



Commercial Market Outlook

India Aviation Market

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Agenda

Market environment

Current situation

Near-term dynamics

Recovery outlook

India focus

Product Update

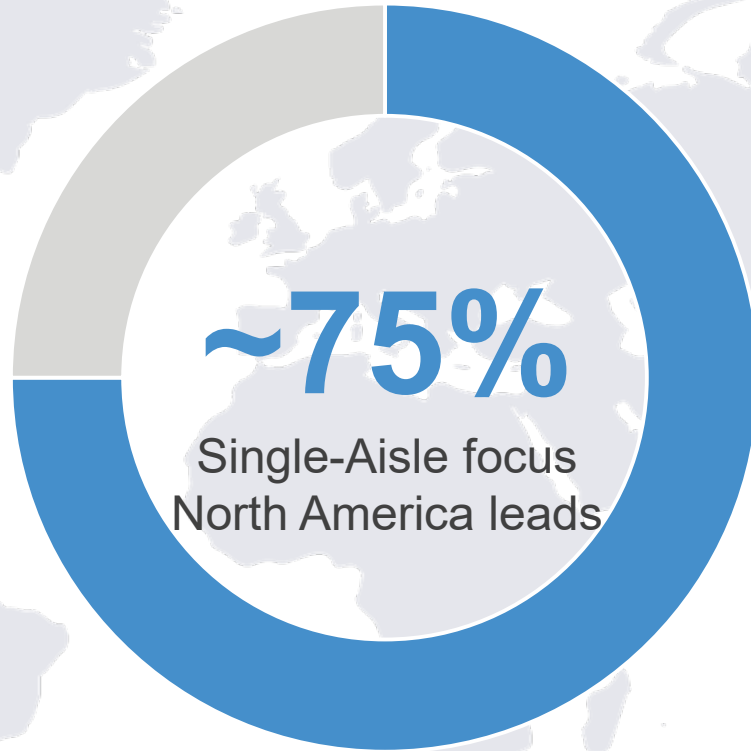


Global aviation dashboard

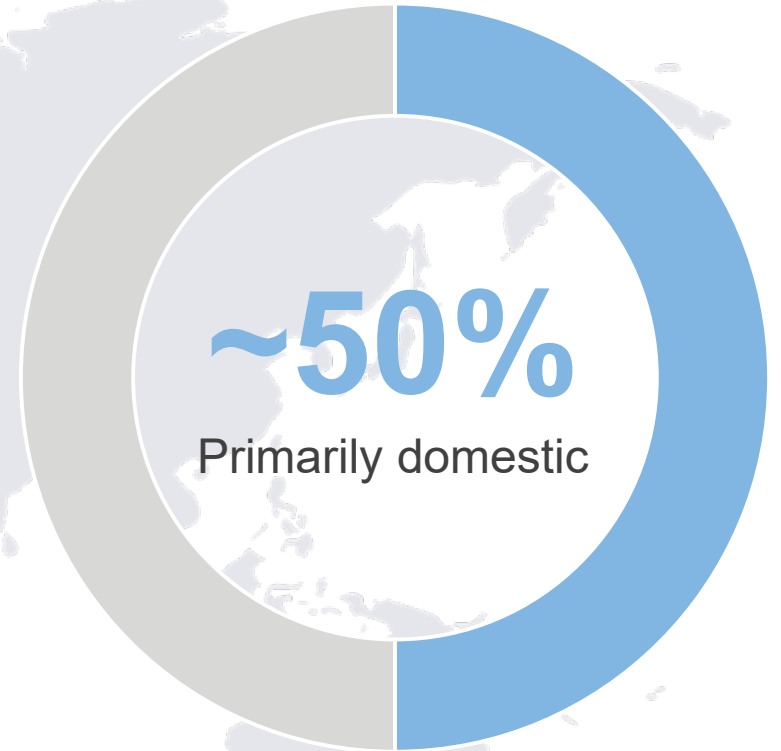
Active aircraft



Flights

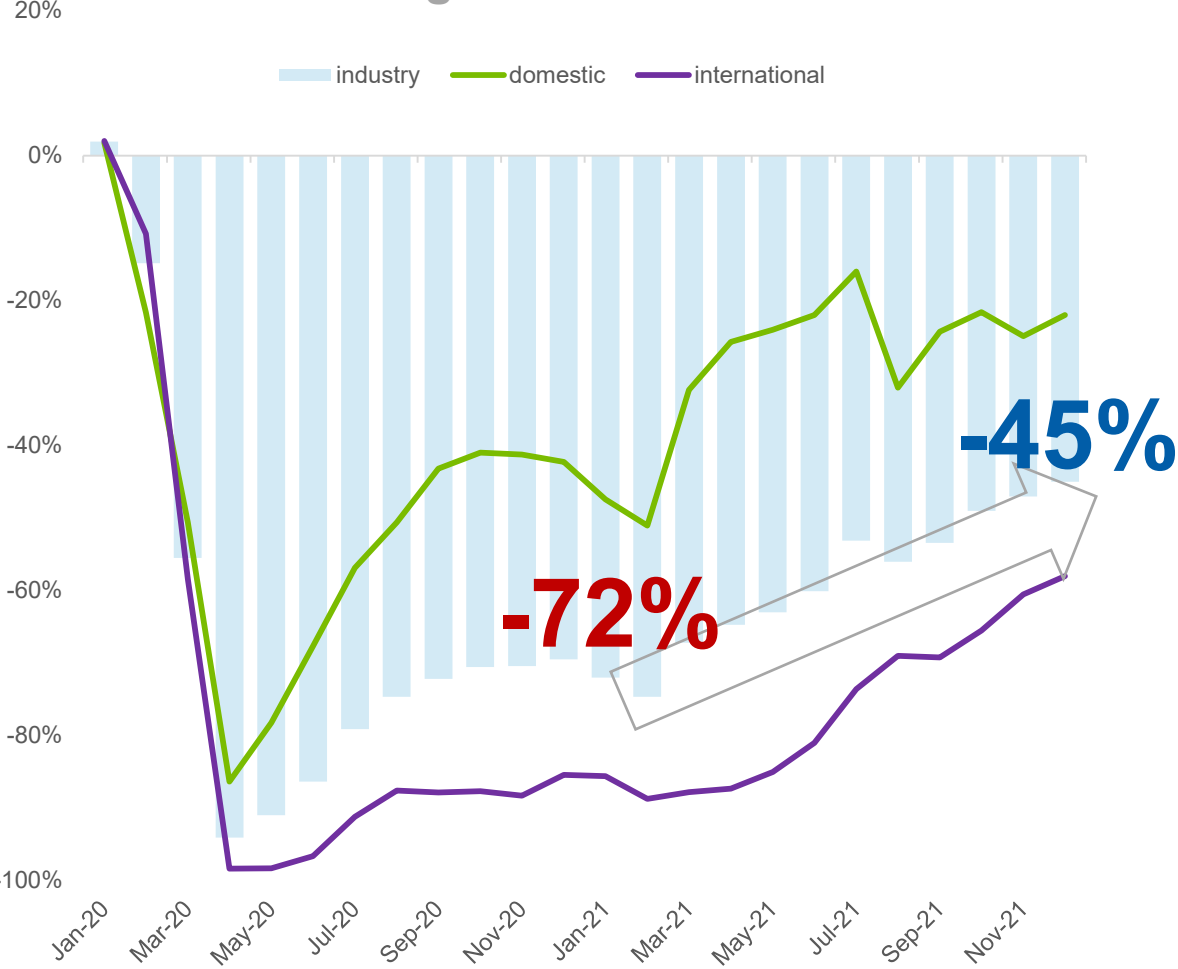


Passenger traffic

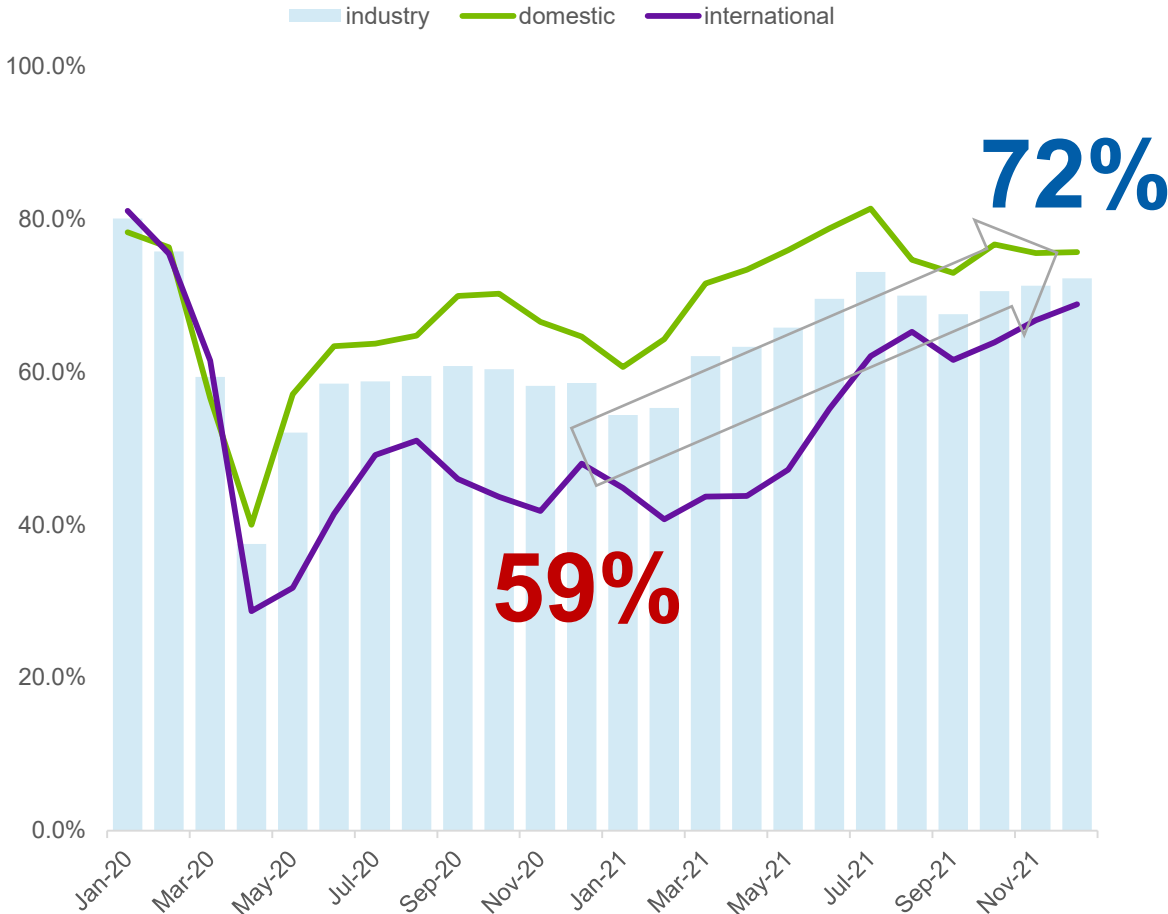


2021 recovery provides stronger base for 2022

Passenger traffic vs. 2019

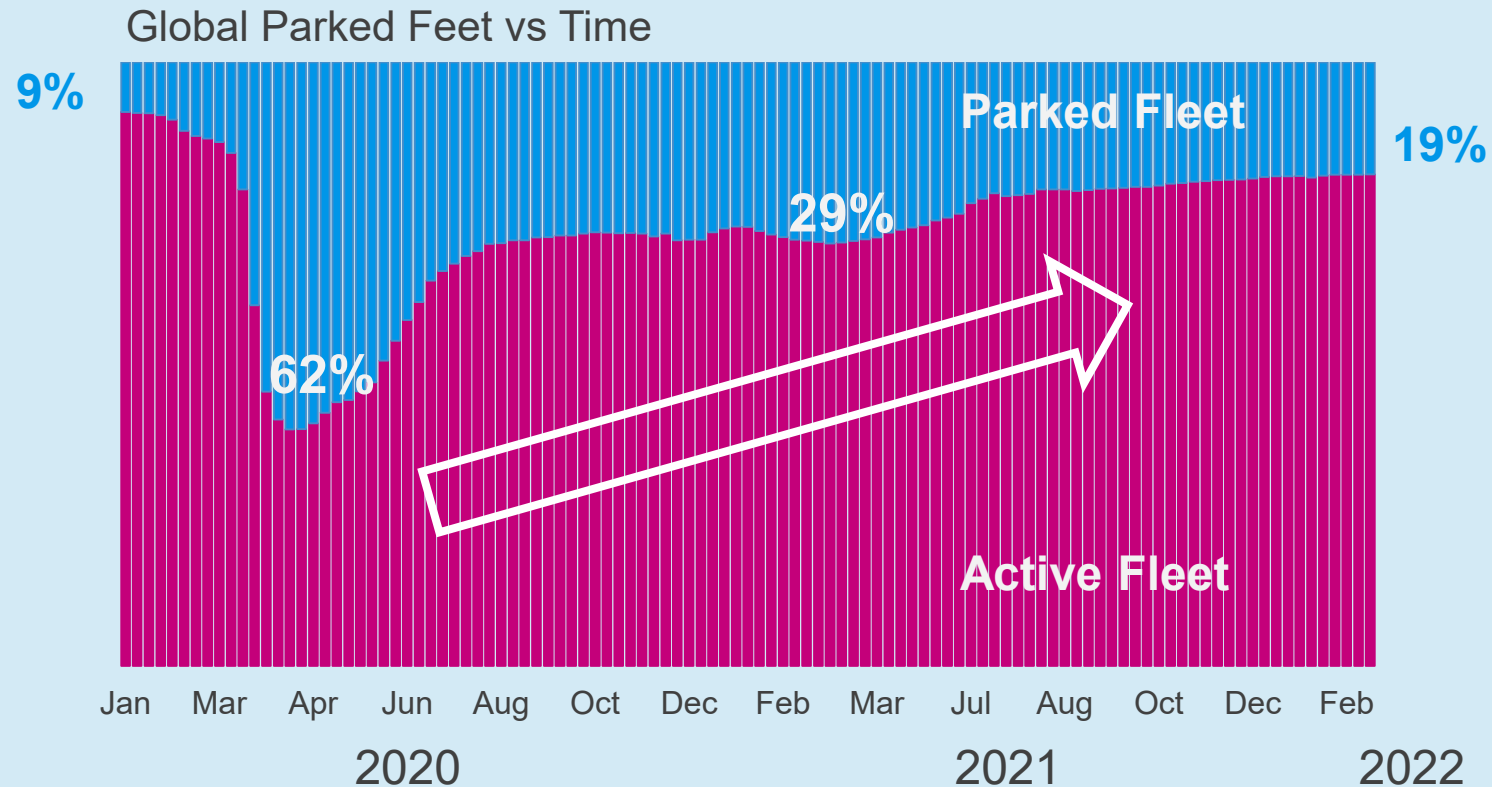


Passenger Load Factor



Source: IATA December 2021

Parked fleet continues to decrease



2020 - January

2,000 parked aircraft

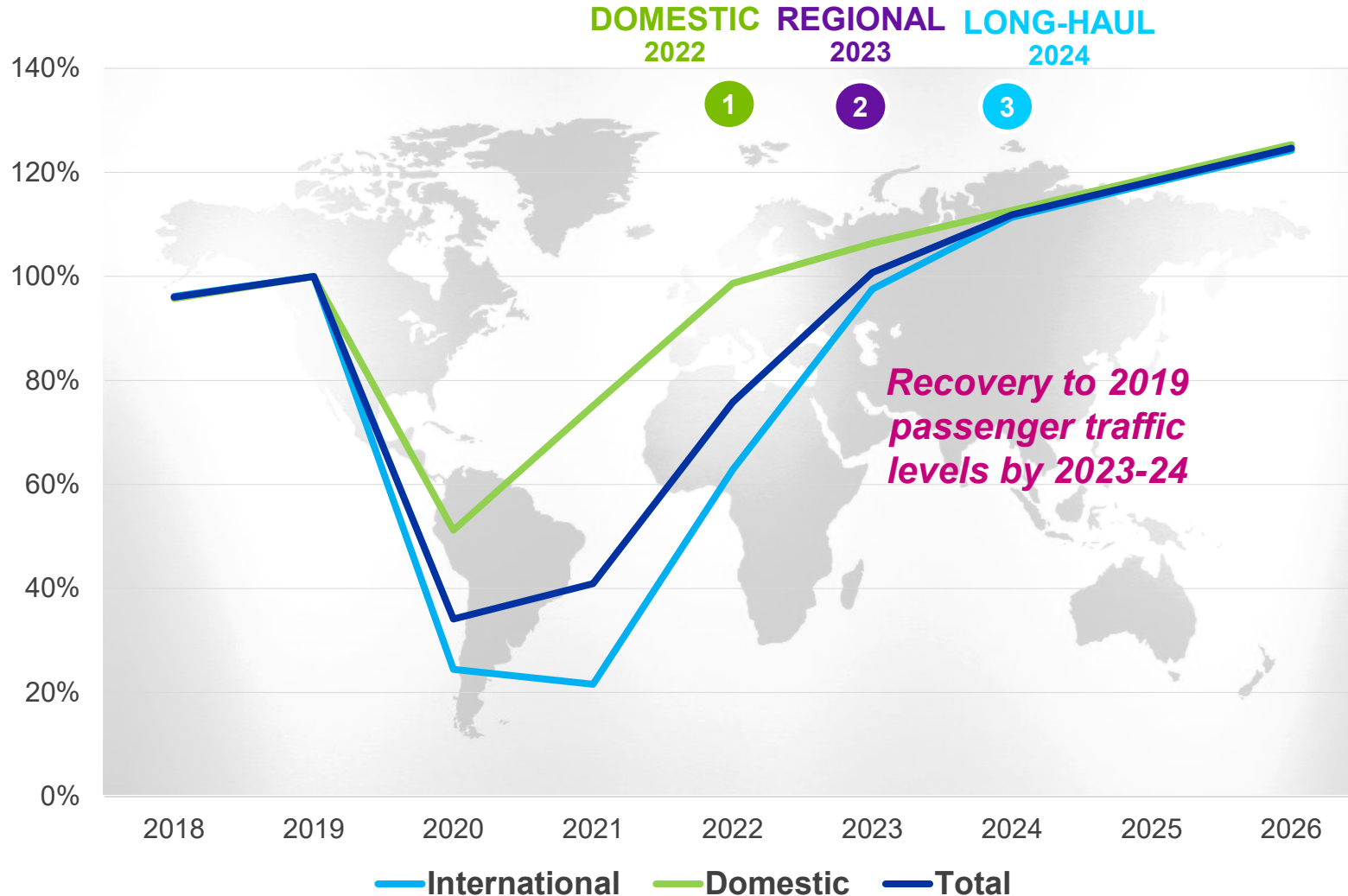
2021 - January

7,000 parked aircraft

2022 - January

4,500 parked aircraft

Multi-speed recovery accelerates in 2022



Key Market Drivers

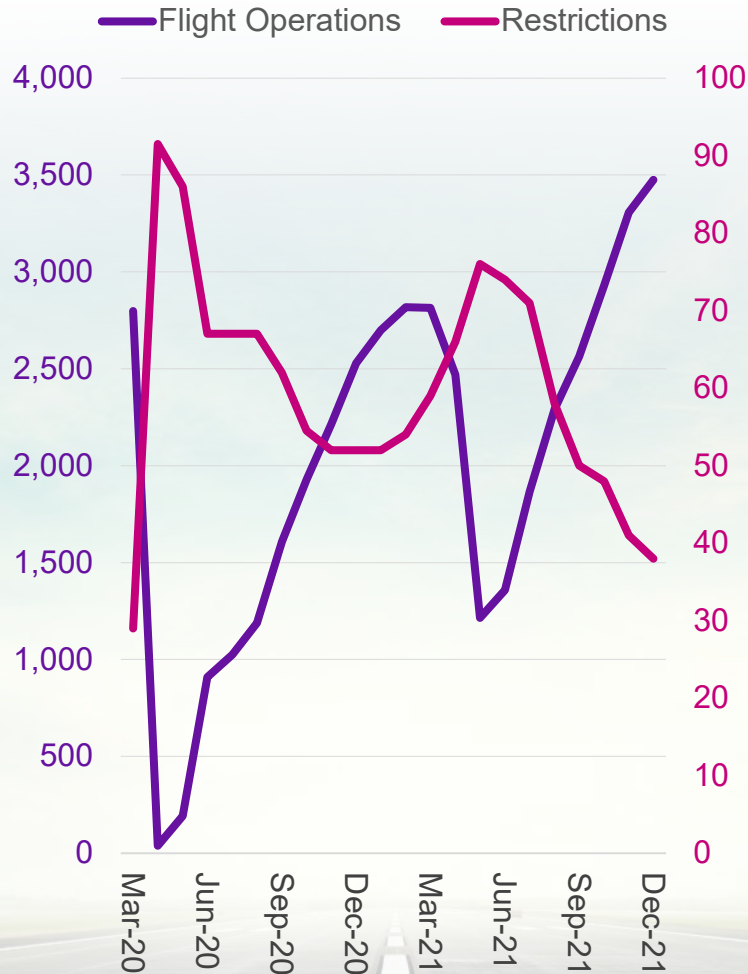
- Economic recovery
- Vaccine efficacy
- Reduced restrictions
- Pent-up savings
- Long-term fundamentals

COVID restrictions key to air traffic developments

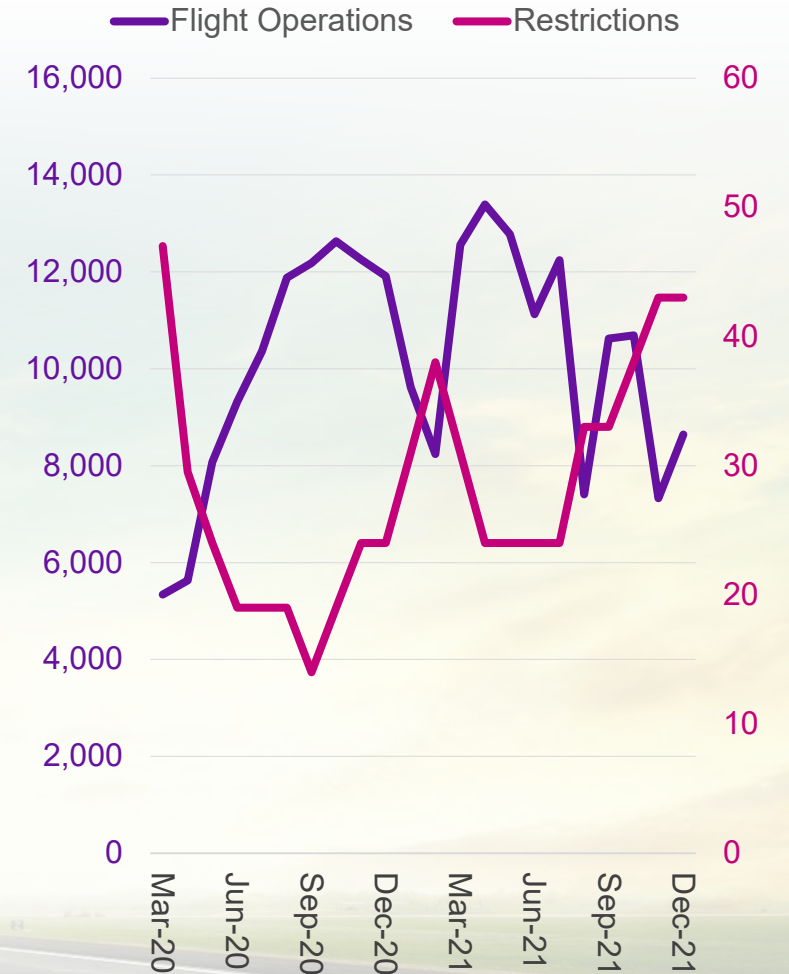
United States



India



China



Commercial aviation market outlook trends

Replacement



Fleet renewal

Sustainability

Efficiency

Resilience



Travel demand

Market diversity

Innovation

Versatility



Capability

Network flexibility

Commonality

Airlines will need 43,610 new airplanes over 20 years; Long-term resilience driven by single-aisle aircraft

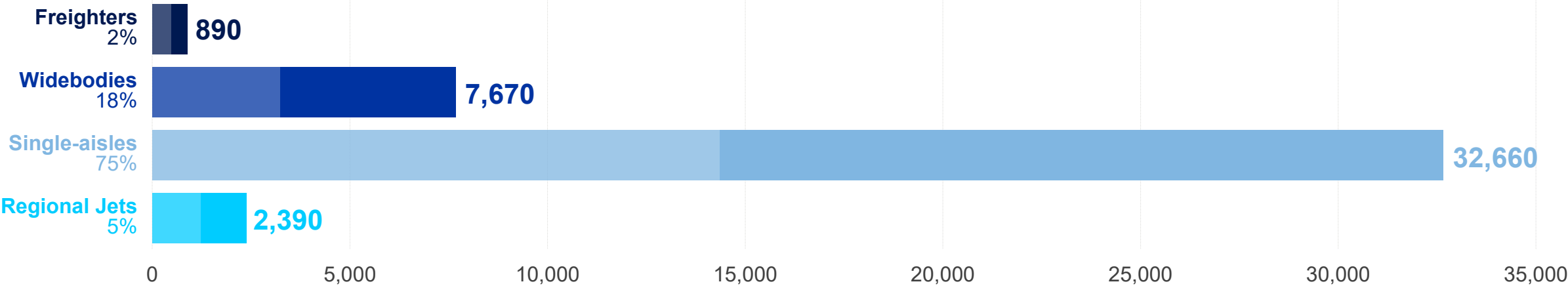


New airplane deliveries 2021-2030:

19,330

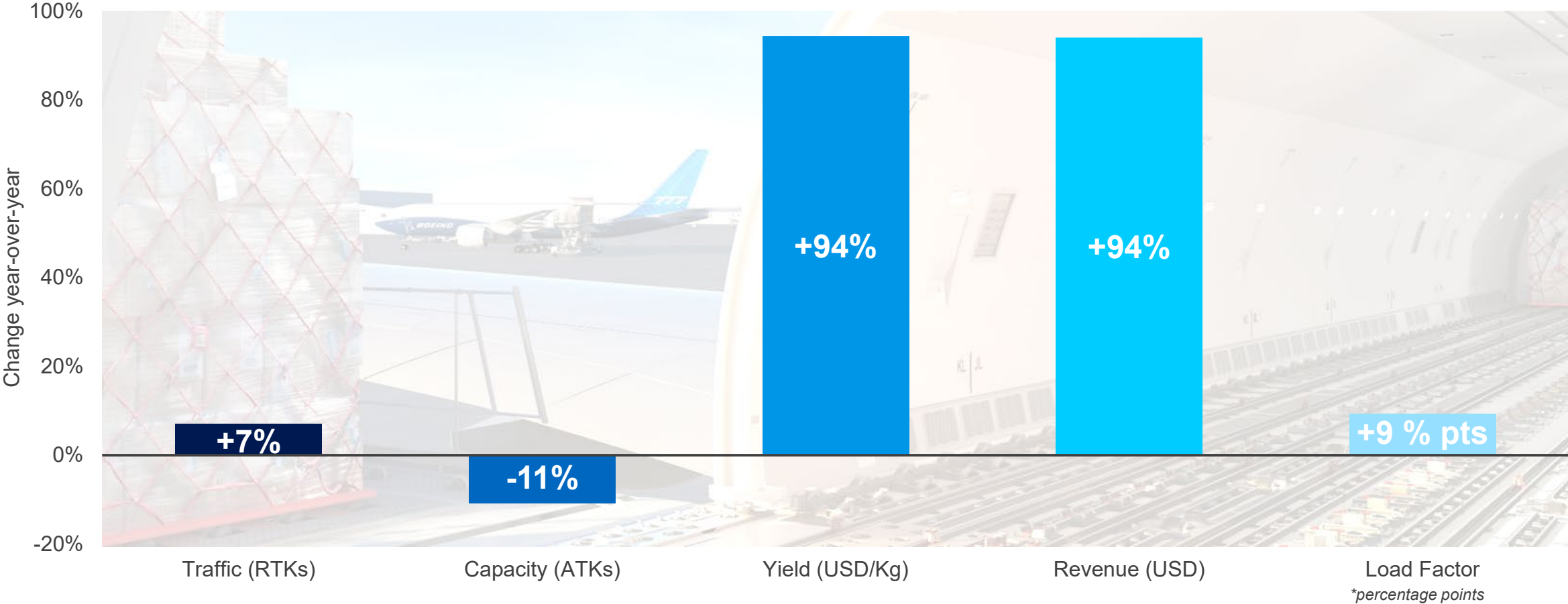
New airplane deliveries 2021-2040:

43,610



Yield and revenues up significantly against 2019

2021 YTD Air Cargo Performance
January – December 2021 vs 2019

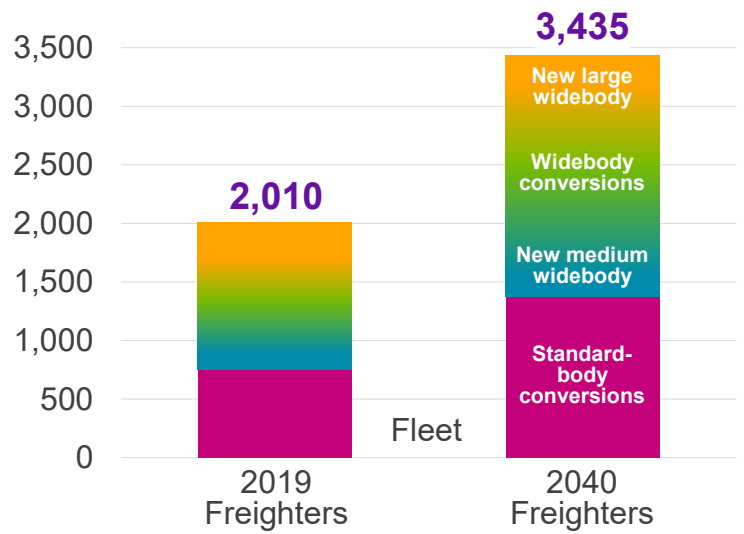
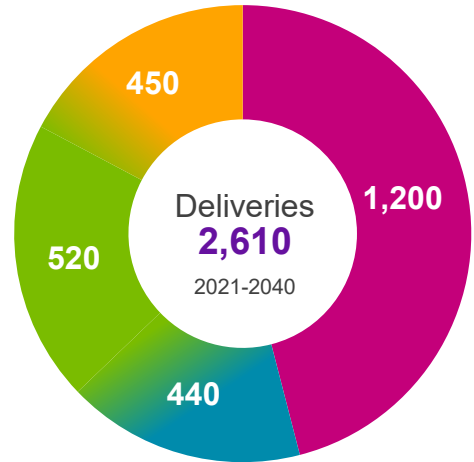


SOURCES: IATA Monthly Tracker, IATA CargoIS Data and Boeing Analysis

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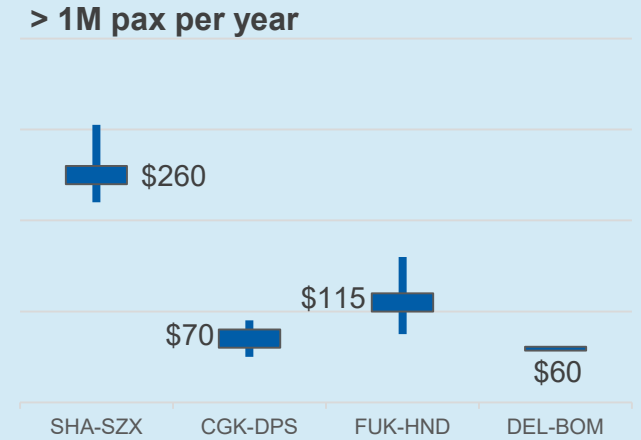
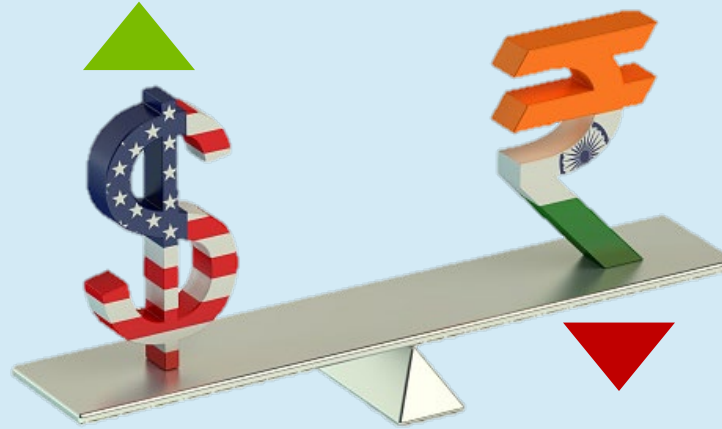
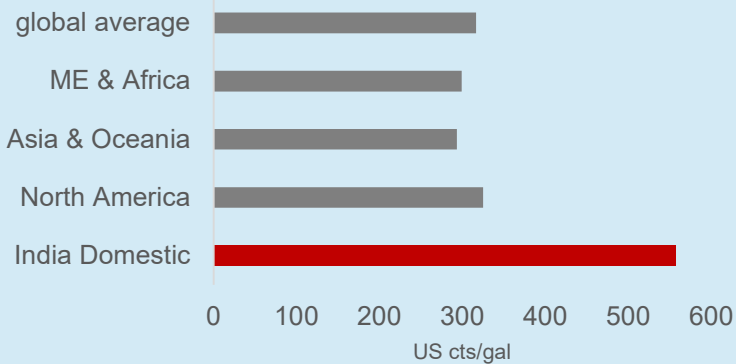
Freighter fleet to grow 70% by 2040



India market update:
Near term challenges with
massive upside



Three major challenges to airlines in India; new generation aircraft help



Fuel

90% higher pricing

737MAX reduces fuel and emissions by **21%** compared to previous generation aircraft

Currency

~70% of airline operational costs are priced in foreign currency

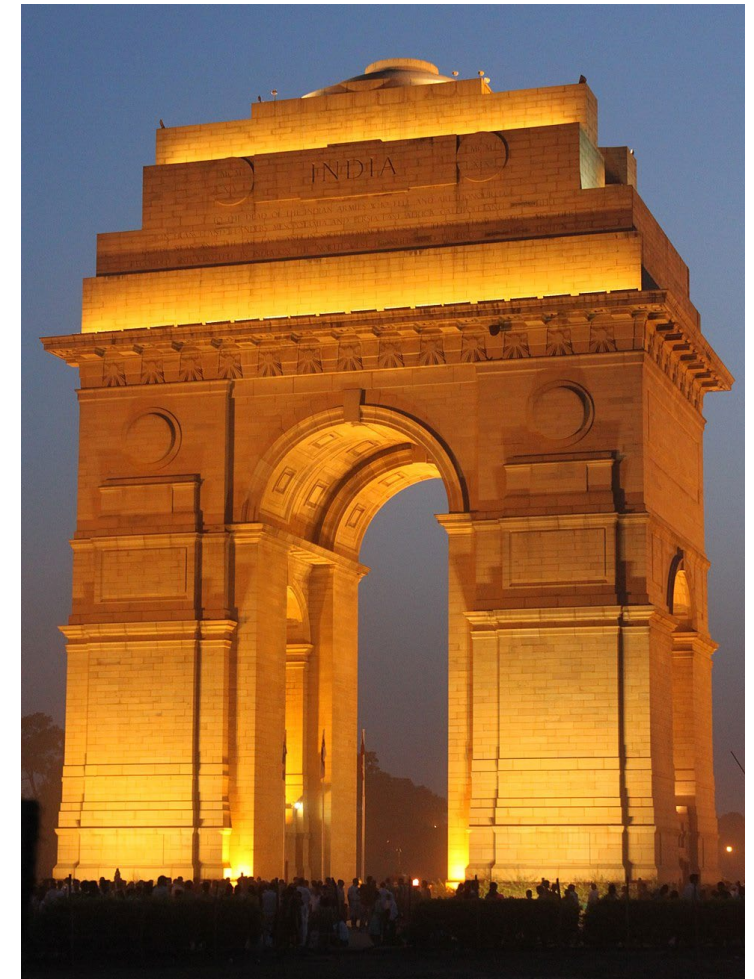
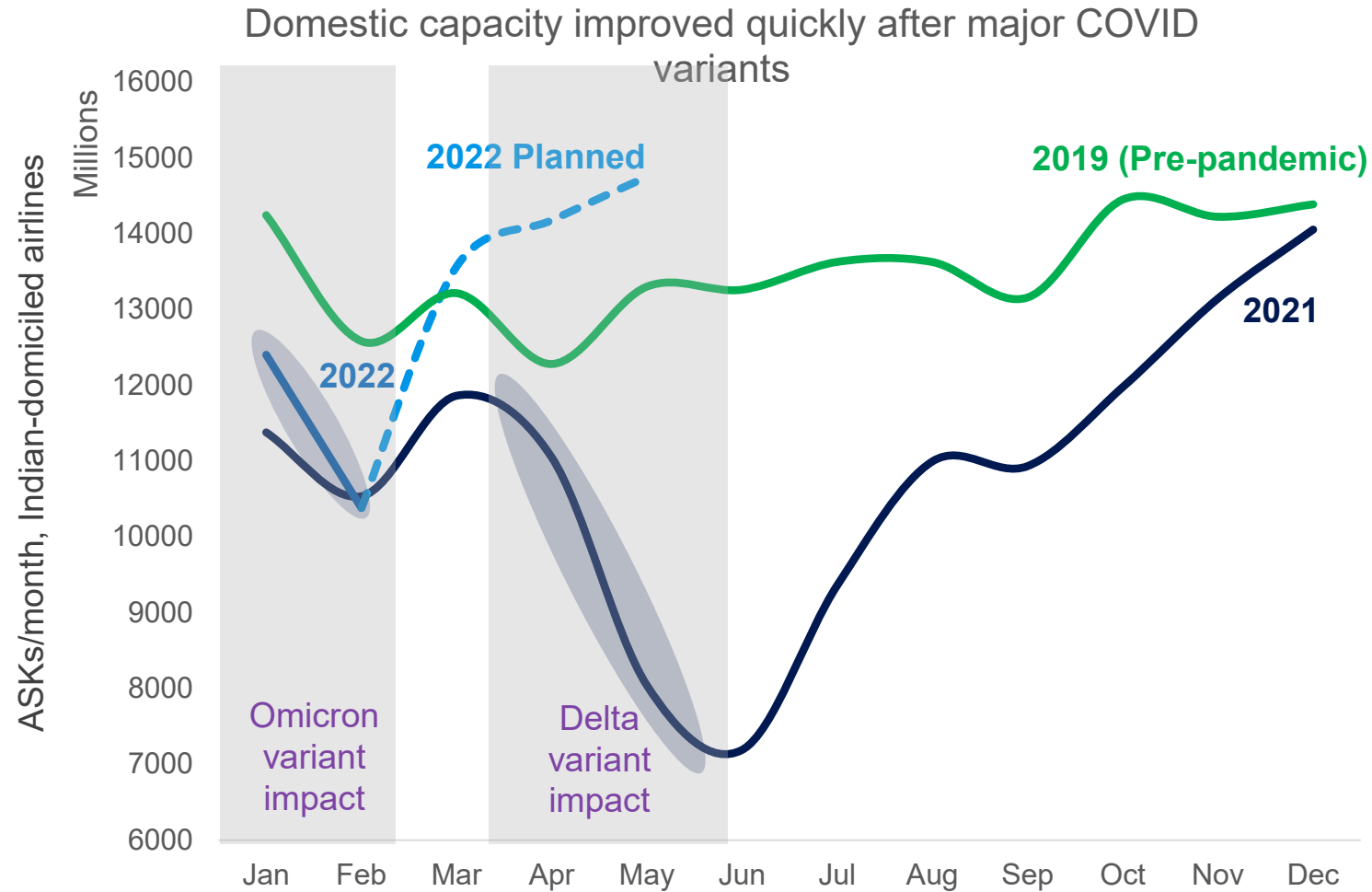
INR stability through pandemic however continued watch item

Fares

Lowest average fares for similar distance and demands

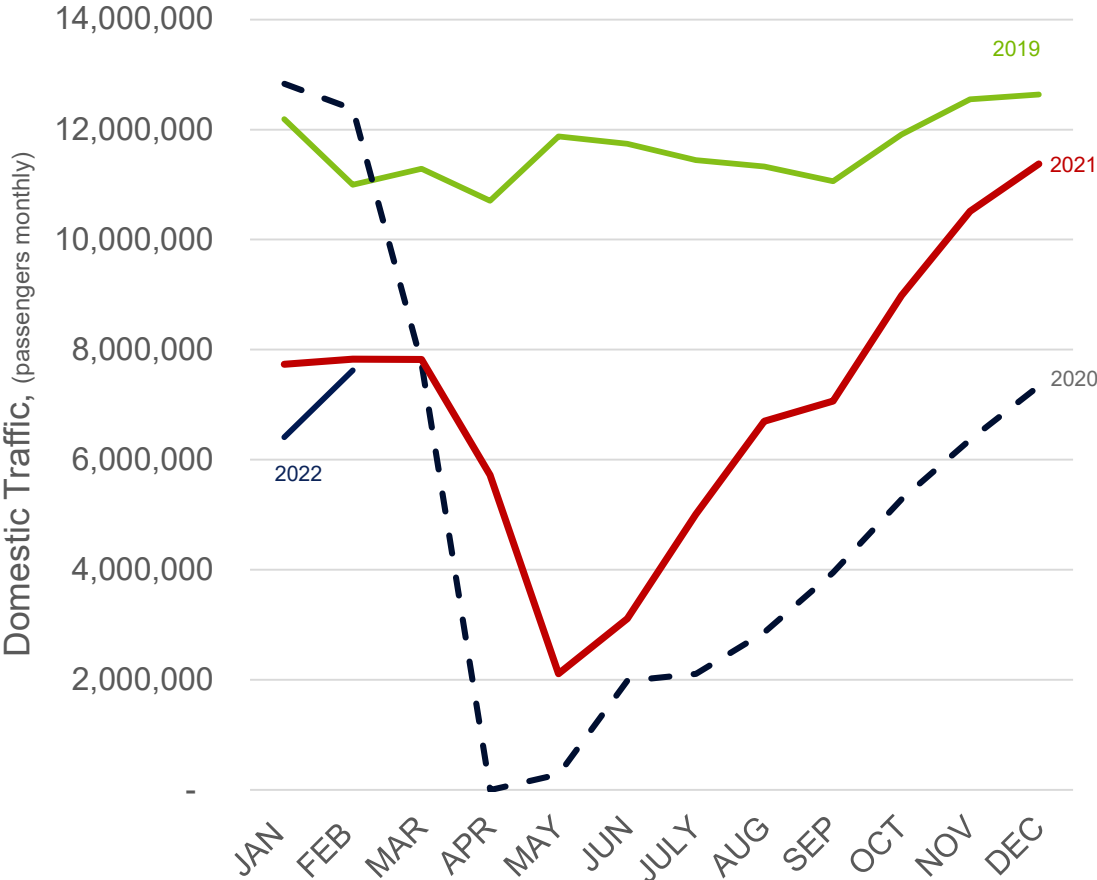
737-10 with **9%** lower seat costs enables strong aviation market with **sustainable low fares**

Planned domestic capacity to exceed 2019 levels this month

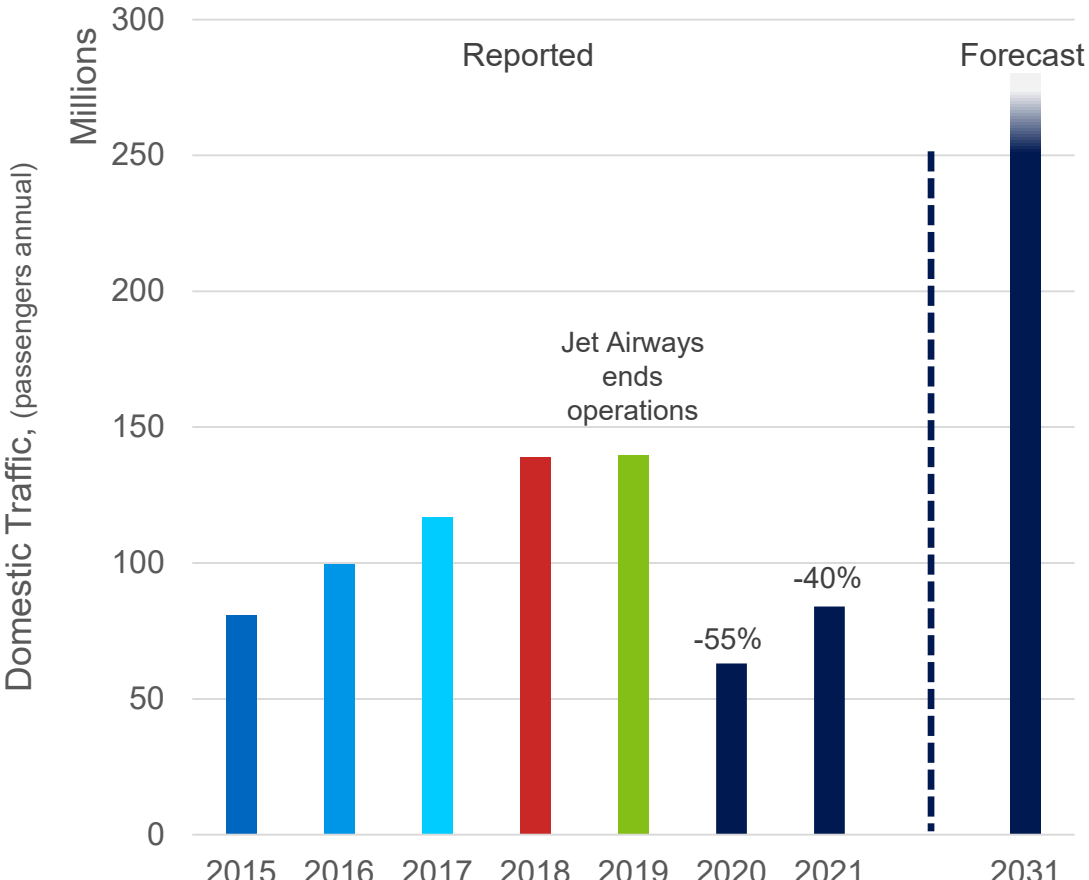


India domestic traffic performing better in 2021 and forecasted to double pre-pandemic levels in a decade

Quick rebound in domestic traffic



2x growth forecasted through 2031

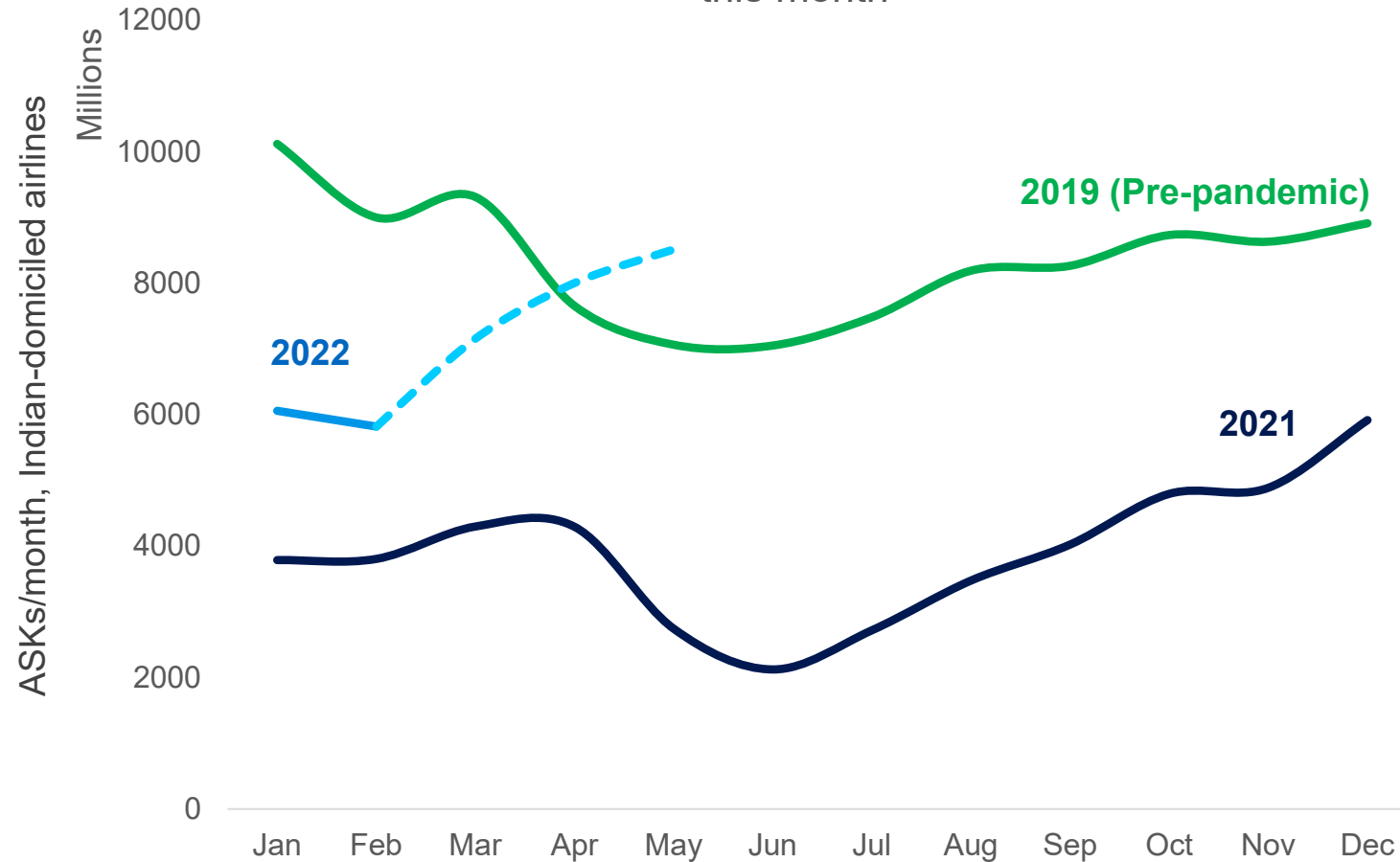


Source: India DGCA, Boeing Analysis

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Planned international capacity expected to exceed pre-pandemic levels as early as next month

International capacity poised for a strong rebound starting late this month



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After 2-year gap, all international flights to resume from March 27

Jagriti Chandra

NEW DELHI MARCH 08, 2022 18:39 IST
UPDATED: MARCH 08, 2022 22:58 IST



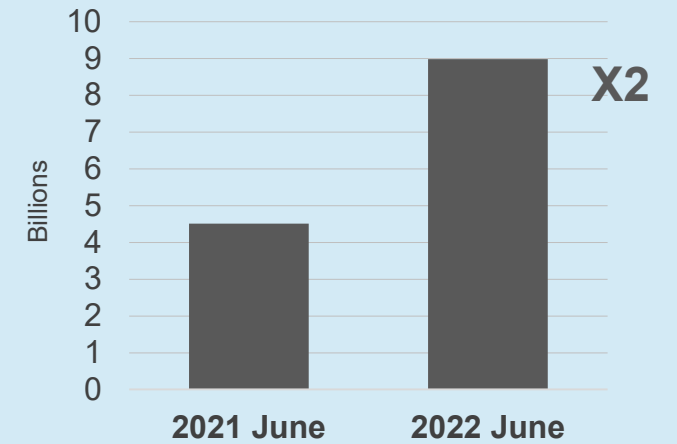
Indian carriers are adding more capacity in both domestic and international routes

International scheduled network from India (2022 June)

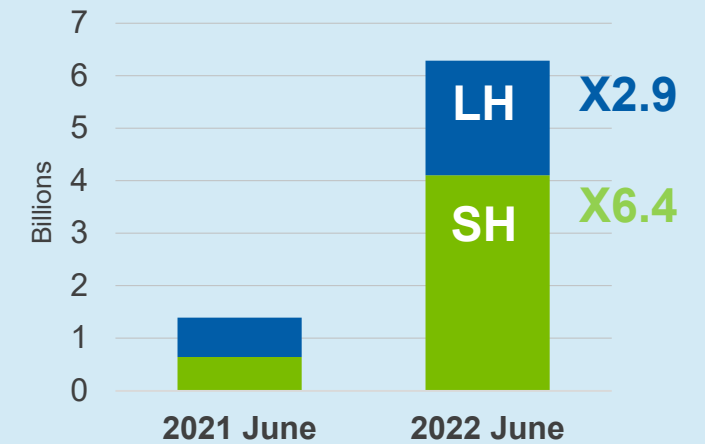


Source: Diio

Domestic ASM in India



Int'l ASM in India



Long-haul $\geq 3,000$ mi
Short-haul $< 3,000$ mi

South Asian airlines will lead air traffic growth rates through 2040

6.9%



5.5%



5.4%



5.4%



4.8%



South Asia

SE Asia

China

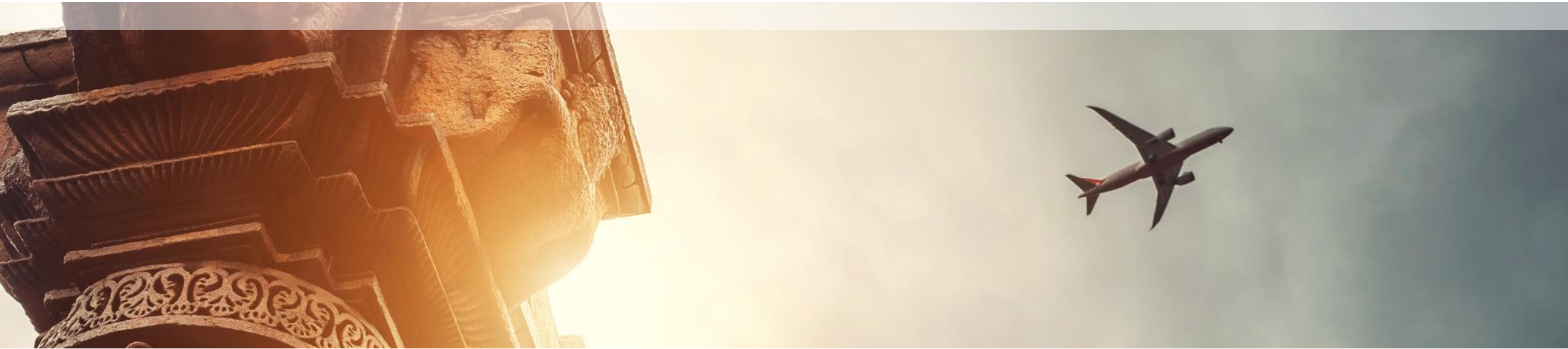
Africa

Latin America

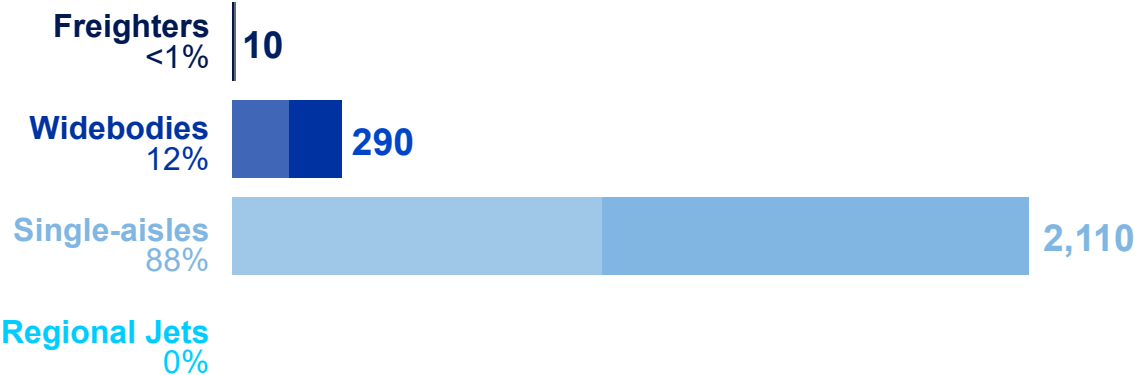
NOTE: growth is for airlines domiciled in the region for all flows

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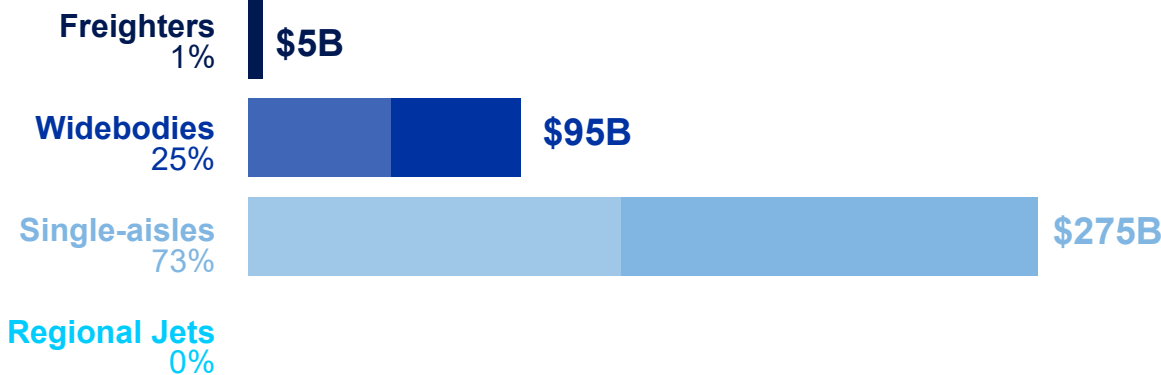
South Asia will need 2,400 new airplanes valued at \$375 billion



New airplane deliveries: **2,410**



New airplane values: **\$375B**



Lighter shade = 2021-2030, darker shade = 2031-2040

Product Update



737 MAX

Sustainable versatility



737-7

Lowest cost &
high-performance



737-8

Most versatile
single-aisle



737-9

More capacity
with range of 737-8



737-10

Most efficient
single-aisle

737 MAX Global Status



Since 9th December 2020, as of 17th Mar 2022



542
43

In-Service Fleet
Airlines



1,061,000+
99.5%

Total flight hours
Schedule Reliability



424,000+
1,790

Departures
Daily departures



MAX cares about the environment

21% less
carbon emissions

50% smaller
community noise footprint

Meets next-generation
noise & emissions standards

A winning low cost combination



Optimized trip costs for new, thinner markets

More seats for lower unit costs

Full commonality with 737 family



Only aircraft optimized for 200-seat markets

11-20 more seats than A320

Most versatile in segment



Lowest single-aisle unit costs

\$1 million annual operating cost savings vs. A321neo

More range than any NG/ceo

737-7

737-8-200

737-10

Strong demand for all MAX family members

2021 orders



787 Dreamliner

The only complete widebody family



787-8

Route opener &
network expander

787-9

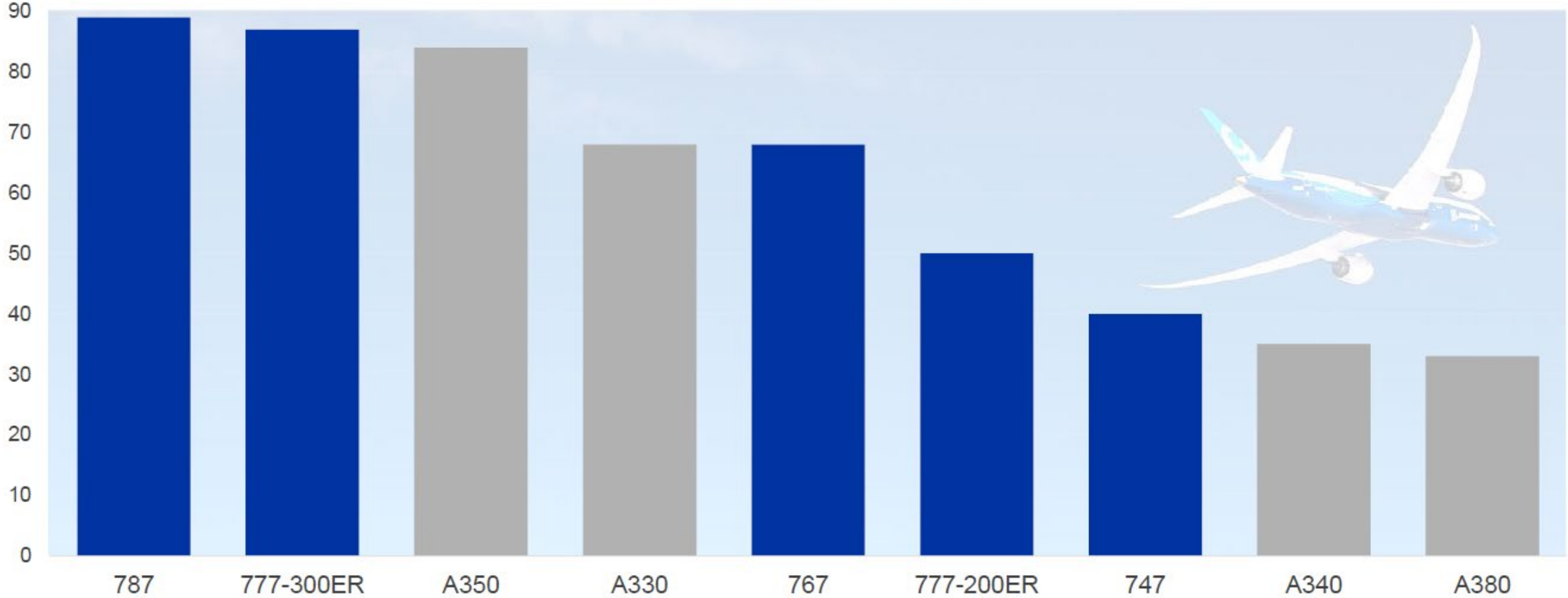
Most versatile
widebody in history

787-10

Maximum payload with
unmatched efficiency

787 leads widebody utilization

Share of passenger fleet active

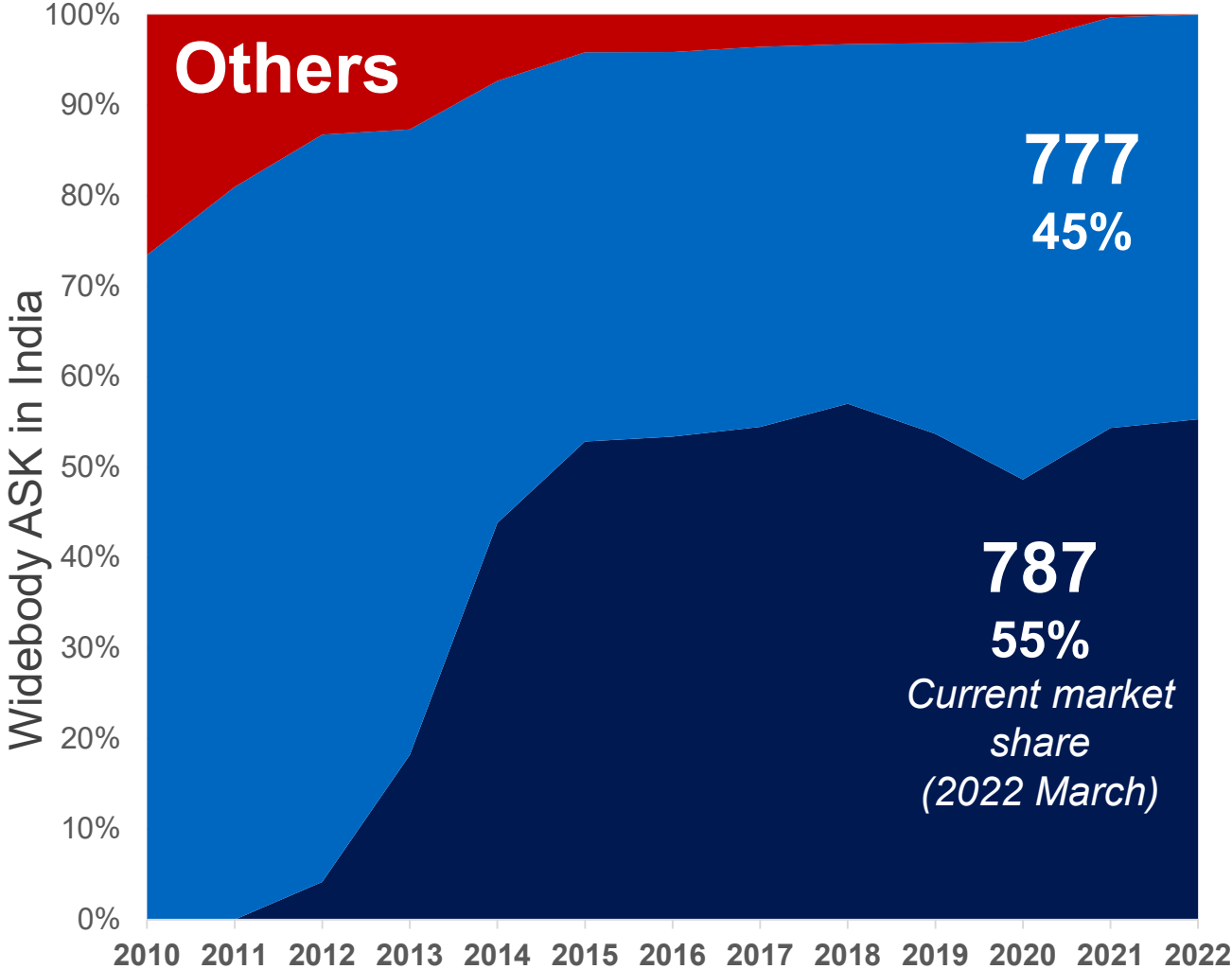


787 opening 52 new markets during pandemic



Widebody capacity by India domiciled carriers over the last 12 years

787 has gained 6% market share during the pandemic in India due to its versatility and efficiency



777X

The next long-haul market leader



Jumbo capability with
twin-engine economics

Unconstrained network
growth opportunities

Seamless commonality
with 777 & 787 families

777X: the next long-haul market leader

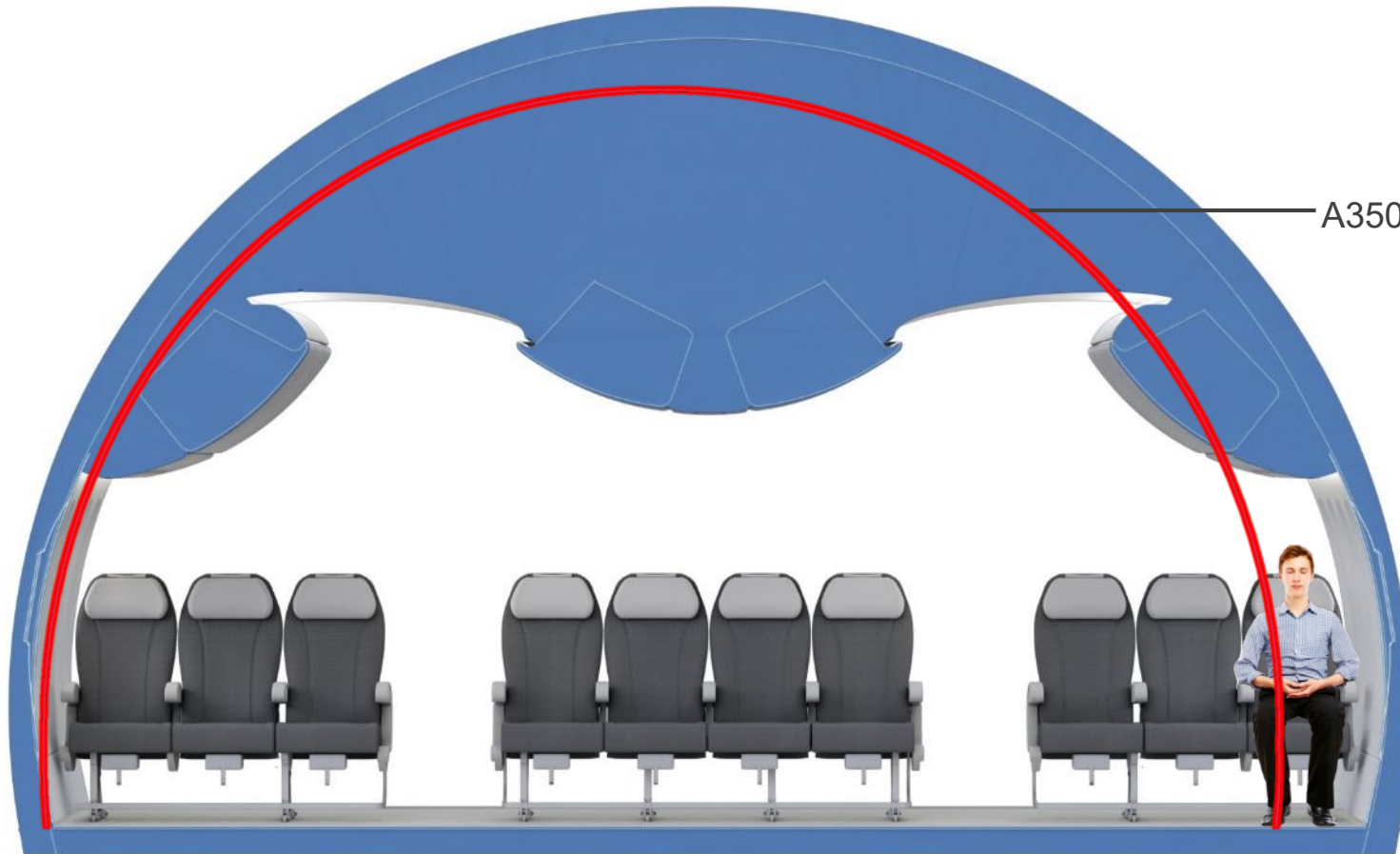


70,000 tonnes less CO₂ per airplane
each year compared to A380

8% lower fuel consumption per seat
Compared to the A350-1000

The 777X: A comfortable 10-Abreast economy

The A350 is too narrow for reasonable 10-Abreast seating



777X is **+40cm** wider

Freighters



777-8F: The next freighter market leader



Highest Payload

118 tonnes structural payload
+11.3 than 777F
+9.3 than A350F

Lowest Cost

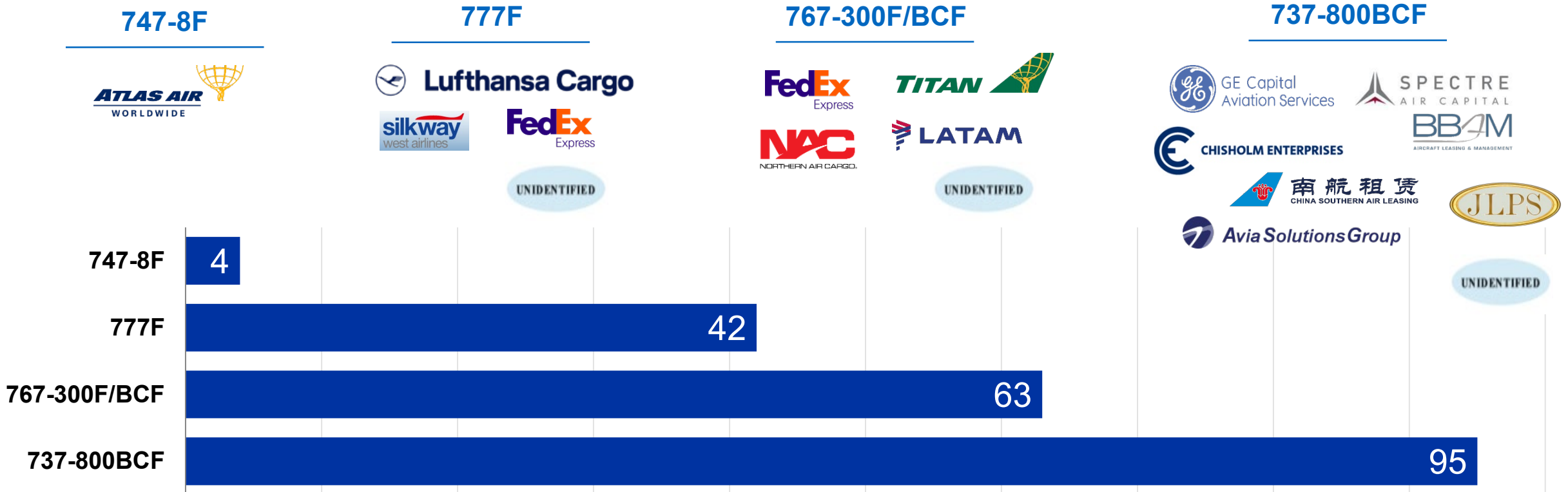
10% lower cost/tonne than 777F
6% lower cost/tonne than A350F
Lowest carbon footprint

Most Connected

E-enabled architecture
Connected crew, operations
Connected cargo, customers

Record sales: 204 freighter orders in 2021

84 Production Freighters and 120 Boeing Converted Freighters (BCF)



*Orders and commitments as of October 31, 2021



Committed to
protecting, connecting
and exploring our
world

Path to a sustainable future:

Fleet Renewal

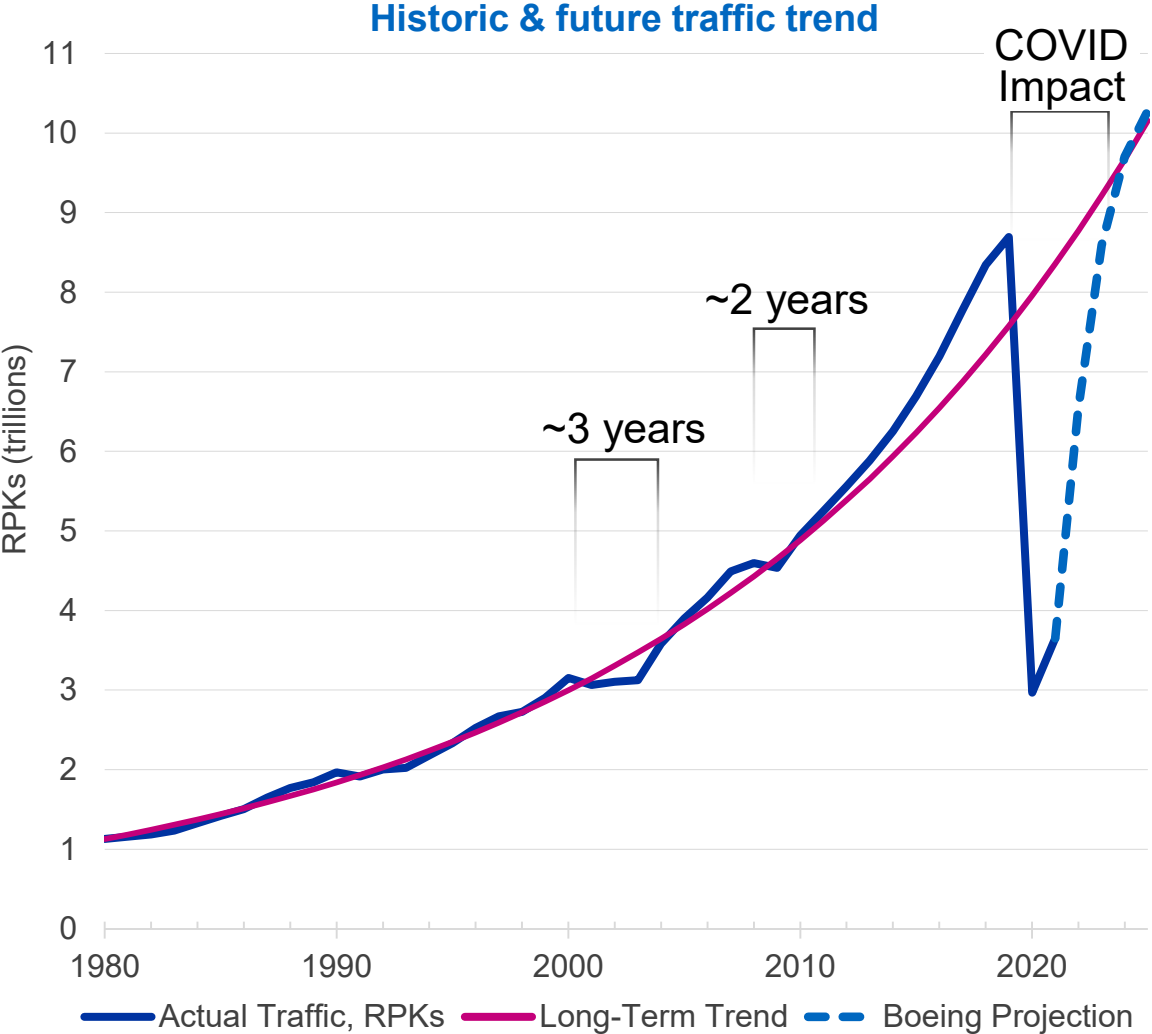
Renewable resources

Advanced technology

Operational efficiency



Aviation proven resilient over and over again



RPKs = Revenue Passenger Kilometers
SOURCES: 2000-2020 IATA stats, Boeing analysis



