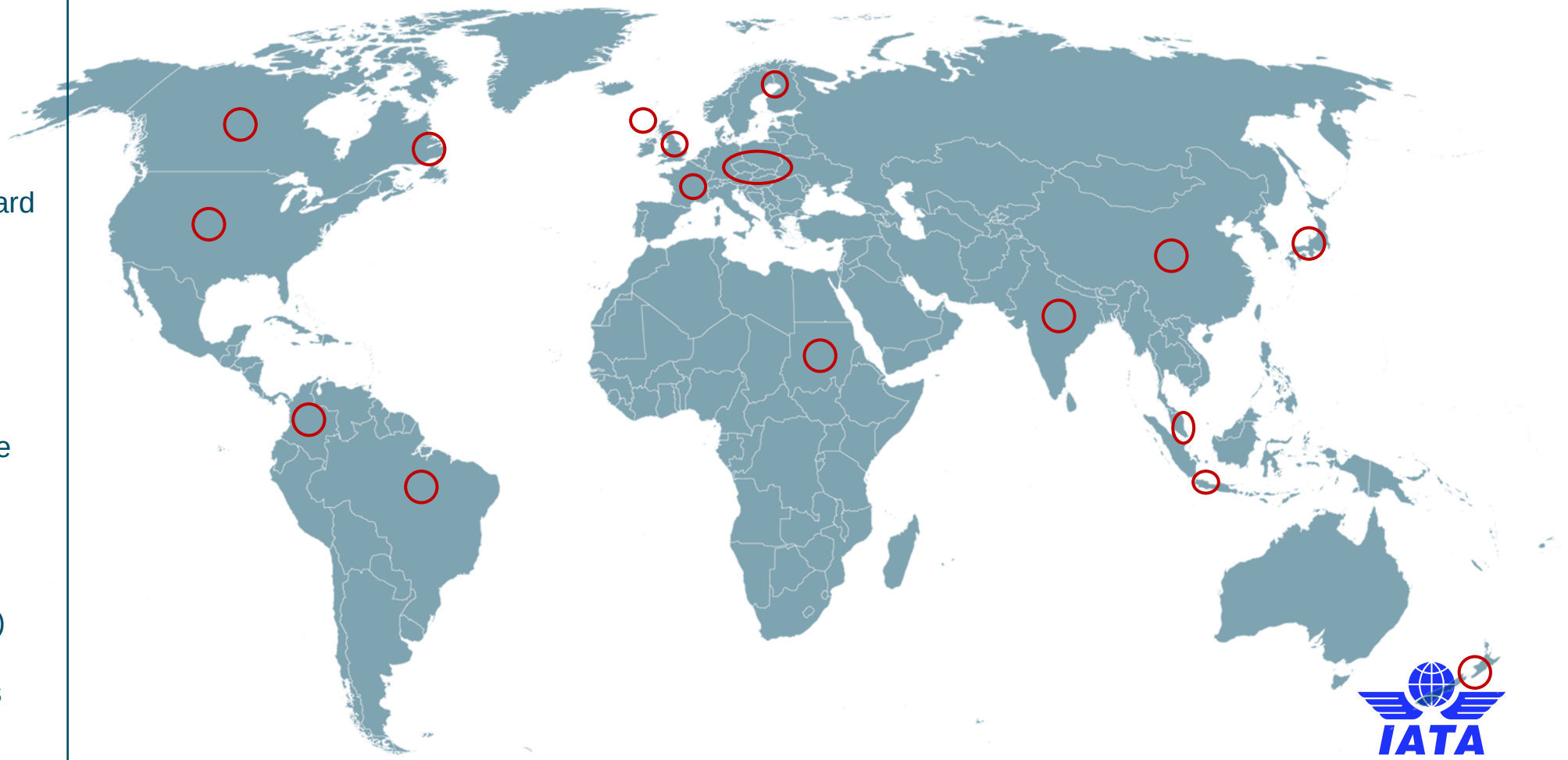
What are some of the conceptual challenges for comparing the 'SAF' price?

- SAF and conventional kerosene are (*in terms of technical performance*) **homogeneous**.
- In the short-term (2021-2025) SAF will be an **immature market** without a transparent and liquid market
- The different methods to produce SAF have **different cost sensitivities**:
- Some production methods have high up front capital cost and low unit cost of production relative to some which have lower up front capital costs and higher unit cost of production
- Is it possible to construct competitive off-take agreements? YES.

SAF Policy - Huge amount of activity in all parts of the world

Numerous global initiatives and policy discussions including:

- ReFuelEU
- UK Jet Zero Council
- COP26 (Glasgow)
- Canada Clean Fuel Standard
- Various US legislative proposals / discussions
- Country SAF mandates in Europe
- Nordic initiatives
- SAF initiative in Japan
- EU-China (H2020 Alternate Project)
- H2020 Alight project (SAF deployment best practice)
- NZ mandate inc SAF
- Indonesia mandate (SAF?)
- CST
- Various industry roadmaps
- ICAO (LTAG and CAAF/3)



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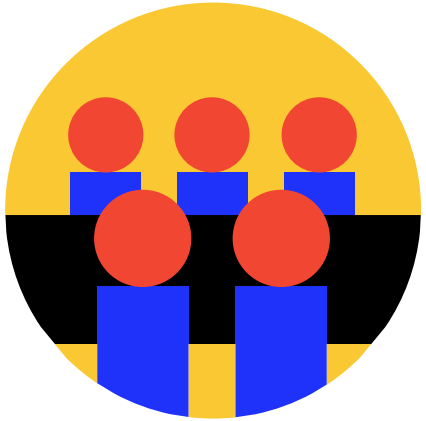


Questions?

Agenda Item 4
Environmental Best Practice

Single Use Plastics in Aviation

1. SUP in Aviation: Background

- Packaging (food, cutlery, toiletries, headsets, blankets, pillows),
- Drink stirrers
- Cotton Earbuds
- Drinks Bottles (PET)
- Drinking cups (cold beverages)
- Lining to paper cups (hot beverages)
- Cutlery and crockery
- Condiments
- Toiletries
- Cargo shrink wrapping
- Waste bags
- Medical (PPE masks, gloves, sanitizer bottles, disposable wipes, vials, bandages, biohazardous waste bags)
- Safety & Security (LaG bags; STEBs; lifejackets!)

SUP in Aviation End of Life

- Landfill/incineration
- Limited recycling (ICW)
- Negligible impact on marine environment (only if removed/littered by pax)

Challenges

- Compliance with asymmetric regulations
- No evidence that regulations took transport emissions into account (LCA)
- Passenger perception v net env benefits
- Pandemic reversed trend
- Alternative product env credentials, availability & cost

2. Update on SUP Regulations

- Asymmetric legislation with limited evidence of LCA approach
- Restrictions mainly focused on import and manufacture (not use/consumption)
- 127 countries introduced bans/restrictions on SUP bags
- 27 countries gone further by banning either specific products (e.g. plates, cups, straws, packaging), materials (e.g. polystyrene) or production levels
- EU member states (27) transpose SUP Directive by May 2021
- India
- Canada

3.1 EU SUP Directive (SUPD)

- SUPD transposed into MS legislation by May 2021
- Term “sustainable alternative” not defined but should not compromise “food hygiene” and that for some SUP products “alternatives are not yet readily available”
- Initial ban (from July 2021) includes: cotton bud sticks, **cutlery, plates**, straws, **drink stirrers** and labelling (marking) requirements for beverage cups & wet wipes
- Draft commission guidelines on SUP products (16 Dec 2020) provides comprehensive list of materials classified as SUP. Confirms that:

(a) paper products lined with plastic = SUP
(b) composite packaging (tetra pak) = SUP
(c) natural polymers that have not been chemically modified = not SUP
(d) waste collection bags = not SUP
(e) wet wipes = SUP

- IATA seeking a legal interpretation of the definitions in article 3 of the SUPD (Article 3) related to “placing on the market” and “making available on the market”

3.2 SUPD: Marking & Labelling Regulations

- 17 Dec 2020 Commission introduced rules (2020/2151) on harmonized marking specifications for certain SUP products
- Rules apply from 2 July 2021
- 2 products of concern for aviation:

1. Wet Wipes and Beverage Cups (part-plastic)

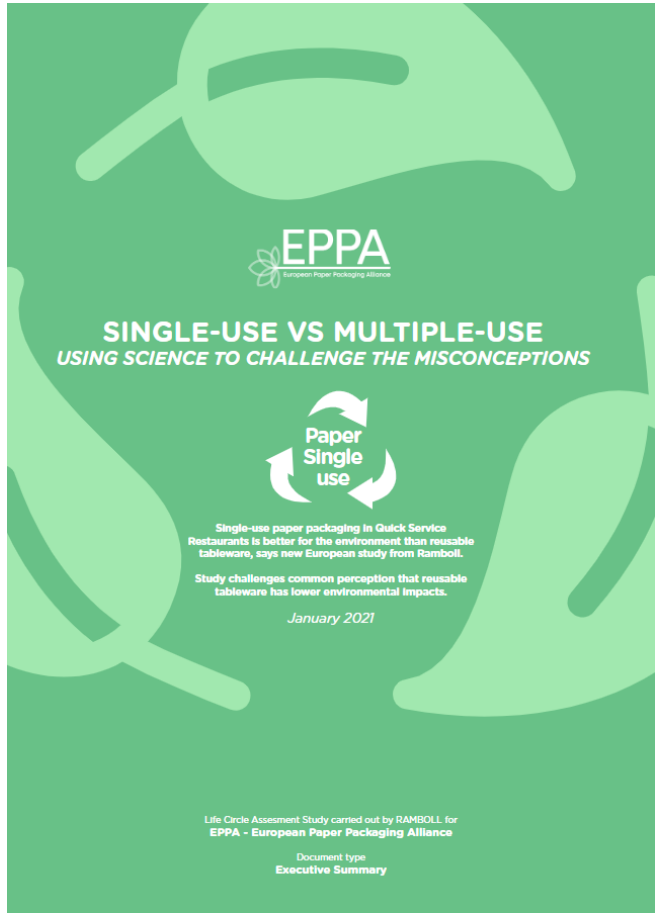
2. Beverage Cups

3.3 SUPD: Commission Engagement

- When will the Commission SUP guidelines be published?
- Marking/labelling requirements (single or multiple languages)?
- Extended SUP stock drawdown date ?
- Latest guidance indicates that only natural polymers, not chemically modified are exempt – will Commission publish a list or provide examples of such materials?
- Will the Commission introduce a certification scheme that can be used to establish that natural polymers have not been chemically modified?
- Will the Commission consider the recommendations from the ICAO's CARTguidance which calls for States to consider suspending SUP restrictions during the pandemic
- Does the scope of the Directive apply to restricted SUP products in waste ?
- Has the Commission considered harmonizing its guidance with other national SUP regulations?

3.4 SUPD: Linear v Circular Controversy

- SUPD draft guidance classifies paper products lined with plastic as a SUP
- Recent LCA study from Ramboll indicates that single use paper crockery & cups significantly outperforms rotable alternatives
- Rotables generate: 177% more CO2-e emissions; consume 267% more freshwater; produce 132% more fine particulates; increase fossil depletion by 238% and terrestrial acidification by 72% (compared to paper alternative)
- If the study was applied in an air transport context the results would be even more pronounced



3.5 Indian SUP Regulations

- Indian PM made commitment to eliminate SUP by 2022
- SUP bans are based on **use**, import & manufacture and not harmonized across Indian States and Airports
- Multiple inspections (Feb 2020) of catering facility at BOM resulted 5+ airlines receiving fines
- Conflicting requirements:

(a) MoCA recovery flight SOPs (PPE; biohazardous bags; pre-sealed food/drink)
(b) ICAO (STEBS and LaGs)

- Lack of alignment with EU SUPD (paper products lined with plastic; composite packaging; sanitizer wipes; natural polymers)
- Airlines operating EU-India will need to choose a compliance regime
- Call with MoCA (8 March) – agreed that they would approach Ministry of Env., Forest and CC
- New draft amendment to Plastic WM Regs (2016) announced (11 March) with aim of harmonizing restrictions
- IATA will prepare comments on draft (submission by 10 May)

4. Regulatory Harmonization Guidance

- IATA has developed final for draft harmonization guidance
- Guidance calls for:

a) Standard definitions: SUP; sustainable alternatives including bio-based; biodegradable; compostable; natural polymers ?

b) Standard restrictions: volumes; thickness; recyclable content (%); labels

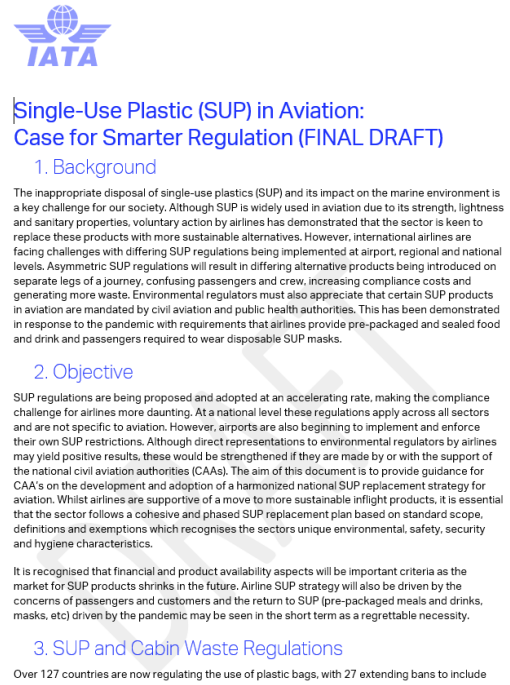
c) Scope: departing airports (international overflights excluded); exclusion of pax/crew

d) Airports to introduce biotreatment for cabin waste comprising alternative bio-based materials

e) Temporary lifting of SUP restrictions during pandemic (CART recommendation)

f) Phased SUP replacement timelines allowing drawdown of SUP stocks and recognizing long R&D/supply chains

g) Joint pax communications campaign on SUP replacement activities



IATA

Single-Use Plastic (SUP) in Aviation:
Case for Smarter Regulation (FINAL DRAFT)

1. Background

The inappropriate disposal of single-use plastics (SUP) and its impact on the marine environment is a key challenge for our society. Although SUP is widely used in aviation due to its strength, lightness and sanitary properties, voluntary action by airlines has demonstrated that the sector is keen to replace these products with more sustainable alternatives. However, international airlines are facing challenges with differing SUP regulations being implemented at airport, regional and national levels. Asymmetric SUP regulations will result in differing alternative products being introduced on separate legs of a journey, confusing passengers and crew, increasing compliance costs and generating more waste. Environmental regulators must also appreciate that certain SUP products in aviation are mandated by civil aviation and public health authorities. This has been demonstrated in response to the pandemic with requirements that airlines provide pre-packaged and sealed food and drink and passengers required to wear disposable SUP masks.

2. Objective

SUP regulations are being proposed and adopted at an accelerating rate, making the compliance challenge for airlines more daunting. At a national level these regulations apply across all sectors and are not specific to aviation. However, airports are also beginning to implement and enforce their own SUP restrictions. Although direct representations to environmental regulators by airlines may yield positive results, these would be strengthened if they are made by or with the support of the national civil aviation authorities (CAAs). The aim of this document is to provide guidance for CAA's on the development and adoption of a harmonized national SUP replacement strategy for aviation. Whilst airlines are supportive of a move to more sustainable inflight products, it is essential that the sector follows a cohesive and phased SUP replacement plan based on standard scope, definitions and exemptions which recognises the sectors unique environmental, safety, security and hygiene characteristics.

It is recognised that financial and product availability aspects will be important criteria as the market for SUP products shrinks in the future. Airline SUP strategy will also be driven by the concerns of passengers and customers and the return to SUP (pre-packaged meals and drinks, masks, etc) driven by the pandemic may be seen in the short term as a regrettable necessity.

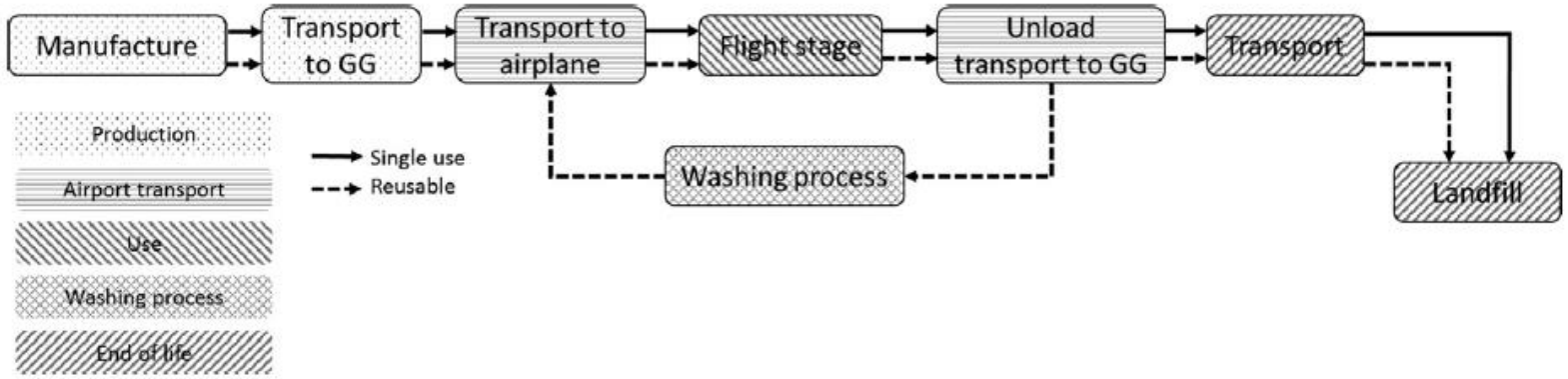
3. SUP and Cabin Waste Regulations

Over 127 countries are now regulating the use of plastic bags, with 27 extending bans to include

5. Sustainable Alternatives Guidance

Potential contents:

1. LCA: features, standards (ISO 14040:2006) and interpretation



2. Definitions: compostable (EN 13432), biodegradable, bio-plastics, natural polymers, not chemically modified, etc
3. Hygiene standards: contaminant migration (EU NO 10/2011)
4. Biomass certification: FSC/Roundtable on Sustainable Biomaterials (RSB) ?
5. Development of eco-design guidelines/standards (minimum % recyclable content; volumes; thickness; material exclusion - oxodegradable).

6. SUP Global Initiatives

- Approached to join **Global Tourism Plastics Initiative** led by the UNEP & WTO in collaboration with the Ellen MacArthur Foundation includes 6 actionable commitments to be achieved by 2025:

1. Eliminate problematic or unnecessary plastic packaging and items;
2. Take action to move from single-use to reuse models or reusable alternatives;
3. (Engage the value chain to) move towards 100% of plastic packaging to be reusable, recyclable or compostable;
4. Take action to increase the amount of recycled content across all plastic packaging and items used;
5. Collaborate and invest to increase the recycling and composting rates for plastics;
6. Report publicly and annually on progress made towards these targets.

Number of concerns including: level of ambition, lack of LCA considerations (weight v fuel burn) and harmonization of SUP bans/restrictions (asymmetric)

- IATA and airlines could openly support proposals for UN treaty on Plastic Pollution (https://www.plasticpollutiontreaty.org/)
- IATA to prepare briefing paper on potential sectoral SUP global initiatives

7. SUP Conclusions

1. We are not alone !
2. Combination of impending SUP regulations & pandemic has stalled airline move to replace SUP with sustainable alternatives
3. Recent LCA study indicates environmental benefits of disposable v rotable
4. Asymmetric SUP regulations will result in confusion & fines and encourage additional alternative product purchasing, double-catering & backflying of waste
5. Airlines are investing in alternative solutions that will not comply with all SUP regs
6. SUP regulations need to recognize aviation exclusions based on security and hygiene (esp during pandemic) & long lead times for supply changeover
7. ICW regulations will undermine credibility if sector moves to bio-based solutions (incineration or deep landfill burial) and biotreatment facilities not available

8. SUP Next Steps

1. Finalize global regulatory harmonization guidance (feedback on Scope)
2. Legal review of EU SUPD application for airlines
3. Seek response from EU Commission & provide comments on Indian proposals
4. IATA to prepare briefing paper on potential sectoral SUP pledges/commitments or and benefits of participating in the Global Tourism Plastics Initiative (GTPI)
5. SUP communication plan: IATA webpage (inc FAQ), passenger awareness
6. Prepare draft Sustainable Alternatives Guidance
7. Airlines to inform IATA of proposed SUP regulations/consultations and approach CAA/MoE (support for postponement of SUP restrictions during pandemic)
8. Establish need for SUP-WG TOR, chair, etc.

Cabin Waste: Overview

BUSINESS TRAVELLER

Watch your waste: The problem with airline food and packaging

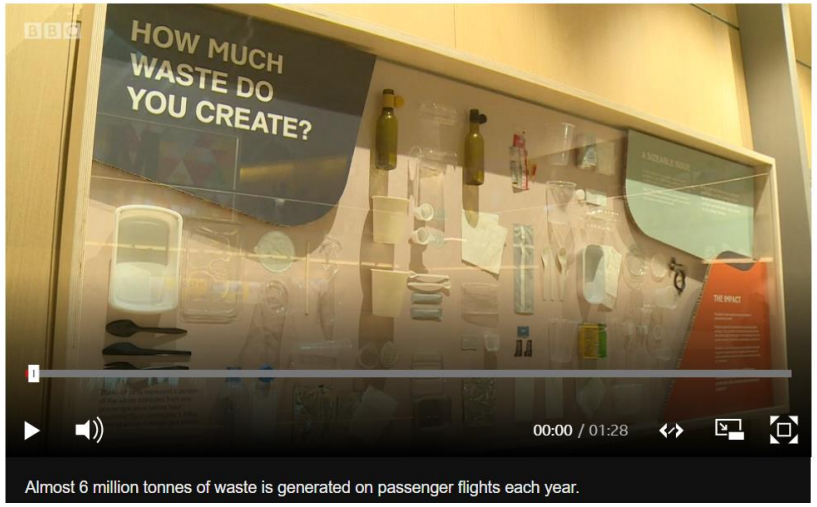
Kate Springer, CNN • Published 18th July 2017

The ridiculous story of airline food and why so much ends up in landfill

Is this the in-flight meal tray of the future?

By Katie Prescott
Business reporter, BBC News

7 October 2019 Share



Basically everything you're given on an airplane is wrapped in plastic. That's a huge environmental problem.

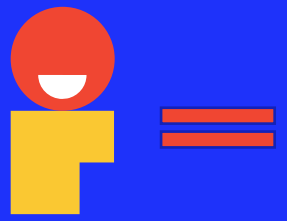
Air travel generates millions of tons of waste every year. Some airlines are trying to change that.

By Jasmin Malik Chua | Jul 9, 2019, 7:00am EDT

The appalling truth behind what happens to all that cabin rubbish

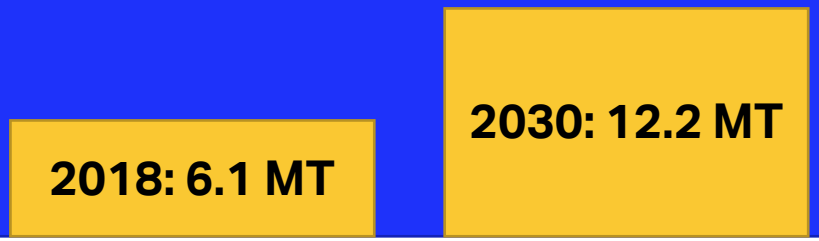
CABIN WASTE

Average passenger generates 1.43 kg of cabin waste per flight



= **1.43 kg**

Predicted to double in next 10 years



Over 20% of waste is untouched food and drink

20% = **$4.5 billion**

LHR Cabin Waste Audit: Kev Data

- 17 Flights (3,721 Passengers) generating 5.3 tonnes
- Average weight Per Passenger = 1.43kg (Low 0.82kg – High 2.50kg)
- Minimal ICW in the Cabin Waste stream (but presence of passenger derived ICW)
- Sealed and unconsumed Food & Beverages represented 23.4% of total weight (including 4.9% bottled water)

Multiple factors impact waste generation & composition:

- Capacity
- Cabin configuration
- Load factor
- Duration of flight
- Meals served
- Delays to flight
- In-flight experience
- Packaging
- Catering provider
- Salvage policy (Airline)
- Salvage policy (Caterer)

LHR Waste Audit: Waste Avoidance







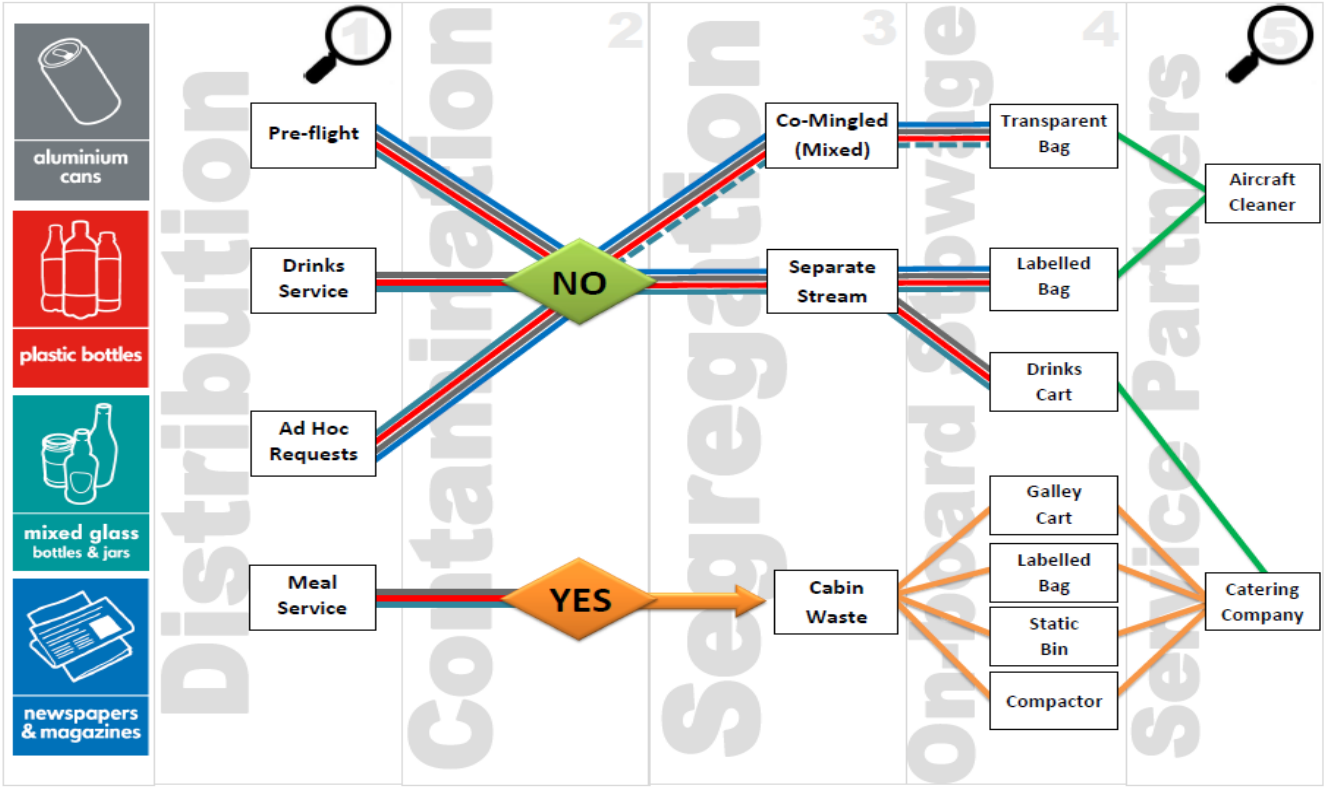




LHR Waste Audit: Passenger ICW

Best Practice Guidance for Recycling on Intl. Flights

- Guidance finalized (May 2015) & subsequently ACI has prepared a corresponding airport document (draft). Series now includes:
- Cabin Waste Recycling for Airlines and Airports (ACI & IATA): cover doc
- Appendix A: RP for Cabin Waste Recycling for Airports (ACI)
- Appendix B: Guidance for Recycling from International Flights (IATA)



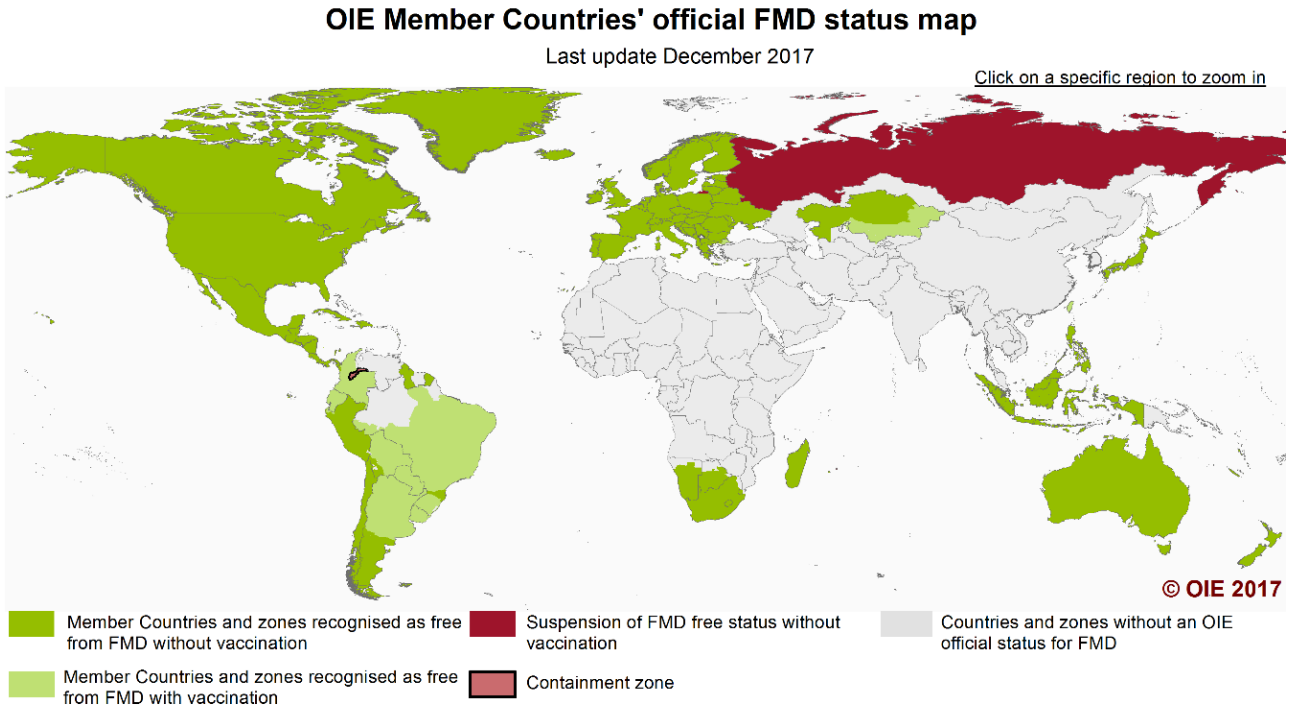
IATA Cabin Waste Handbook

Research date: December 2017
Publication Date: August 2019

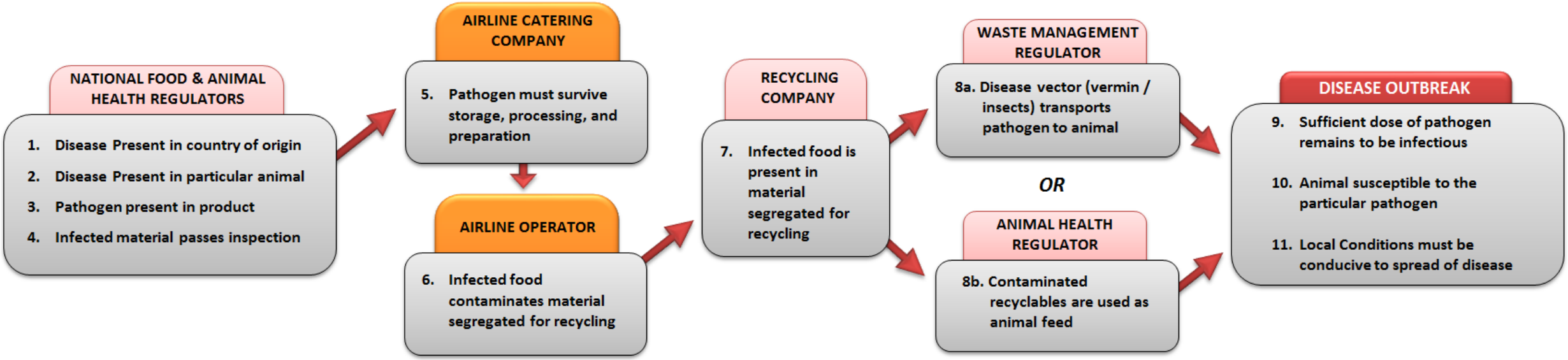
Table of content

ICW Risk Assessment Report

- Restrictive legislation based on protecting animal health
- ICW may be a risk to destination countries with high animal health status
- Six animal pathogens of concern (primary = FMD)
- Promulgated into other regions (e.g. South America)



ICW Risk Assessment: Risk Pathway for Recyclables



ICW Risk Assessment

Results

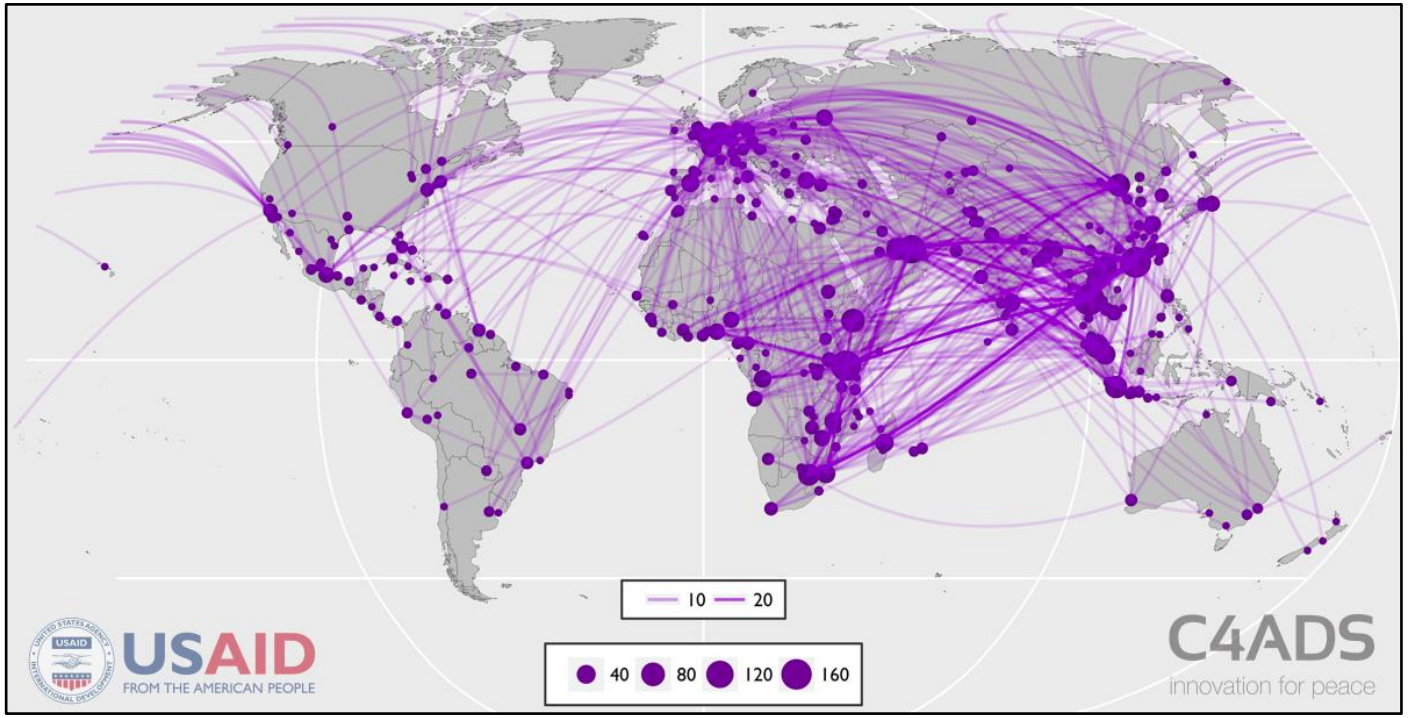
- Animal disease outbreak linked to airline catering waste: No evidence found
- Quantitative risk assessment: No evidence found
- Regulatory impact assessment: No evidence found
- Milk and milk products: No scientific justification for classifying as high risk
- Honey: Normal processing of honey will destroy most bee pathogens
- Illegal import of meat: Represents a more significant risk

Recommendations

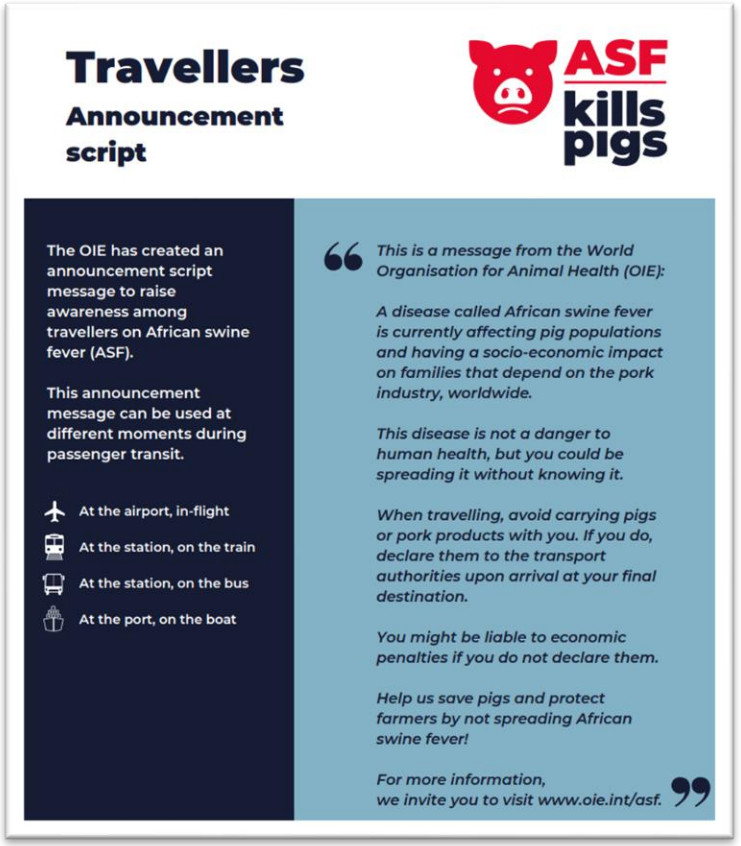
- Adoption of harmonized recycling guidance by regulators
- Mutual recognition of the animal health controls in countries with high status
- Develop and implement new ingredient source controls (HACCP) into IFSA catering standards
- Introduction of low-risk menu plans
- Amendment of ICW legislation based on risk and SMARTER regulation principles (incl. milk and honey)
- On-board segregation of recyclables
- Partnership approach with regulators on smuggling of animal products

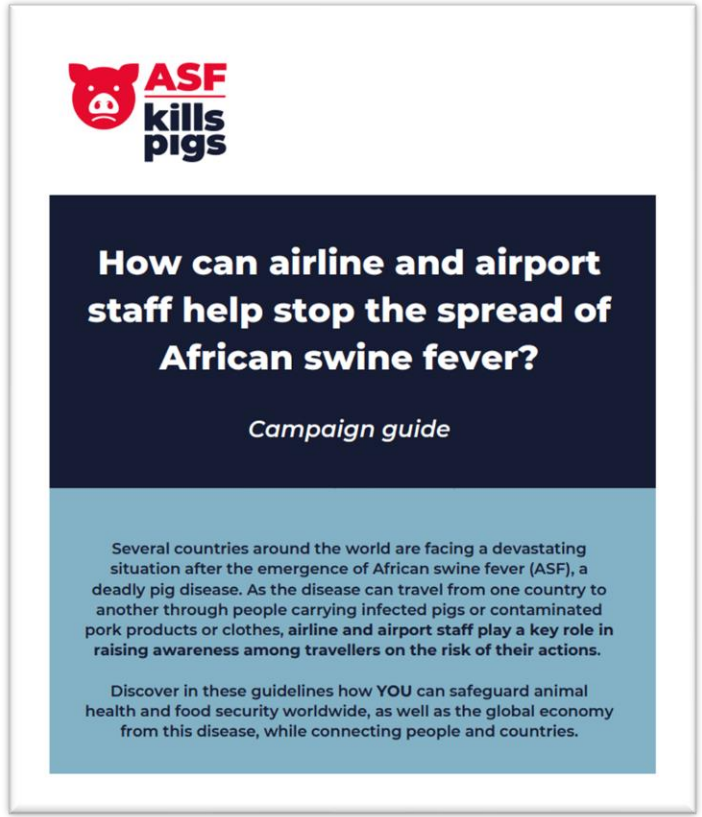
Animal Product Trafficking

- IATA's ICW Risk Assessment & wildlife trafficking research indicates widespread smuggling of animal products by passengers, presenting a potential risk of spreading disease
- ASF virus detected in pork products concealed in baggage (Australia, Northern Ireland)
- Regulators commenced outreach activities with airlines
- IATA met with OIE, DG Sante & ABP WG to present findings of ICW Risk Assessment report



OIE-IATA Campaign: Chinese New Year Period





- IATA and OIE have launched an ASF communications campaign and discussing partnership agreement on response to animal pandemics

Cabin Waste Regulations: Risk-Based Approach

- Lack of cabin waste reuse and recycling is key passenger, press and social media issue
- Human and Animal pandemics are bad for business
- Airline catering has strict hygiene procedures (HACCP) that can be extended to include animal health ingredient-source controls.
- But we need regulator support in the following areas:

(1) Harmonized guidance and implementation on exempt products and recycling

(2) ICW quantitative risk assessment and sectoral impact assessment

(3) Support for research into alternative treatment methods (e.g. composting, anaerobic digestion, sustainable alternative fuels)

(4) Bilateral cooperation between countries with high animal health status (e.g. support for transatlantic trial flights)

(5) Joint passenger communication campaigns to raise awareness of risks of smuggling animal products

Cabin Waste: Moving forward

- Inform IATA of proposed adoption/amendment of ICW regulations
- Undertake and share cabin waste composition audit results
- Understand your inflight catering and waste costs (cost benefit analysis)
- Focus efforts on waste avoidance (“feed before you fly”; meal selection at check-in)
- Development of food waste KPI (supported by AI)
- IATA will continue to engage with waste stakeholders – regulators; ACA; IFSA;
- Develop a cabin waste communications policy

Progressive Environmental Sustainability
for the Aviation Industry

IATA

Our Approach

Community

IEnvA is **industry-led** and overseen by its member airlines.

By **working together** we identify challenges, risks and even opportunities faster to develop functional solutions to address environmental and sustainability issues.

Online and virtual training and workshops enable **continual improvement** on best practice

Standardization

A single global and holistic standard for the aviation industry ensuring continued environmental sustainability performance improvement.

Non-discriminatory; allowing **airlines of all sizes, MRO's, Caterers and Ground Handling** to comply and be assessed.

Based on, and independently verified to generic **globally accepted ISO Standards.**

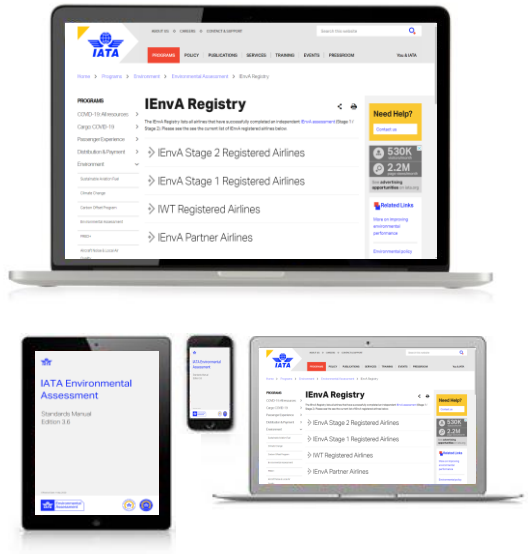
Verification

Independent and objective assessment is undertaken by highly experienced aviation auditors.

Aviation-familiar governance, documents and practice, following the similar governance as IOSA, ISAGO and ISSA audit/assessment programs.

IEnvA Registry

Find IEnvA registered airlines, documents and publications on the IEnvA website.



https://www.iata.org/en/programs/environment/environmental-assessment/ienva/

What's in store for 2021/22?

Focus on Awareness

A series of short video clips, created for social media, on-board entertainment and platforms for airlines and IATA.

Sustainable Financing

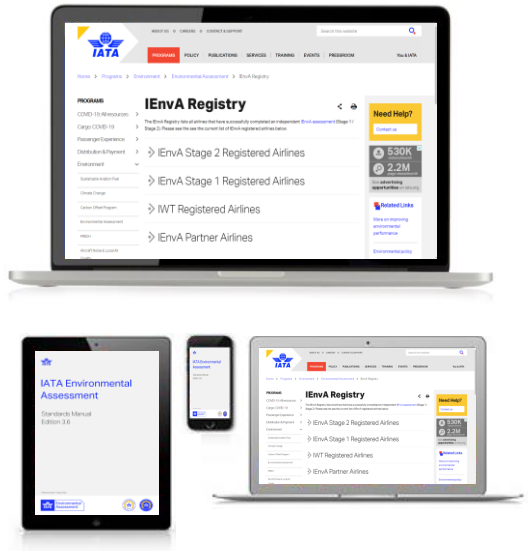
The IEnvA Team and a selection of IEnvA member airlines, will be engaging directly with financial institutions, banks, financiers, etc. to unlock potential cheaper financing opportunities for IEnvA registered airlines.

Compliance Database

The IEnvA Team is looking forward to releasing the beta version of is environmental compliance database for IEnvA member airlines.

IEnvA Registry

Find IEnvA registered airlines, documents and publications on the IEnvA website.



https://www.iata.org/en/programs/environment/environmental-assessment/ienva/

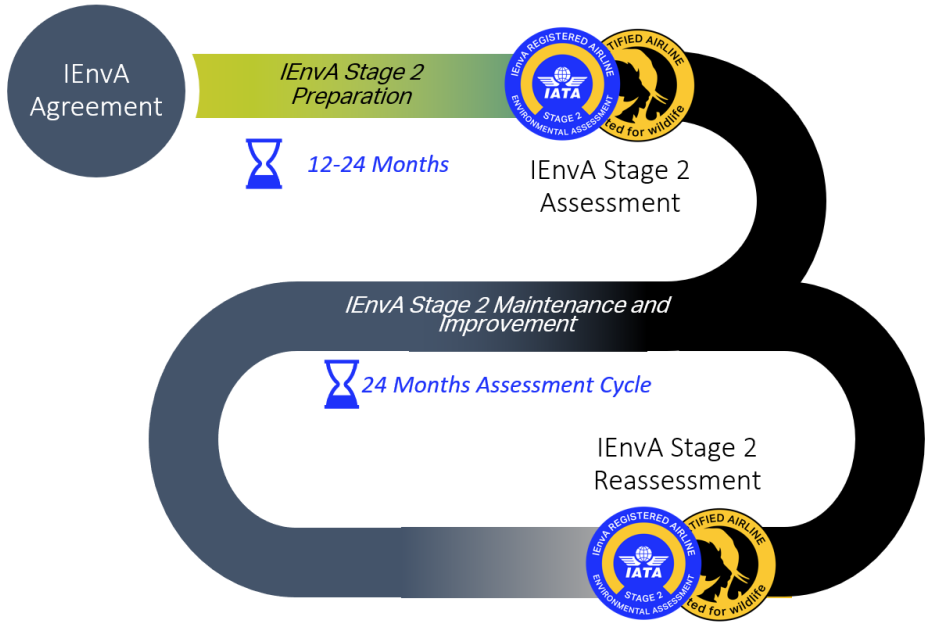
IEnvA Program

Addressing significant environmental challenges

that matters, when it matters

IEnvA is based primarily on your organization's operational and regulatory context. If you're a small airline connecting islands in the Caribbean, or a major intercontinental player connecting the world's continents, **you have unique and specific environmental sustainability challenges.**

However, because **as a transport sector**, we operate similar planes, we burn the same fuel, and we face the same social and public scrutiny, we also recognize that we have **similar solutions.**



Areas of Focus

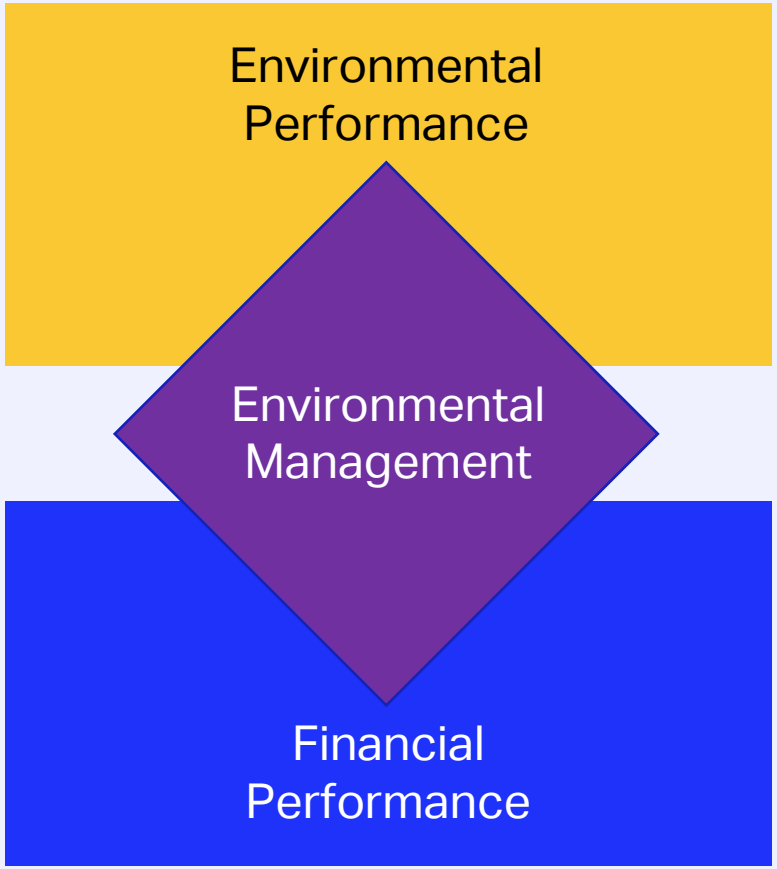
- Waste, Single Use Plastics, Disease, Hazardous Waste, Illegal Wildlife Trade
- Water, Water Quality, Water-use, Wastewater
- Emissions, CO2, NOx, SOx, Particulate Matter, Contrails
- Noise

13
IEnvA Registered airlines

26
IEnvA Partner airlines

7
IWT Certified airlines

Why use a management system?

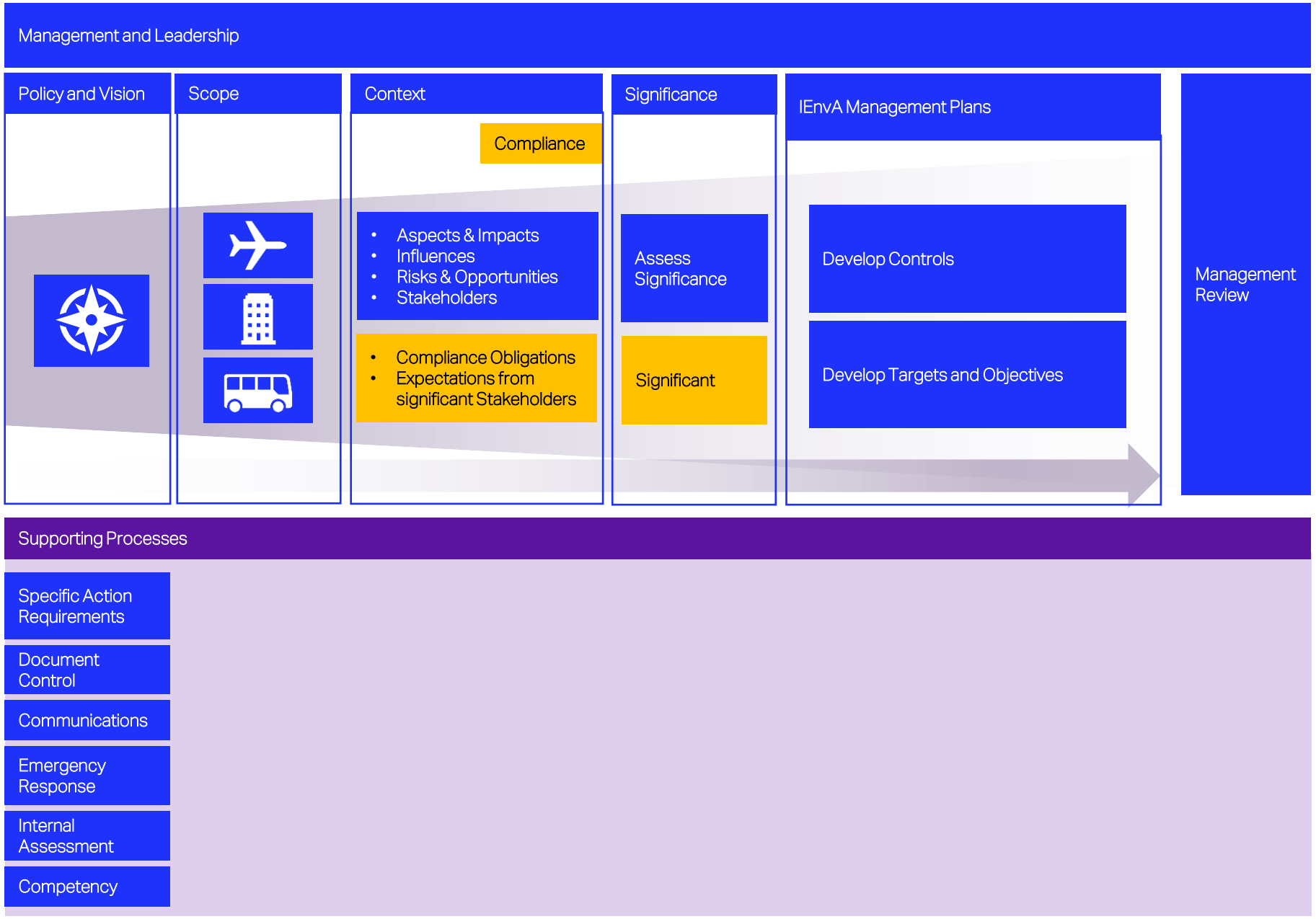


Sets the rules of engagement

An Environmental Management System, like IEnvA, sets the rules of engagement for how the airline deals with environmental and sustainability matters.

It is always unique to the airline's and its circumstances.

The IEnvA Framework



A view of the overall picture

IEnvA Tools and Guidance

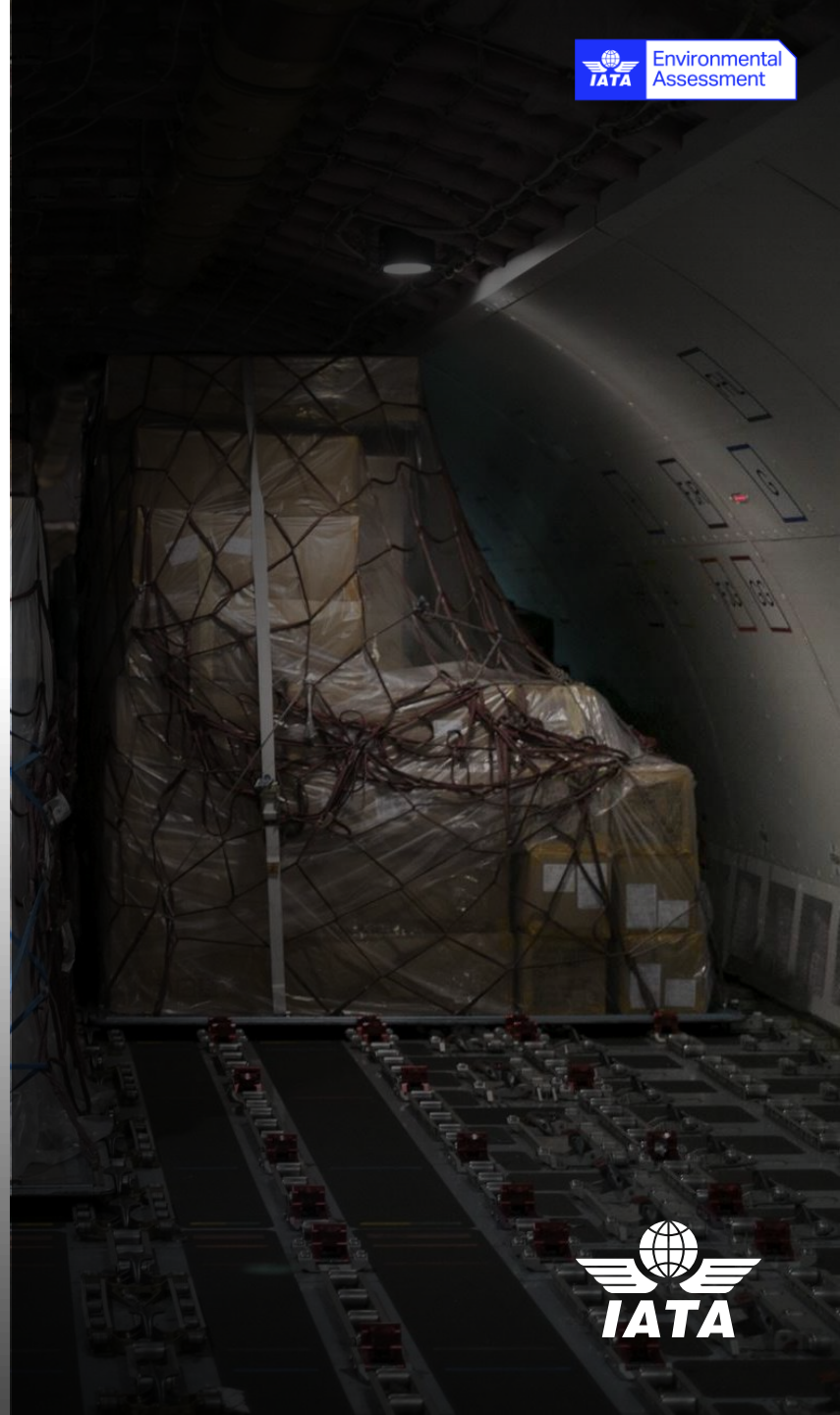
Addressing significant environmental challenges

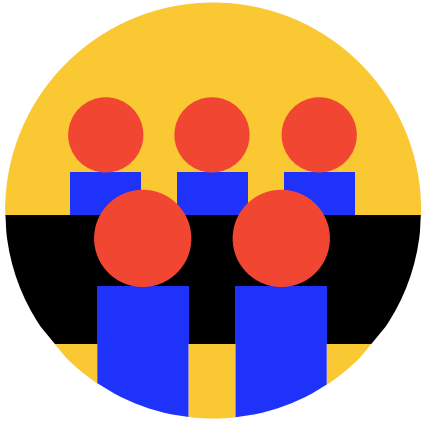
that matters, when it matters

IEnvA Scope Requirements

Addressing significant environmental challenges

that matters, when it matters





Questions?

Agenda Item 5
AOB

Wildlife Trafficking in Air Transport

April 2021

ROUTES
Reducing Opportunities for Unlawful Transport of Endangered Species

USAID FROM THE AMERICAN PEOPLE

C4ADS innovation for peace

IATA

TRAFFIC the wildlife trade monitoring network

WWF

Illegal Wildlife Trade

- Valued between 7–23 billion US dollars annually
- Only behind drugs, human, and arms trafficking as the most valuable type of international organized crime by estimated annual value
- Wildlife trafficking by air passes through every world region
- Wildlife trafficking affects, but is not limited to, broadly recognized species
- Understanding how wildlife trafficking moves through the aviation industry is essential to counteracting it

All air trafficking routes recorded in the C4ADS Air Seizure Database (2015-2020)

Map shows flights used to traffic wildlife products through the air transport sector, including instances where products were seized earlier in the route. The transparency of the route represents the number of times it was used. The circles represent the total number of flights to and from each city.

Illegal Wildlife Trade Impacts

ROUTES
Reducing Opportunities for Unlawful Transport of Endangered Species

TRAFFICKING:

BRIBERY

CORRUPTION

FRAUD

MONEY LAUNDERING

VIOLENCE

INSIDER THREAT (AVIATION)

Mexico arrests 'hitman' for trafficking endangered fish

September 14, 2018

A Fish So Coveted People Have Smuggled, Kidnapped, and Killed For It

The Asian arowana or "dragon fish" is protected by the Endangered Species Act and illegal to own in the U.S. But the tropical fish's status symbol among wealthy buyers has made it the object of a thriving black market.

IATA

Airlines are committed to wildlife

- 66 airlines signed Buckingham Palace Declaration (BPD) (>33% global traffic)
- IATA AGM Resolution (2016)
- Trialling a staff reporting app with CSI
- Independent IWT airline certification introduced

- ROUTES **resource portal** holds awareness-raising material, training presentations for air transport and an analysis of aviation wildlife trafficking routes
- ROUTES **dashboard** includes country profile maps of wildlife seizures and flight route risk evaluation tool.
- Assists airlines meet their commitments under the BPD

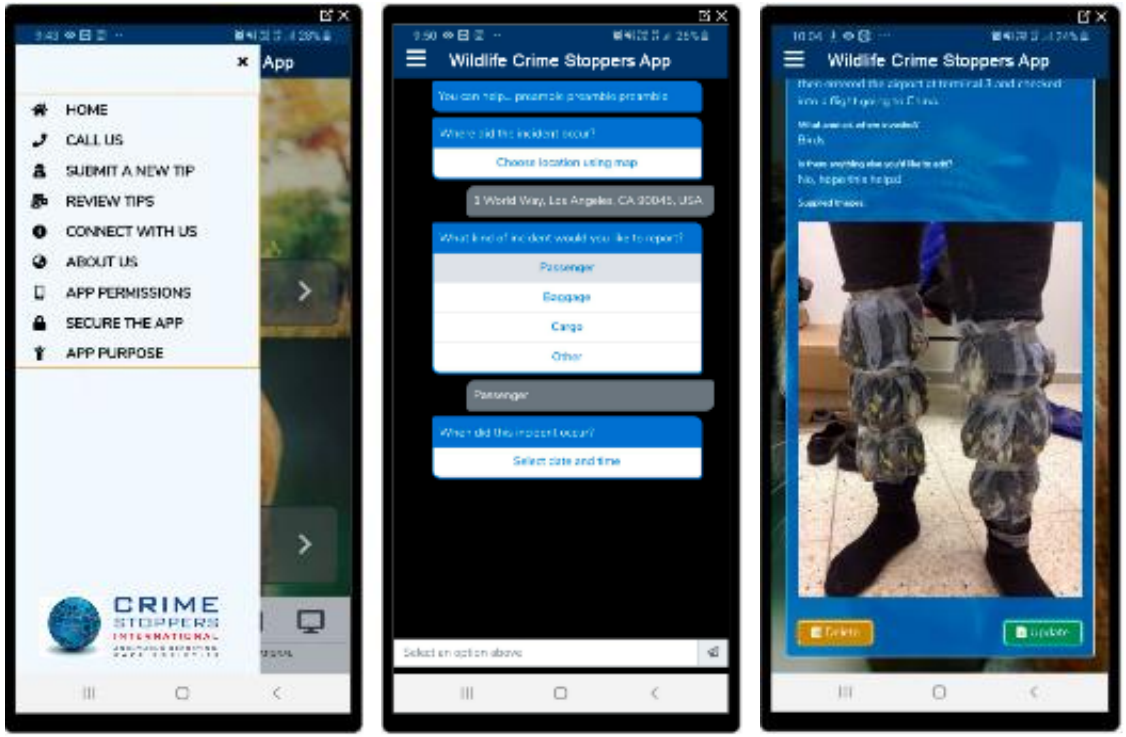
IEnvA REGISTERED AIRLINE IATA STAGE 2 ENVIRONMENTAL ASSESSMENT

CERTIFIED AIRLINE united for wildlife

IATA

IATA's IWT activities

1. Wildlife Crime Stoppers App



2. Independent IWT certification

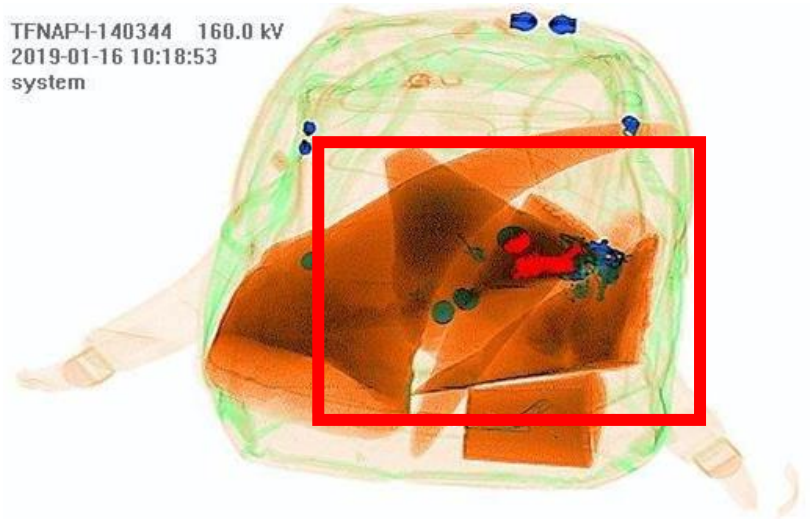
IATA IEnvA

IEnvA REGISTERED AIRLINE
IATA
STAGE 2
ENVIRONMENTAL ASSESSMENT

CERTIFIED AIRLINE
united for wildlife

ROUTES
Reducing Opportunities for Unlawful Transport of Endangered Species

Project Vikela



- Pilot project with South African authorities on **automated detection** of wildlife concealed in baggage using X-ray images
- **Algorithms** widely used in automated threat detection for Aviation Security purposes

Build image library of concealed rhino horn and stream of commerce → Algorithm development → Testing → Integration

ROUTES
Reducing Opportunities for Unlawful Transport of Endangered Species

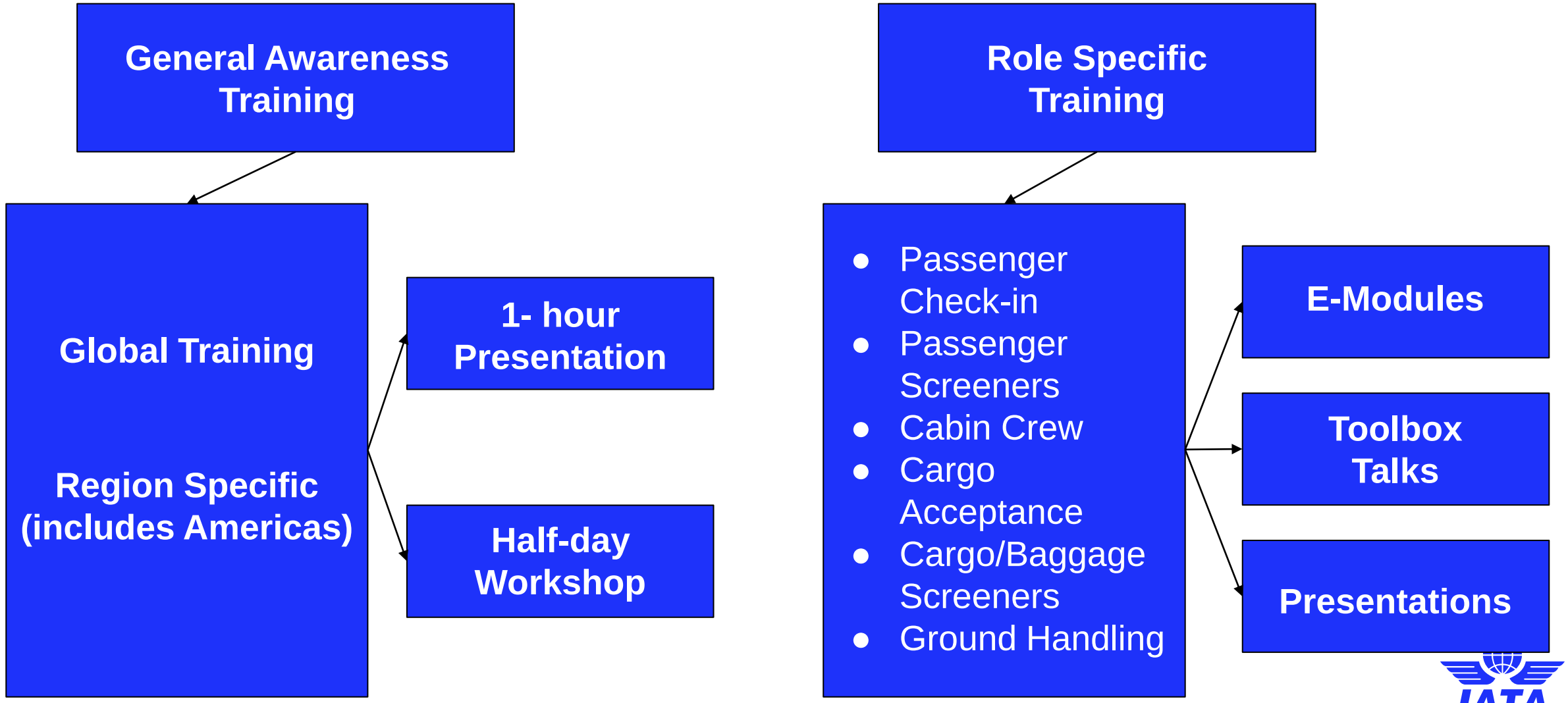
IATA

ROUTES Resources

- Training materials
  - General awareness
  - Role-specific
  - E-modules
  - Brief Toolbox Talks
- Action Plan
- Industry Guidance
- Awareness Raising Materials
  - Posters
  - Imagery
  - Social Media Toolkits
- IWT Reports
- Interactive Data Dashboard

All material is available at routespartnership.org

ROUTES Training Materials



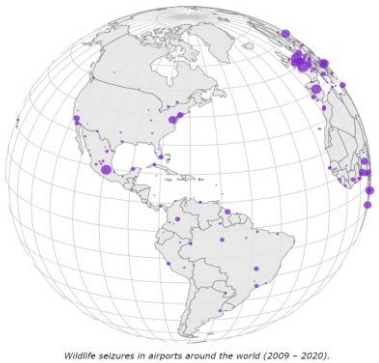
ROUTES DASHBOARD

ROUTES
Reducing Opportunities for Unlawful Transport of Endangered Species

Use the Routes Dashboard to explore the data independently and draw conclusions specific t or area of interest

ANALYTICS

- Generate statistics, seizure numbers, trafficking instances, common trafficking routes, and common modes of transport for wildlife trafficking linked to airports



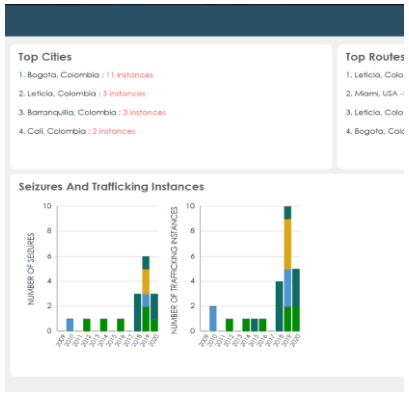
Wildlife seizures in airports around the world (2009 – 2020).

ROUTE RISK TOOL

- Explore risks along specific routes by choosing origins and destinations and viewing seizures recorded along that

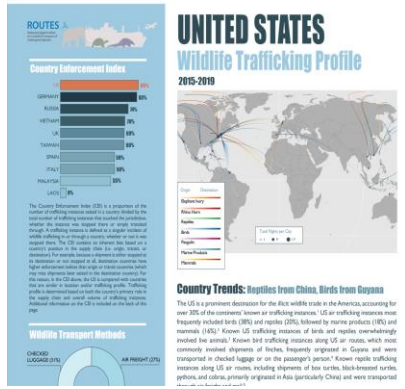
COUNTRY PROFILE MAP

- Navigate around a globe to view the top cities and routes in the country, along with graphics of seizures and trafficking instances over time and the Country Enforcement Index.



COUNTRY TRAFFICKING ASSESSMENTS

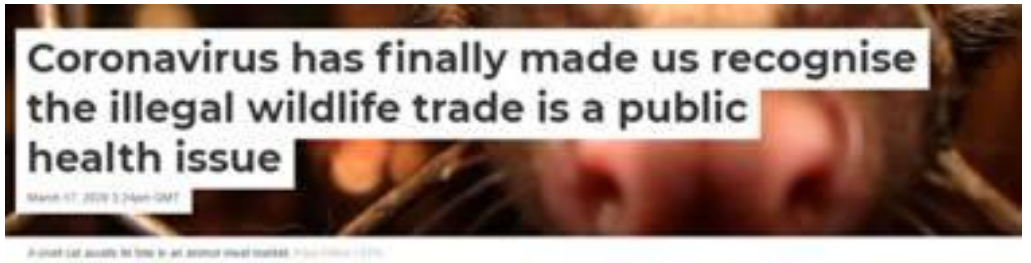
- Read and download wildlife trafficking assessments for key jurisdictions along illicit wildlife supply chains which include analysis of key trafficking trends including routes, species, and obfuscation methods

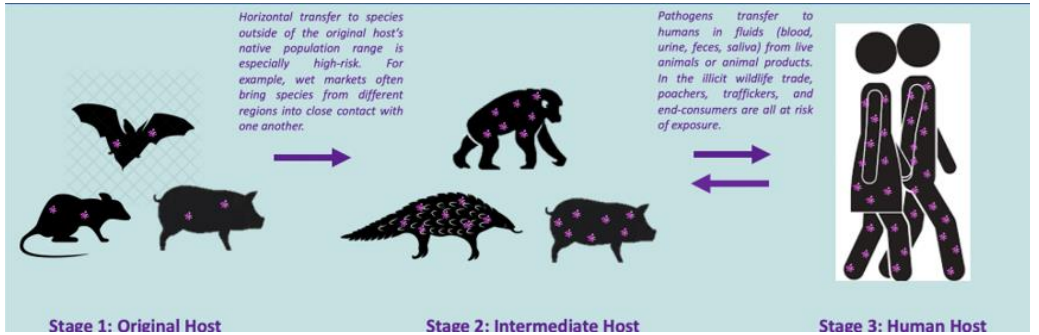


ROUTES Dashboard is available at routesdashboard.org

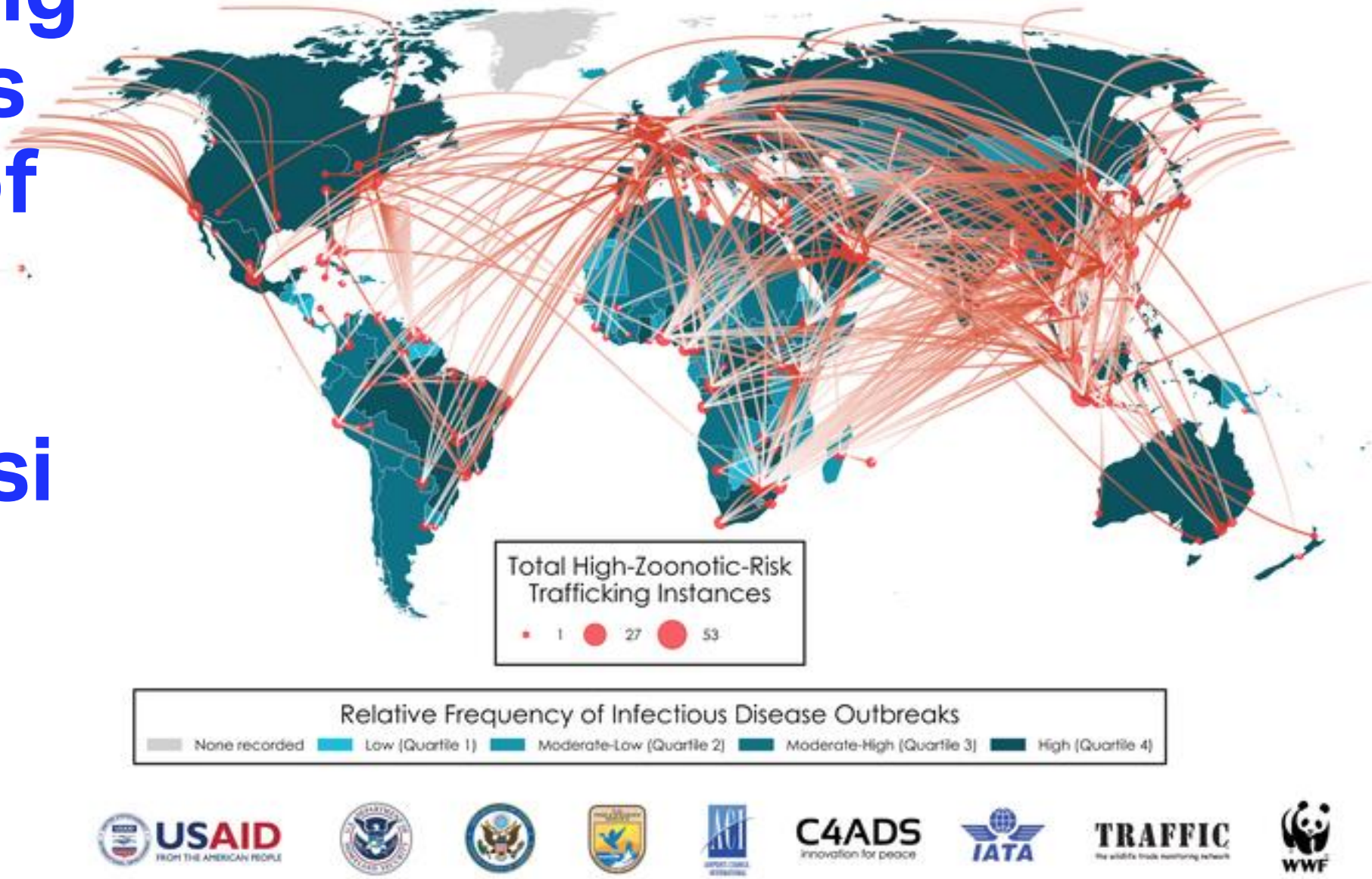
Pandemic has provided a new stimulus for countering IWT

- Interconnected world created by aviation contributes to our own vulnerability
- Pandemics will increase in frequency & intensity (climate change, habitat loss and international travel)
- Countering wildlife trafficking can have benefits beyond conservation, nature-based tourism & security to include human & animal health
- Zoonotic diseases can be carried in trafficked wildlife (avoiding sanitary checks)
- Growing realization that pandemic prevention needs a One Health approach





Trafficking increases the risk of zoonotic disease transmission



Bushmeat smuggling: a hidden

- Smuggling of bushmeat (wild caught) products by passengers is widespread
- Thousands of tonnes of bushmeat smuggled into Europe each year for personal consumption or supplemental income
- Low profit margins discourage organized crime
- Under-reporting & low/no fines due to difficulty in establishing:

  (1) species (dried/body parts)

  (2) domesticated or wild

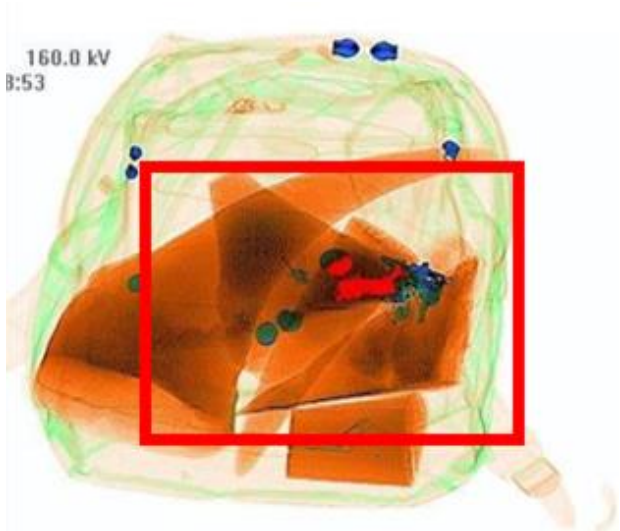
  (3) CITES listed

Study at a European airport found **100% of bushmeat** samples exhibited bacteria “above levels considered safe for human consumption”

Pandemic Resilience Planning

- COVID-19 exposed a lack of risk preparedness in the sector
- Drive from investors, regulators, employees, customers & communities to be more resilient
- Contingency planning needs to be initiated to prevent or reduce impact of future pandemics
- PRP focuses on 5 areas:

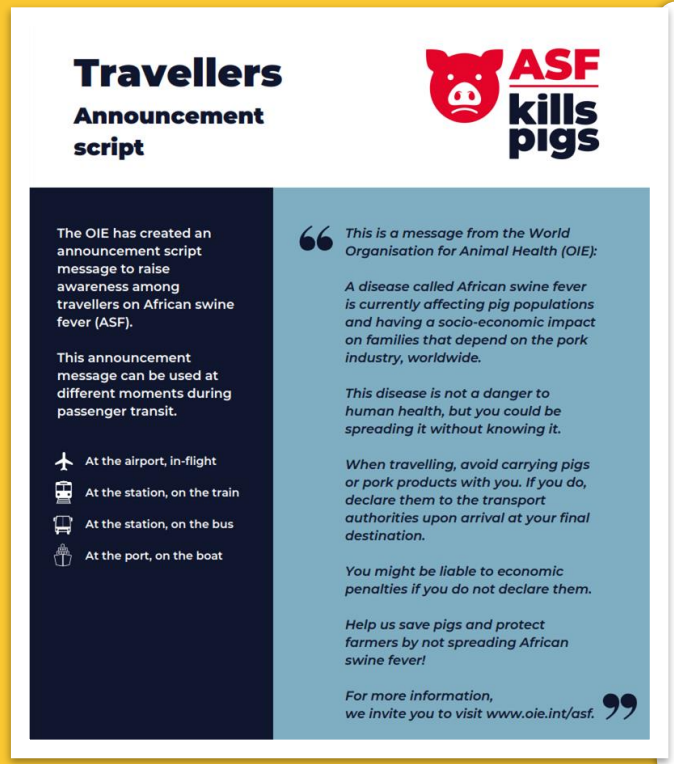
1. **Prevention** countering wildlife smuggling (pax awareness campaigns; autodetection);
2. **Preparedness:** improved coordination with public & animal health agencies; early warning alerts; vigilance on high-risk routes;
3. **Response**
4. **Recovery**
5. **Mitigation** (lessons learned)



IATA

Pandemics: passenger awareness campaigns

IATA and OIE launched an award-winning pandemic communications campaign and discussing partnership agreement on response to animal pandemics.



IATA

Fighting future pandemics

Pandemics will increase in frequency and intensity (climate change, habitat loss and intern. travel)

Unlike other industries, air transport can contribute to pandemic prevention

Further to existing IWT activities (awareness raising, BPD, certification, staff reporting tools) airlines can initiate focused passenger education campaigns & enhanced scrutiny of shipments on high-risk routes

Pandemic resilience will be key component of “building back better” for sector

Prevention requires a coordinated “One Health” partnership approach between private and public sector (beyond wildlife enforcement to include customs, public health and agricultural agencies)

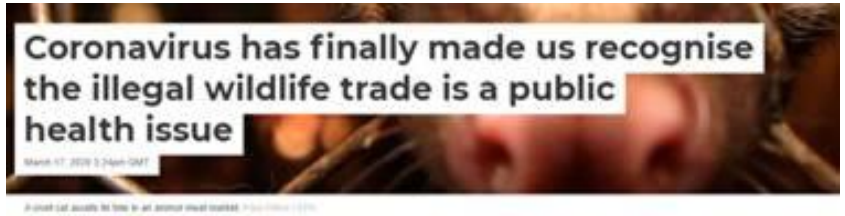
Under reported wild (bush) meat smuggling represents a hidden threat

Smarter use of existing aviation security data and technology cooperation (image sharing; autodetection; e-freight; RFID baggage tags) would make wildlife trafficking unprofitable & reduce risks of zoonotic spillover

IATA

ASPAC Airlines:
Join the fight against wildlife trafficking

- Pandemics will increase in frequency & intensity.
- Join the 66 airlines that have signed the Buckingham Palace Declaration (BPD) on Illegal Wildlife Trade.
- Airline focused resources (tools, training modules, videos & manuals) available on iata.org and routespartnership.org
- Meet with national enforcement authorities.
- Provide feedback on new reporting tool.
- Ensure that wildlife trafficking is included as a key component of airline pandemic prevention plans.



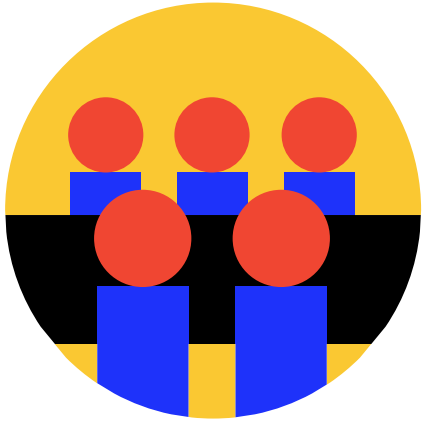
Jaguar parts smuggled from Latin America to China via secret routes, environmental report says

Posted Thu 5 Nov 2020 at 4:54pm

Top traders of jaguar parts in Bolivia supply to sel

Reptiles smuggled from Mexico found at German airport stitched inside dolls

3 December



Questions?

Closing Remarks

Vinoop Goel,
Regional Director,
Airports & External Relations,
Asia-Pacific, IATA

Thank you for participation!

Further questions: aepu@iata.org