

Green Horizons: Boosting Aviation's race to net zero in Latin America









Environmental Progress

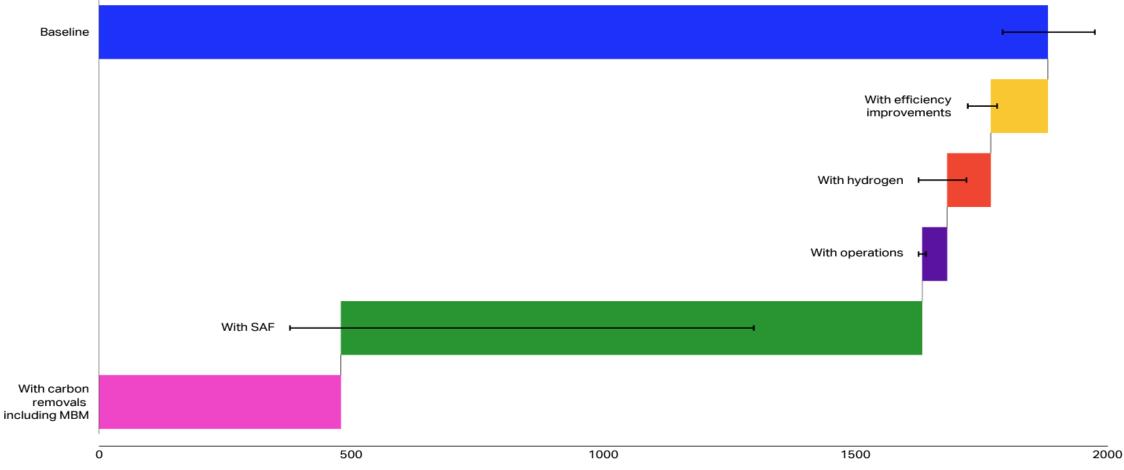
- CO2 emissions per seat Kilometer have come down by over 80% since the first jet aircraft in the 1950s.
- A typical new generation single aisle aircraft coming off the production line today emits around 50 grams of CO2 per seat kilometer (equivalent to 2 liters of fuel burn per passenger for 100km, lower than that of compact cars, although aircraft travel much faster).
- Over 14.6 billion tons of CO2 were avoided from 1990 to 2023 through new technology, operational efficiencies, and infrastructure improvements, with airlines investing over \$1 trillion in 19,360 new aircraft since 2009.

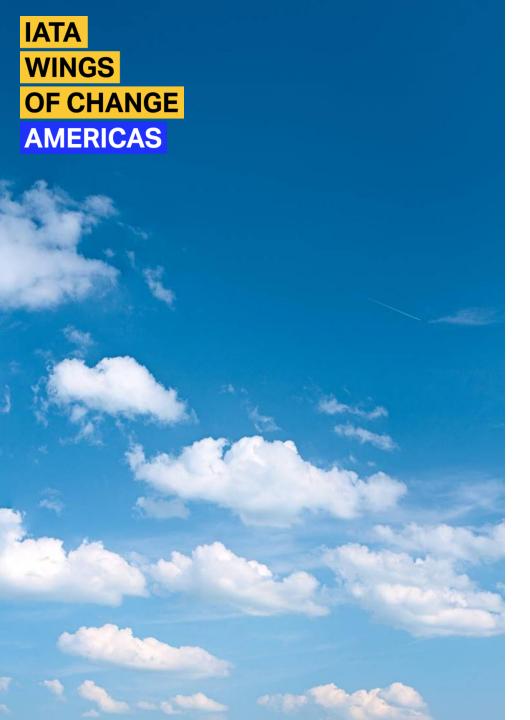


SAF is a key enabler to help the aviation industry achieve net-zero CO₂ emissions

WINGS
OF CHANGE
AMERICAS

Reductions in aviation CO₂ emissions in 2050, by source, Mt



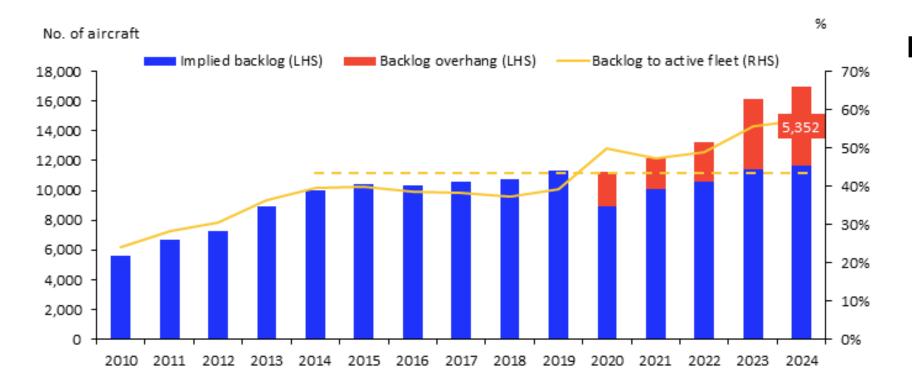


Net zero air transport by 2050

- Fossil fuels account for over 80% of global energy consumption.
- The energy transition must target the energy source, not the industry that uses it.
- Policies must maximize renewable energy production for all.
- And maximize air transport's capacity to grow the global economy.

How many aircraft are we missing?

Implied backlog, based on the constant ratio to the active fleet and implied overhang of backlog compared with the historical average





By 2040, Latin America will need

2.460+
NEW AIRCRAFT

14-year

of wait time for delivery

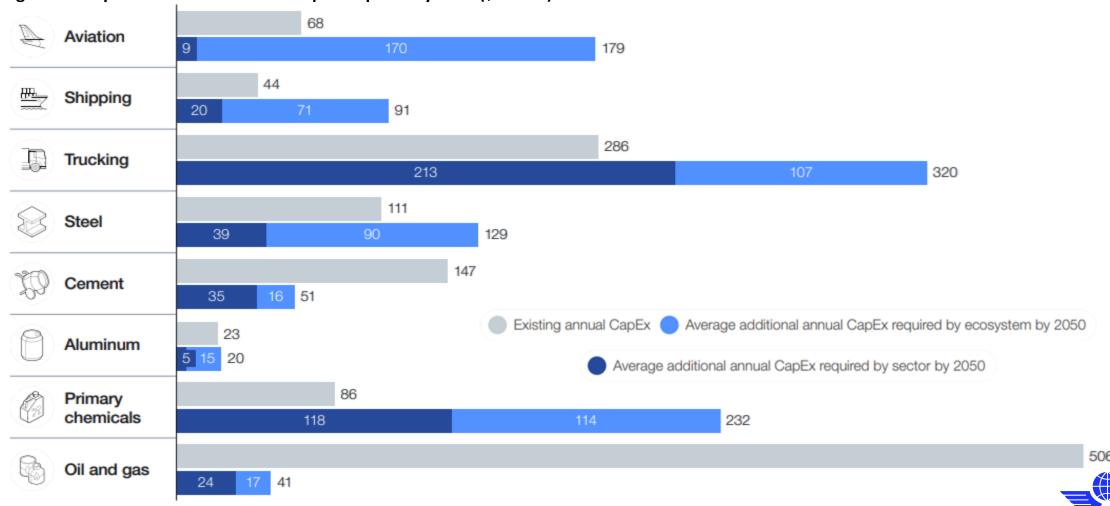


Aviation has a significant funding requirement...

...and a significant funding gap

Existing annual capex vs additional annual capex required by 2050 (\$ billion)





The magnitude of the financing task

Key elements in the Finance Roadmap (2024 to 2050)



CAPEX TO INVESTORS

New renewable fuel plants needed

Best-case scenario: **minimum** number of plants needed **3,096**

Worst-case scenario: maximum number of

plants needed **6,658**

Capital investment (capex) needed

Best-case scenario: minimum capex needed \$3.9 trillion

Worst-case scenario:

maximum capex needed
\$8.1 trillion

COST TO AIRLINES

Transition Cost

\$4.7 trillion additional cost to airlines for using:

- SAF
- Offsetting via CORSIA
- Hydrogen for aircraft
- Carbon removals



There are various sources of external finance-all will be required to deliver the industry's sustainability transition



Main sources of industry finance and expected relative contribution

(Illustrative scale of relative involvement)

Public support (in-country)

- » Tax and regulatory assistance for construction and operation (use of SAF).
- » Project leadership.
- » Limited initial financing.

Public finance (donor country)

- Assistance with capacity building and knowledge / technology transfer.
- Financing of initial de-risking of plants.

Philanth ropic funding

- » Assistance with capacity building.
- Financing feasibility studies and collaboration initiatives.

Public finance (MDBs/IFIs)

- Financing of first series of plants.
- Assisting with the de-risking of projects across countries and for institutional and private finance.

Institutional investors

» Providing scale investment, working alongside the MDBs and IFIs to fund plants 2, 3, 4 etc. Private capital

» Providing scale investment, working alongside the institutional investors to fund plants 5+.



Source: ATAG

Is there a role for policy and governments? Invariably, yes!



- Aviation's sustainability transition must be seen as part of the global energy transition
 - Developing energy policy frameworks that are tailored to local conditions and supported by international collaboration is crucial, emphasizing efficiency while ensuring access to aviation's network of services.
- Government policy should refrain from imposing obligations or mandates that could harm the financial performance of the sector.
- IATA's Net Zero CO2 Emissions Policy Roadmap highlighted
 - The necessity for all supply chain stakeholders to be subjected to stable, predictable, longterm, and as globally harmonized as possible policies.
 - An urgent and substantial practical and financial need to support emerging economies in developing new energy markets.