

Aviation outlook and major trends

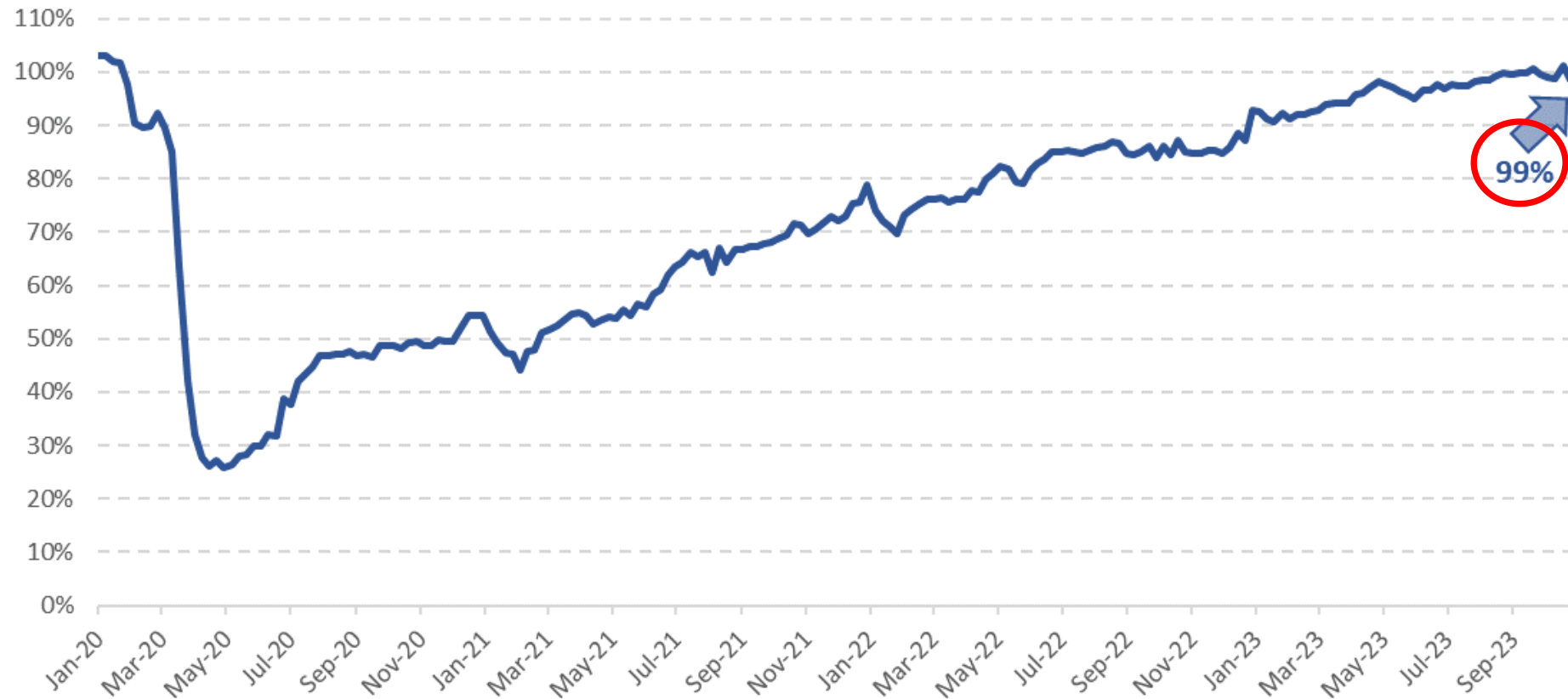
Simon Elsegood
Head of Research

CAPA – Centre for Aviation

Recovery is nearly complete

- Global seats are at 99% of pre-pandemic levels

Global scheduled airline seats

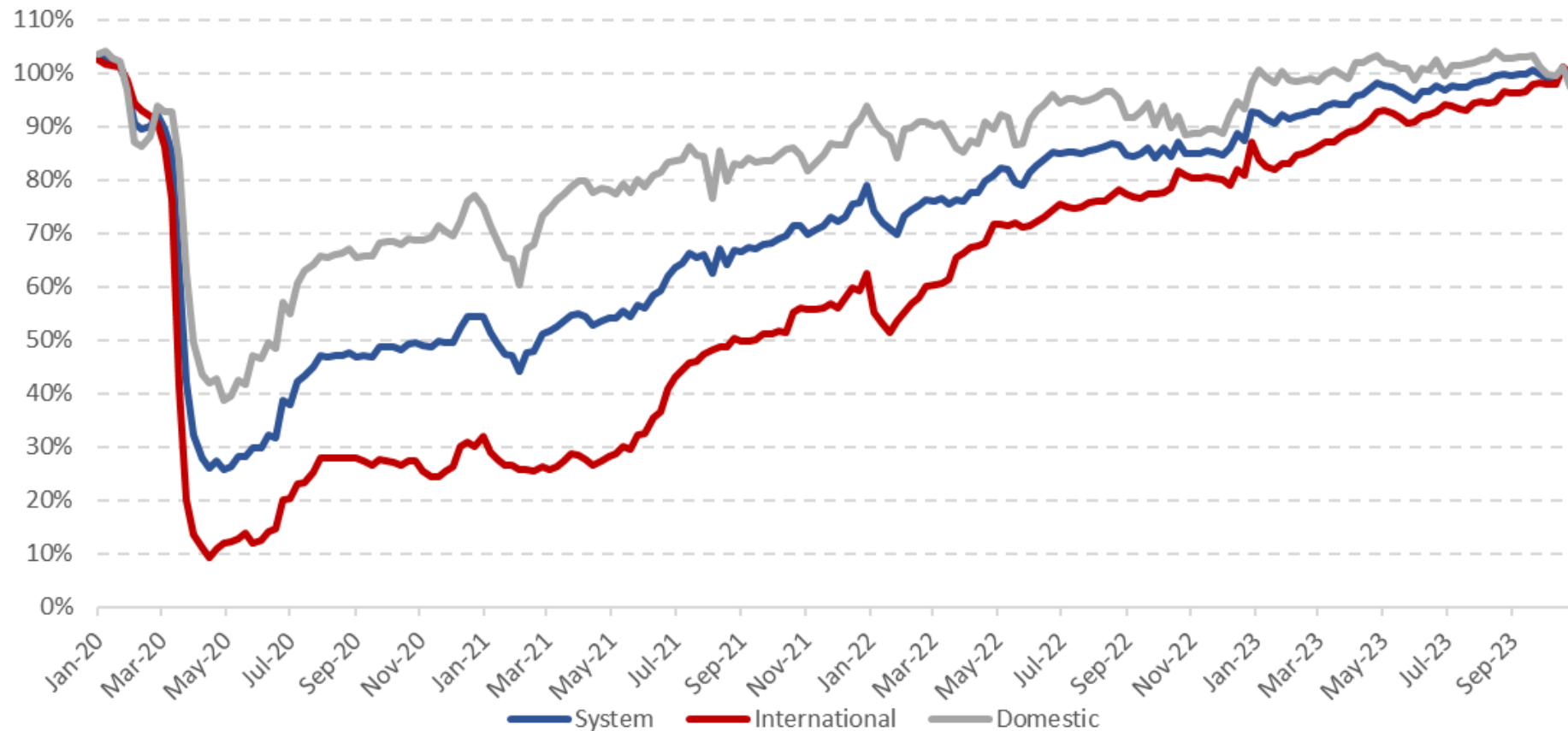


Source: CAPA – Centre for Aviation & OAG

Recovery is nearly complete

- Global seats are at 99% of pre-pandemic levels
- Return of domestic and international seats has now equalised

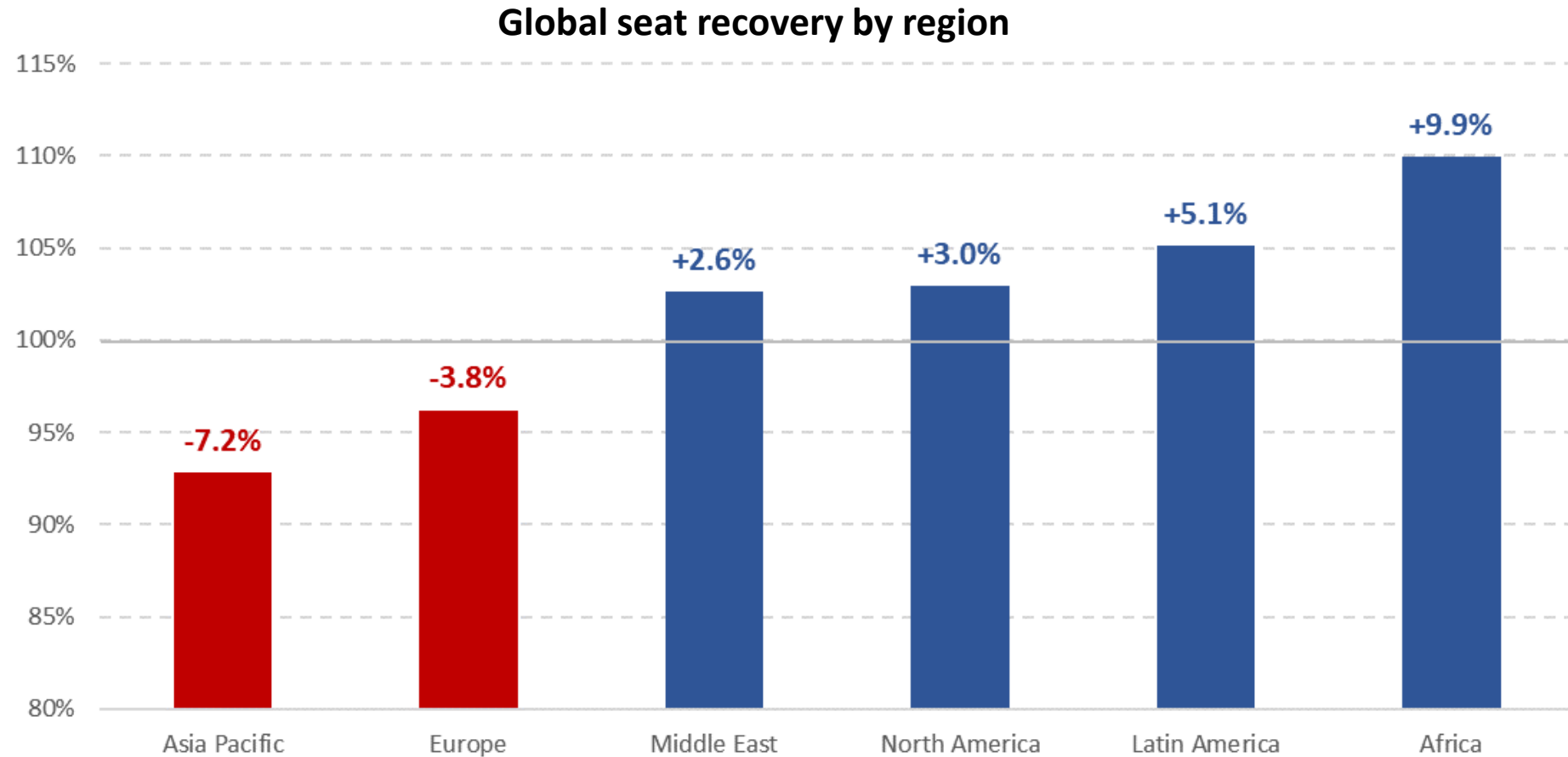
Global domestic and international seats



Source: CAPA – Centre for Aviation & OAG

Recovery is nearly complete (but unevenly distributed)

- Global seats are at 99% of pre-pandemic levels
- Return of domestic and international seats has now equalized
- This masks the fact that the recovery is still not evenly distributed

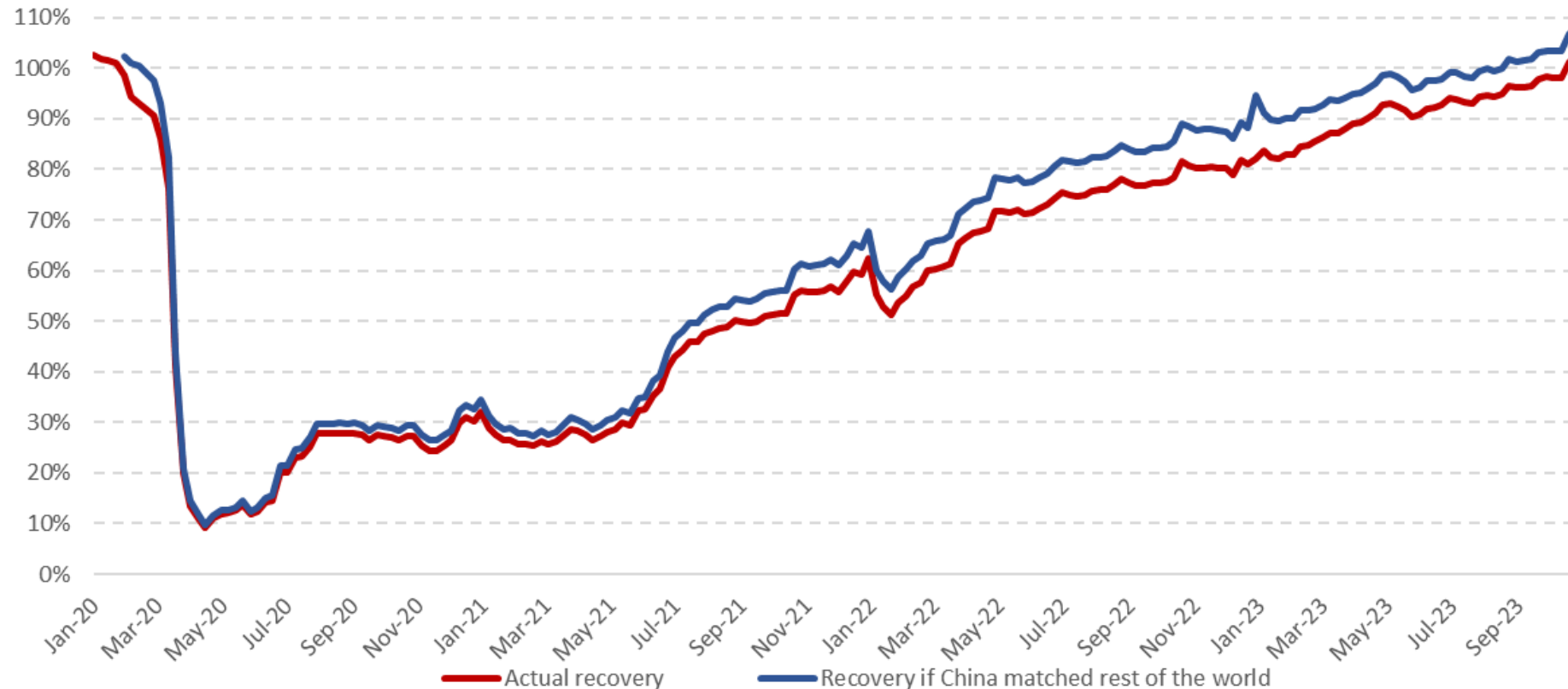


Source: CAPA – Centre for Aviation & OAG

Recovery is nearly complete (but unevenly distributed)

- Global seats are at 99% of pre-pandemic levels
- Return of domestic and international seats has now equalised
- This masks the fact that the recovery is still not evenly distributed
- International travel to/from China remains the major outlier

Global international seat recovery

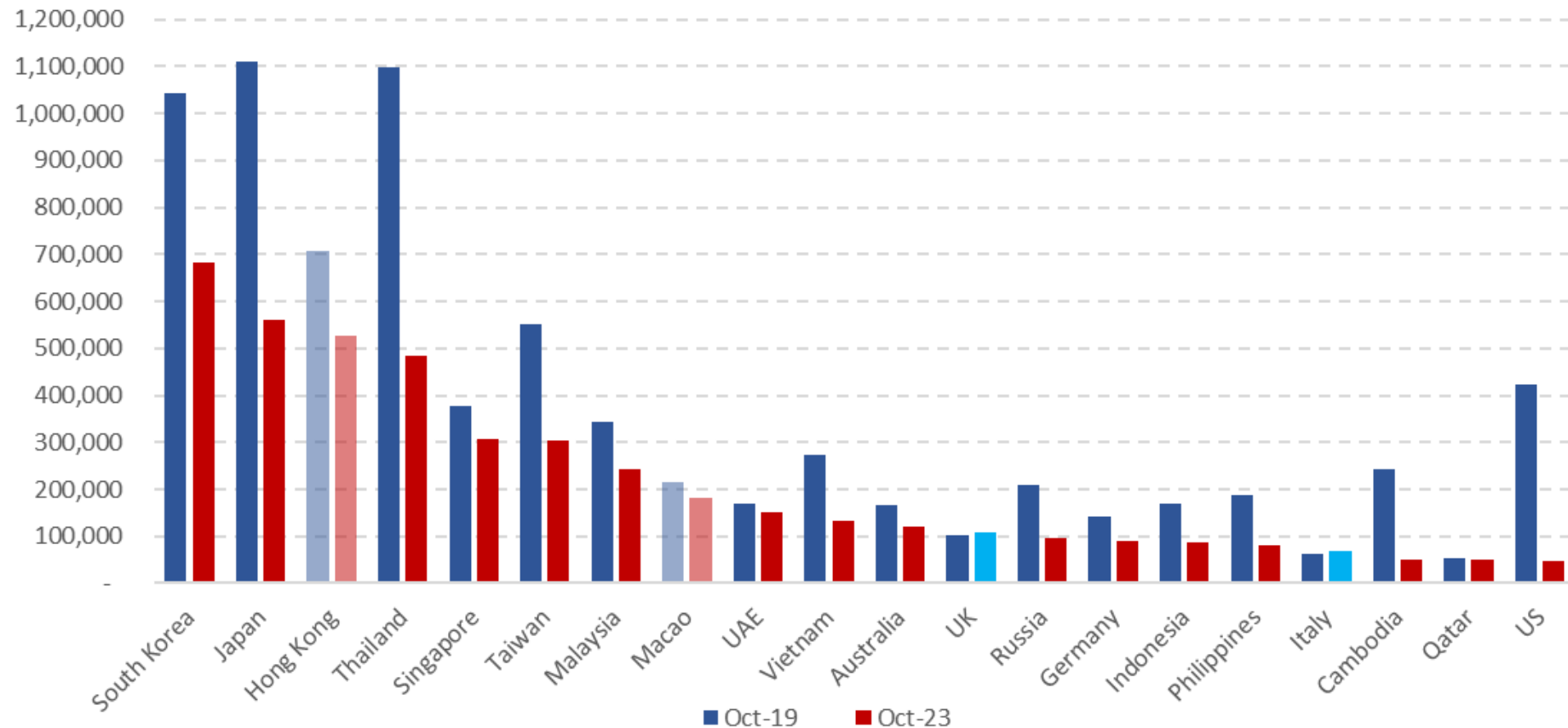


Source: CAPA – Centre for Aviation & OAG

Recovery is nearly complete (but unevenly distributed)

- Global seats are at 99% of pre-pandemic levels
- Return of domestic and international seats has now equalized
- This masks the fact that the recovery is still not evenly distributed
- International travel to/from China remains the major outlier
- Rebuild of Chinese capacity to some markets is still uncertain

Top 20 Chinese international markets



Source: CAPA – Centre for Aviation & OAG

Positive global outlook for 2024 despite slowing growth

Global capacity outlook



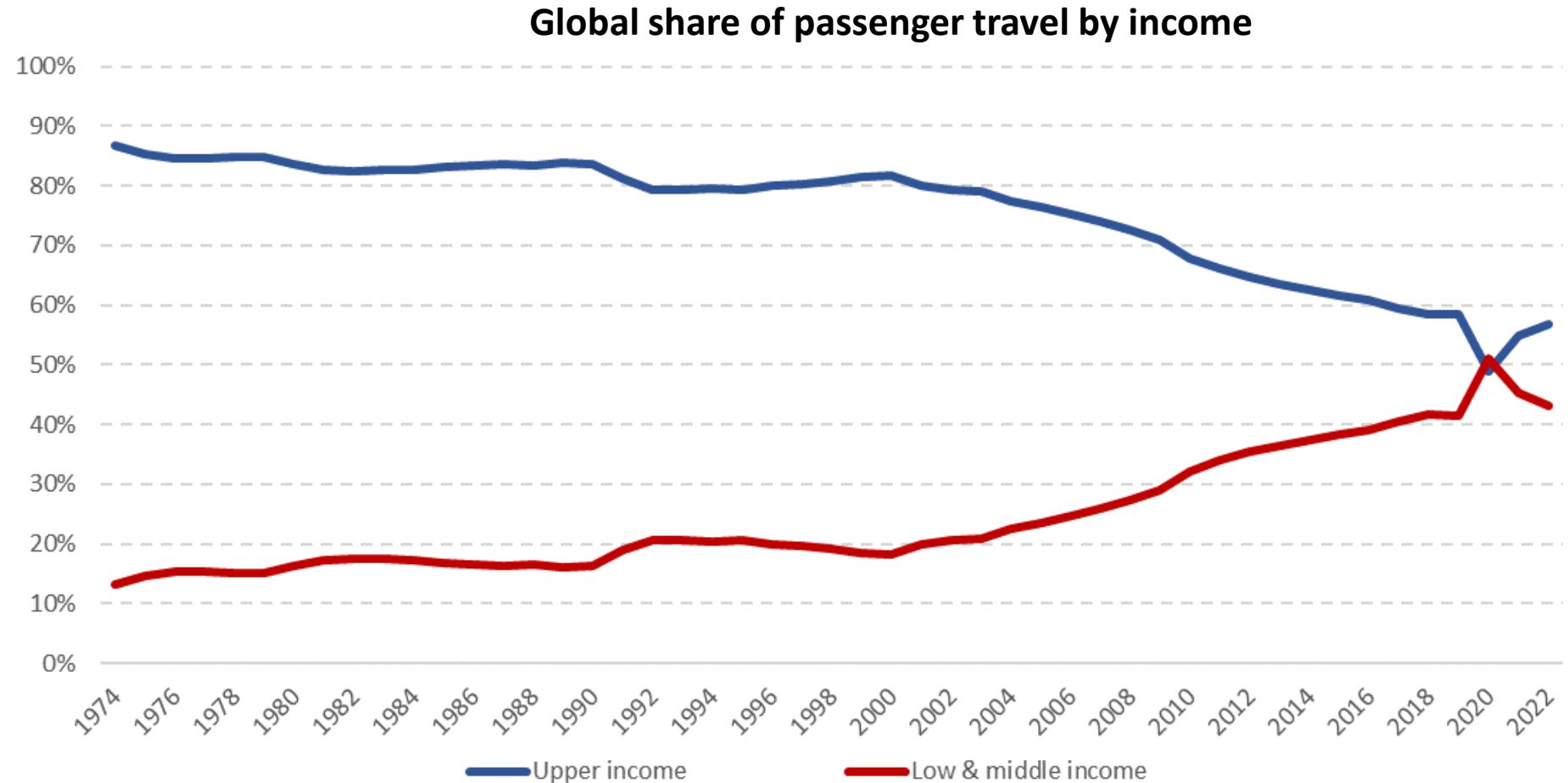
- Global capacity at ~110% of 2019 by the end of 1Q2024
- Global travel overall now expected to pass pre-pandemic levels in 2024
- Demand outlook is diverging between domestic and international markets
- Uncertainty and downside risks are increasingly prevalent

Source: CAPA – Centre for Aviation & OAG

Aviation mega trends

Shifting centre of gravity for commercial aviation

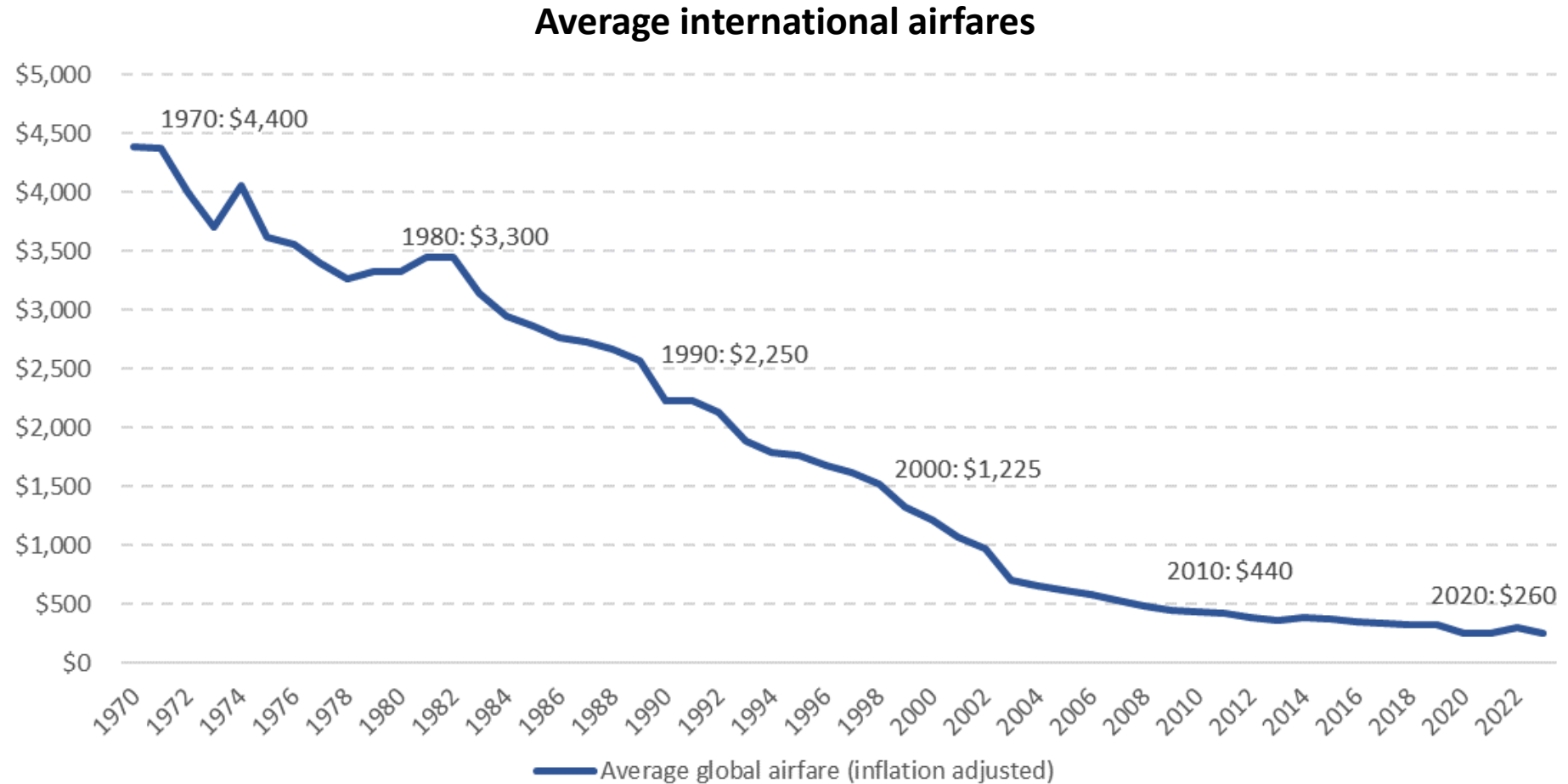
- The share of global air travel in low- and middle-income nations has doubled in the last 20 years



Source: CAPA – Centre for Aviation & ICAO

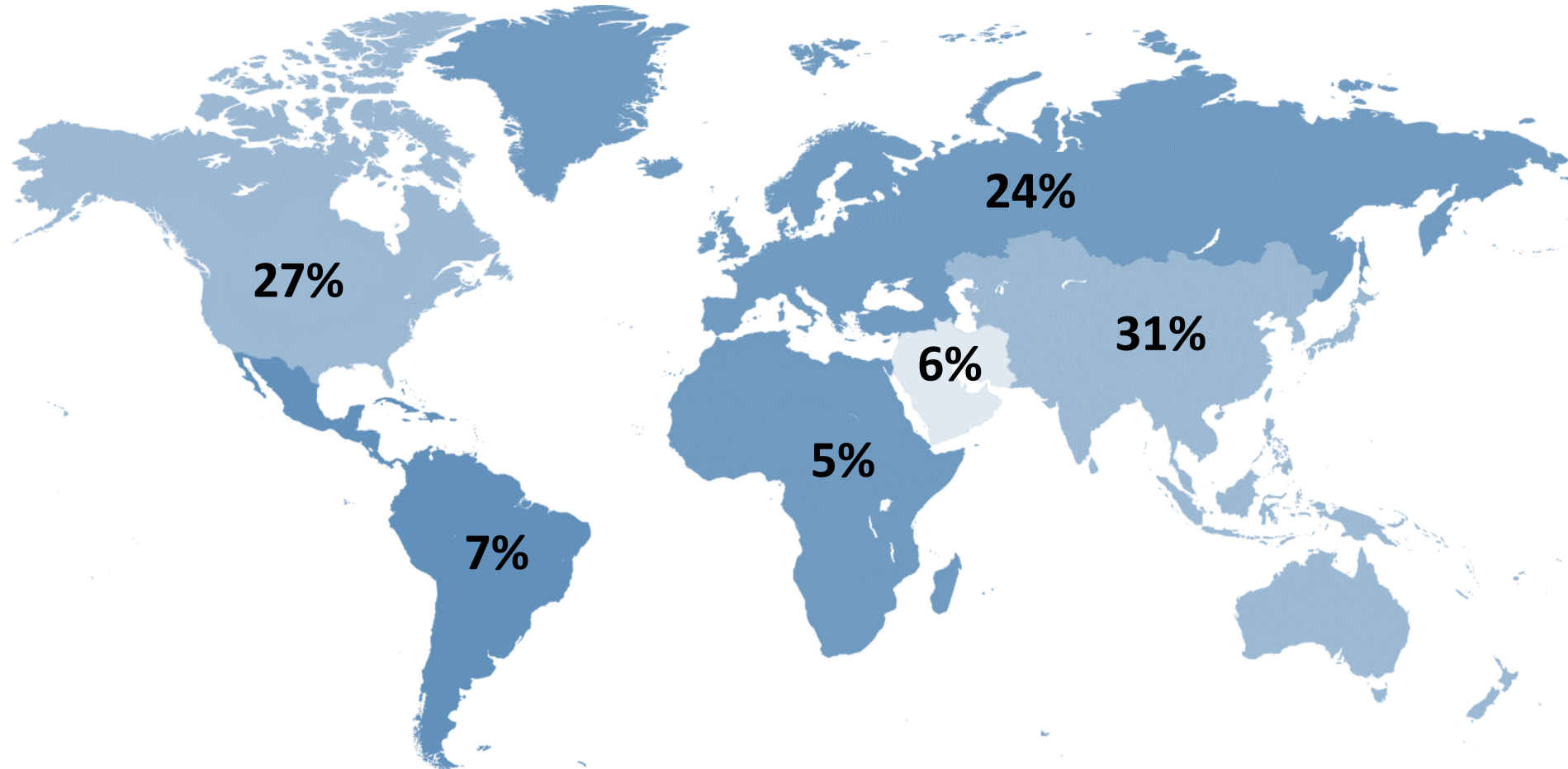
Shifting centre of gravity for commercial aviation

- The share of global air travel in low- and middle-income nations has doubled in the last 20 years
- The major elements of this are population growth and the improved affordability of air travel



Source: CAPA – Centre for Aviation, IATA, ICAO

Global commercial aircraft fleet by region

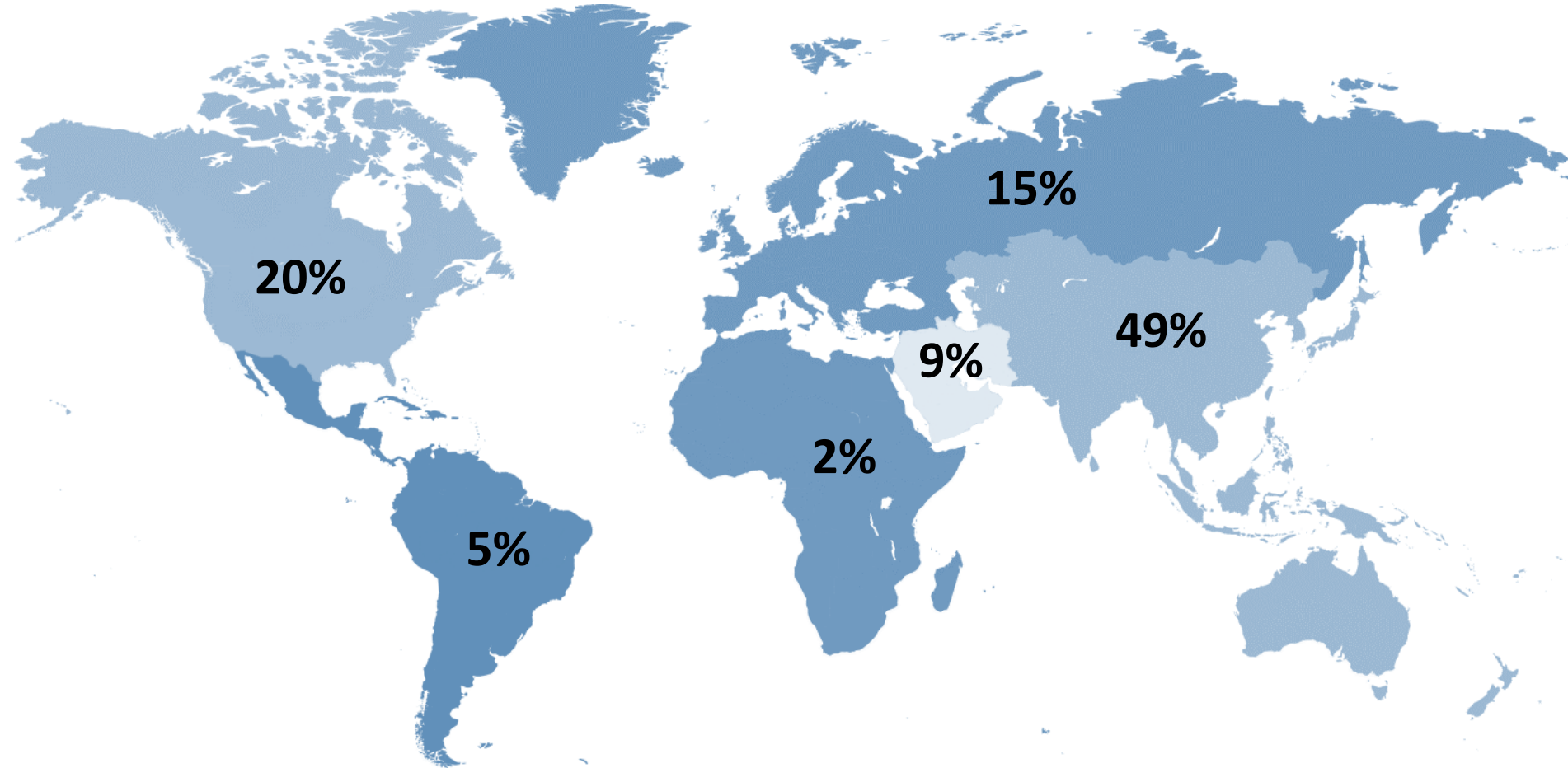


- The share of global air travel in low- and middle-income nations has doubled in the last 20 years
- The major elements of this are population growth and the improved affordability of air travel
- Demographics (and fleet orders) are destiny

Source: CAPA Fleet Database

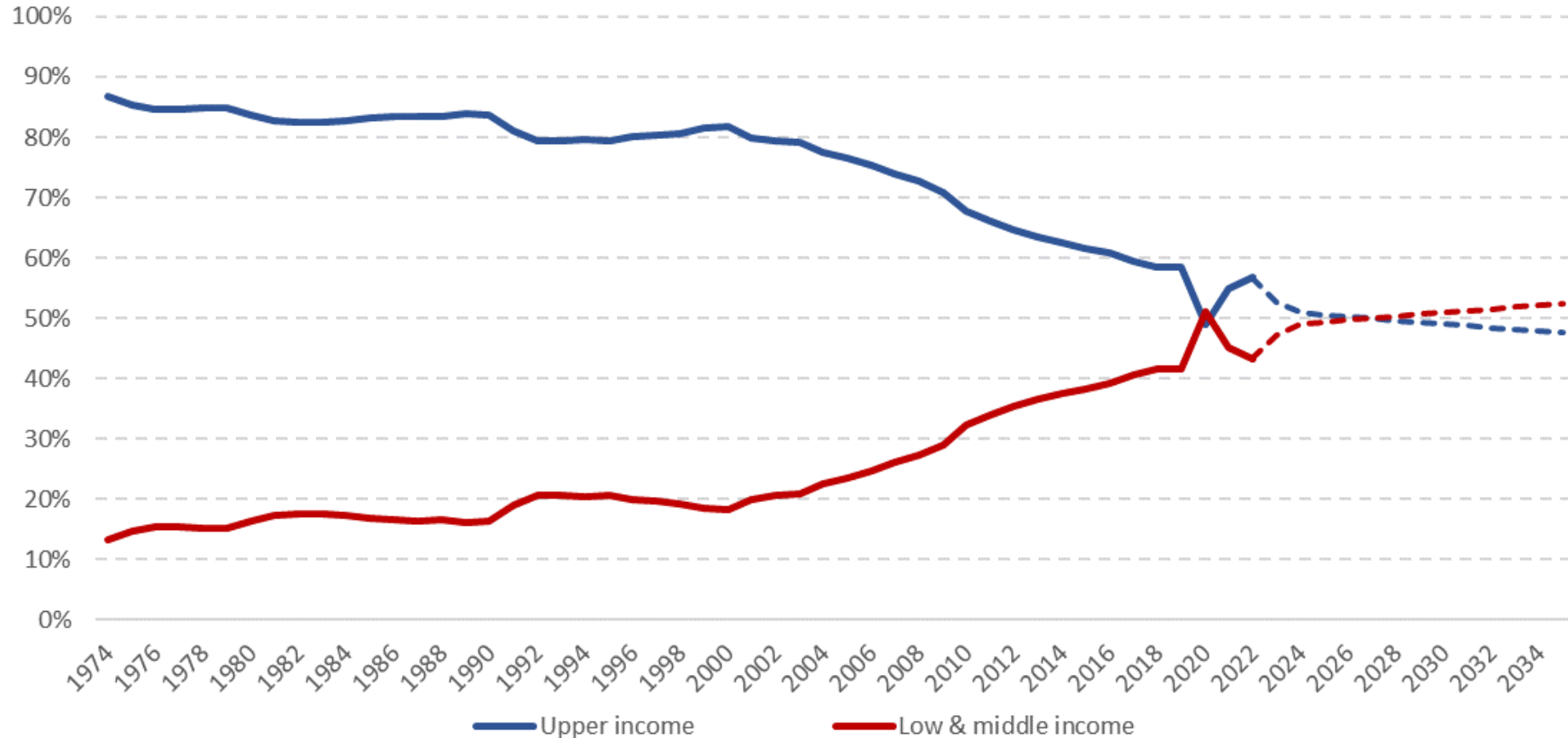
Global commercial aircraft orders by region

- The share of global air travel in low- and middle-income nations has doubled in the last 20 years
- The major elements of this are population growth and the improved affordability of air travel
- Demographics (and fleet orders) are destiny



Source: CAPA Fleet Database

Global share of passenger travel by income

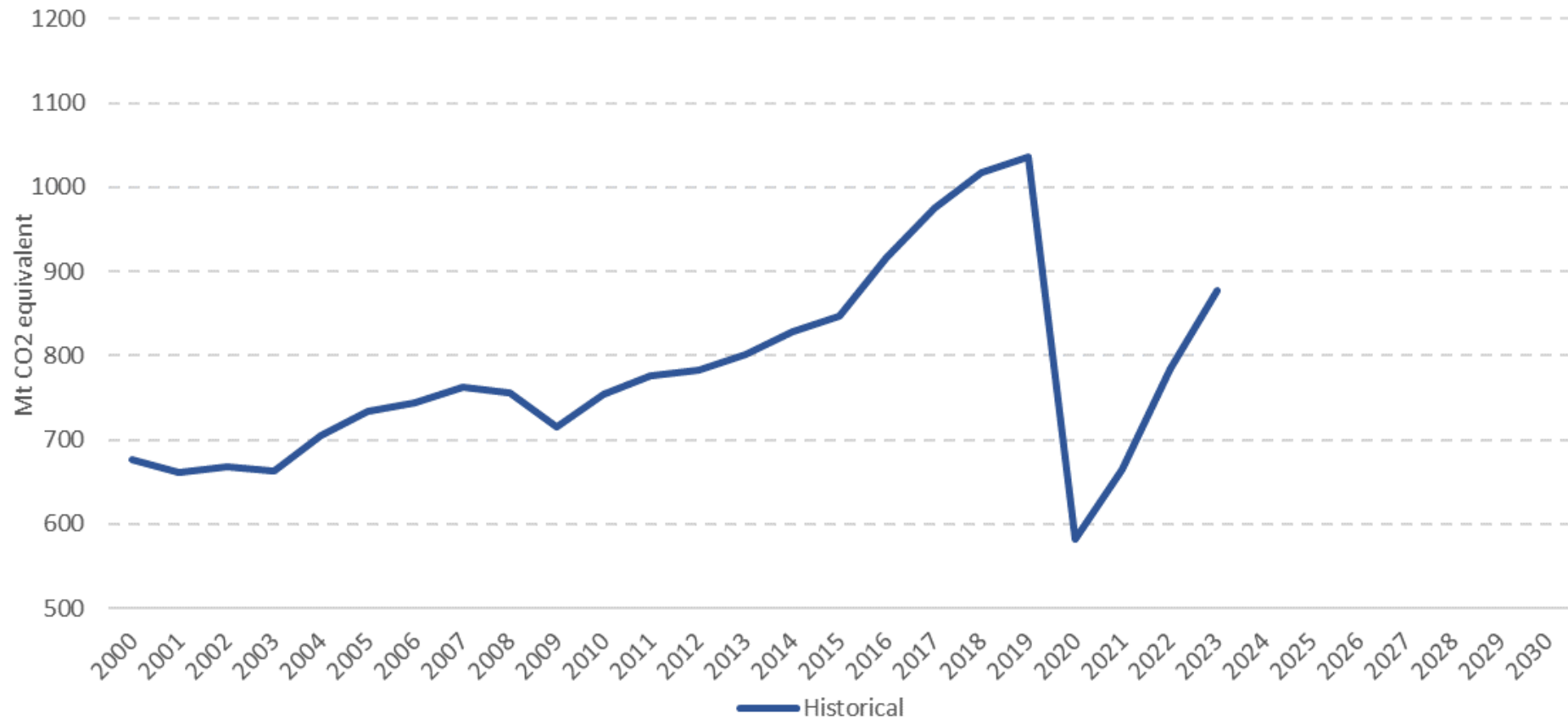


- The share of global air travel in low- and middle-income nations has doubled in the last 20 years
- The major elements of this is population growth and the improved affordability of air travel
- Demographics (and fleet orders) are destiny
- Growth patterns will see wealthy nation's share of air travel fall below 50% in the next decade

Source: CAPA – Centre for Aviation & ICAO

- Sustainability is having an impact on every part of the air travel business

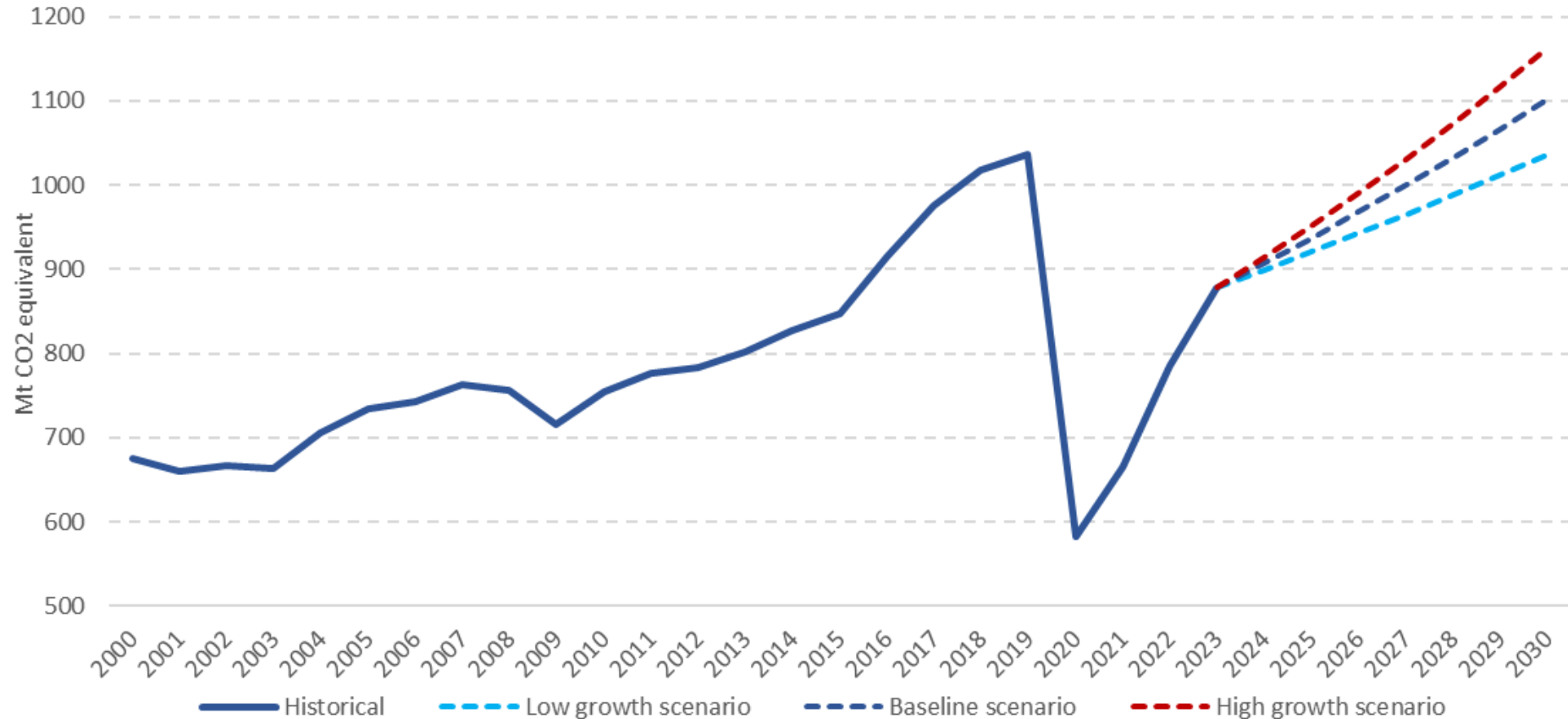
Aviation CO2 emissions



Source: CAPA – Centre for Aviation & ICAO

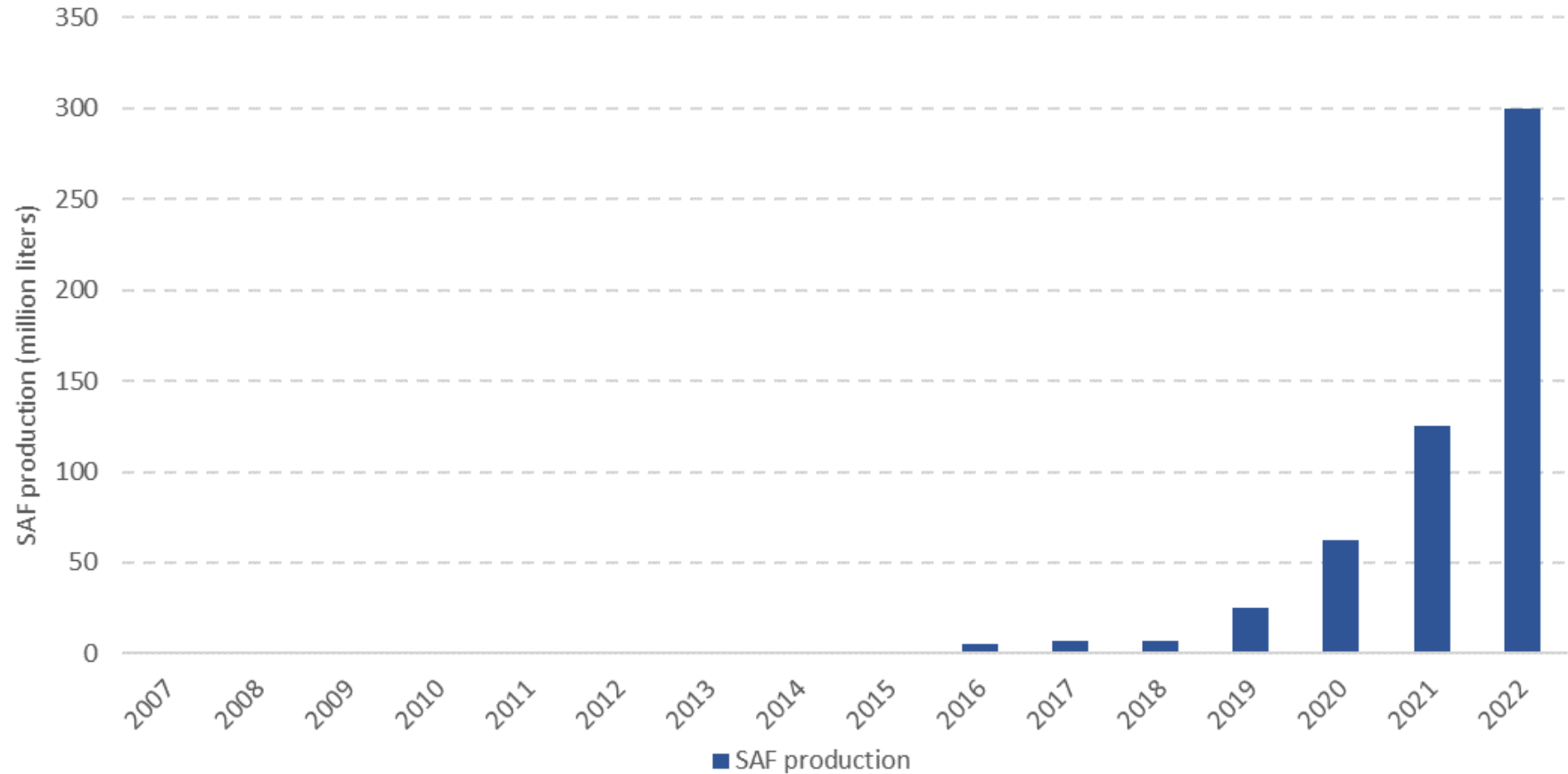
- Sustainability is having an impact on every part of the air travel business
- Even in optimistic scenarios, aviation emissions will continue to grow beyond 2030

Aviation CO2 emissions forecasts to 2030



Source: CAPA – Centre for Aviation & ICAO

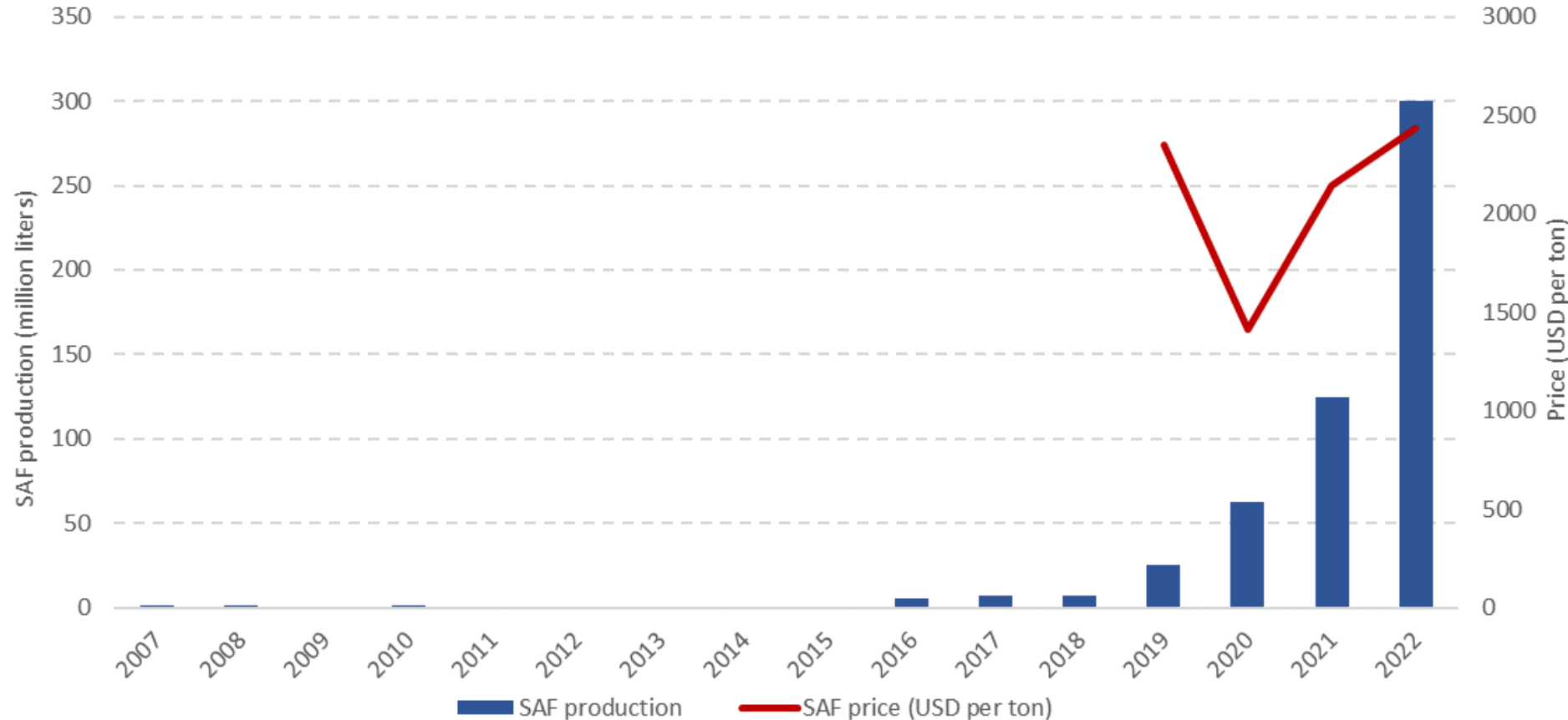
Global SAF production per year



- Sustainability is having an impact on every part of the air travel business
- Even in optimistic scenarios, aviation emissions will continue to grow beyond 2030
- Sustainable aviation fuel will account for up to two thirds of emissions reductions

Source: CAPA – Centre for Aviation & ICAO

Global SAF production and price

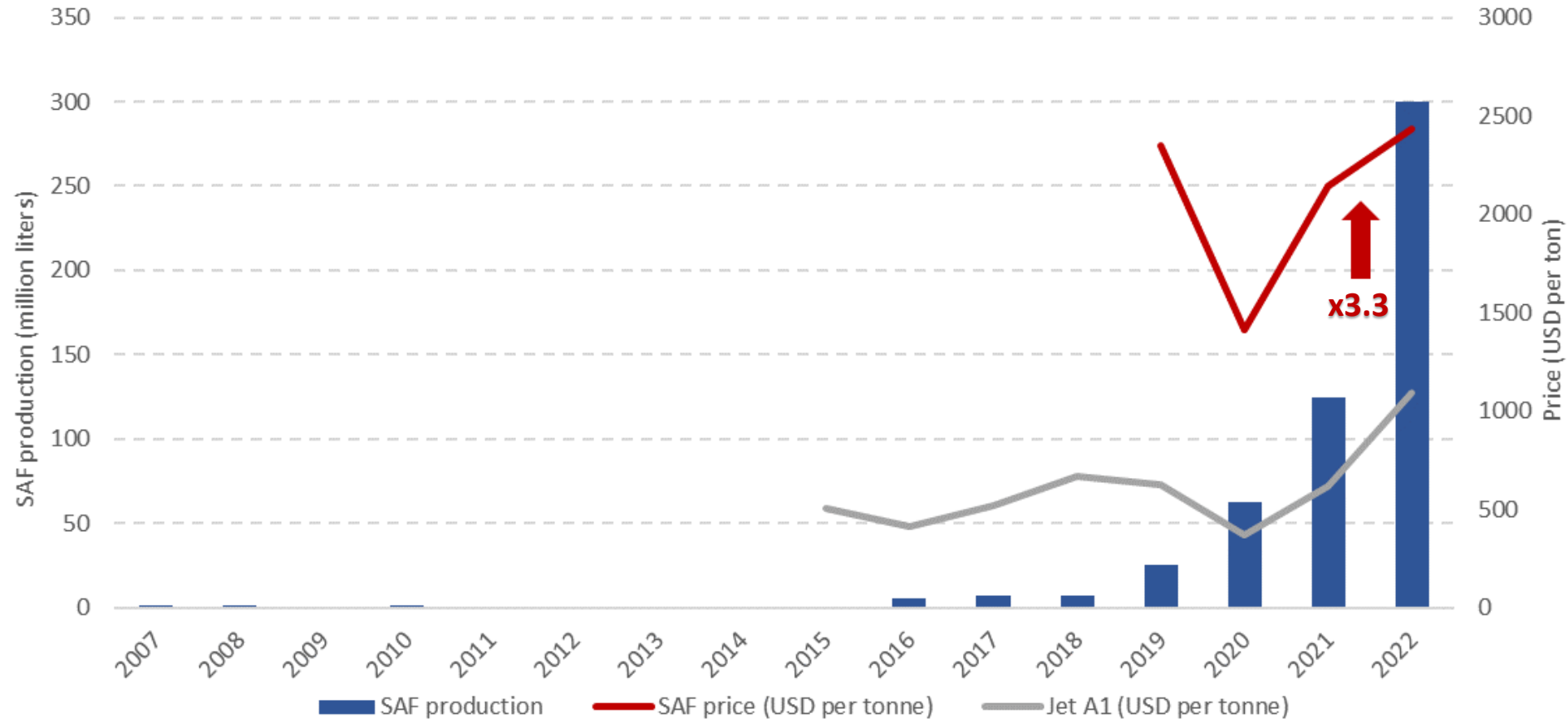


Source: CAPA – Centre for Aviation, ICAO & IATA

- Sustainability is having an impact on every part of the air travel business
- Even in optimistic scenarios, aviation emissions will continue to grow beyond 2030
- Sustainable aviation fuel will account for up to two thirds of emissions reductions – but scale up is slow

Global SAF production and price

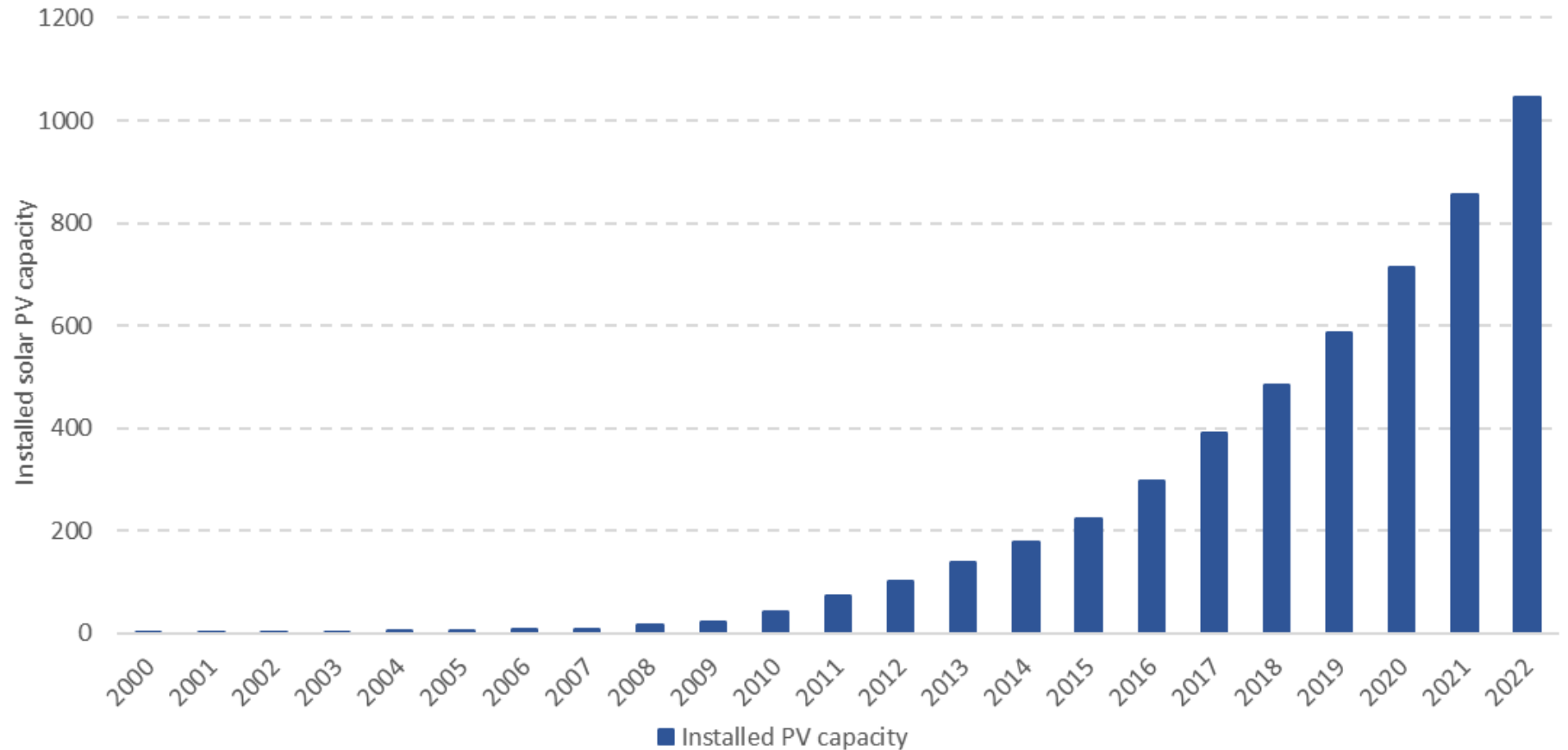
- Sustainability is having an impact on every part of the air travel business
- Even in optimistic scenarios, aviation emissions will continue to grow beyond 2030
- Sustainable aviation fuel will account for up to two thirds of emissions reductions – but scale up is slow and expensive



Source: CAPA – Centre for Aviation, ICAO & IATA

- Sustainability is having an impact on every part of the air travel business
- Even in optimistic scenarios, aviation emissions will continue to grow beyond 2030
- Sustainable aviation fuel will account for up to two thirds of emissions reductions – but scale up is slow and expensive
- SAF prices will come down, but achieving net zero is going to increase the cost of flying

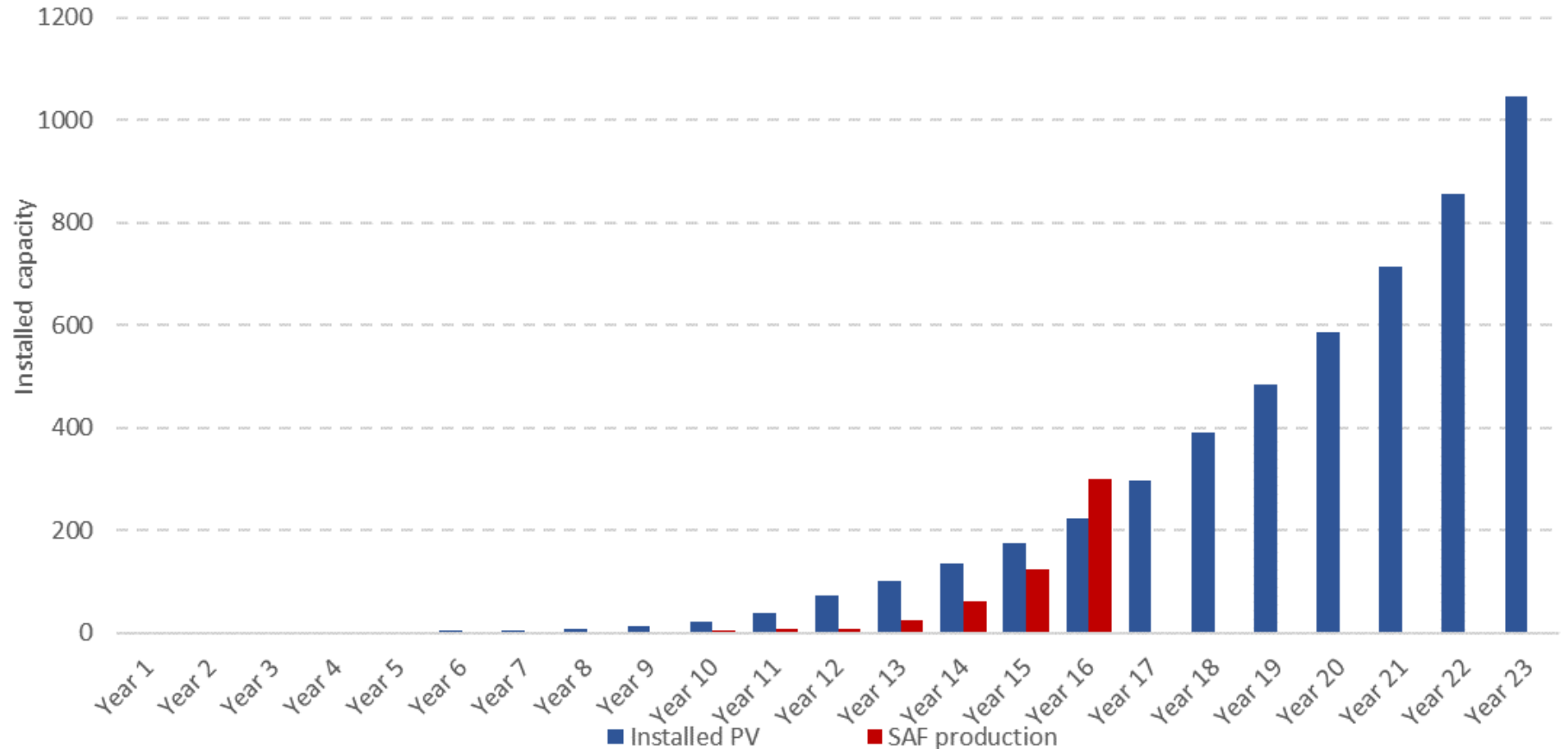
Global installed solar power capacity



Source: International Energy Agency

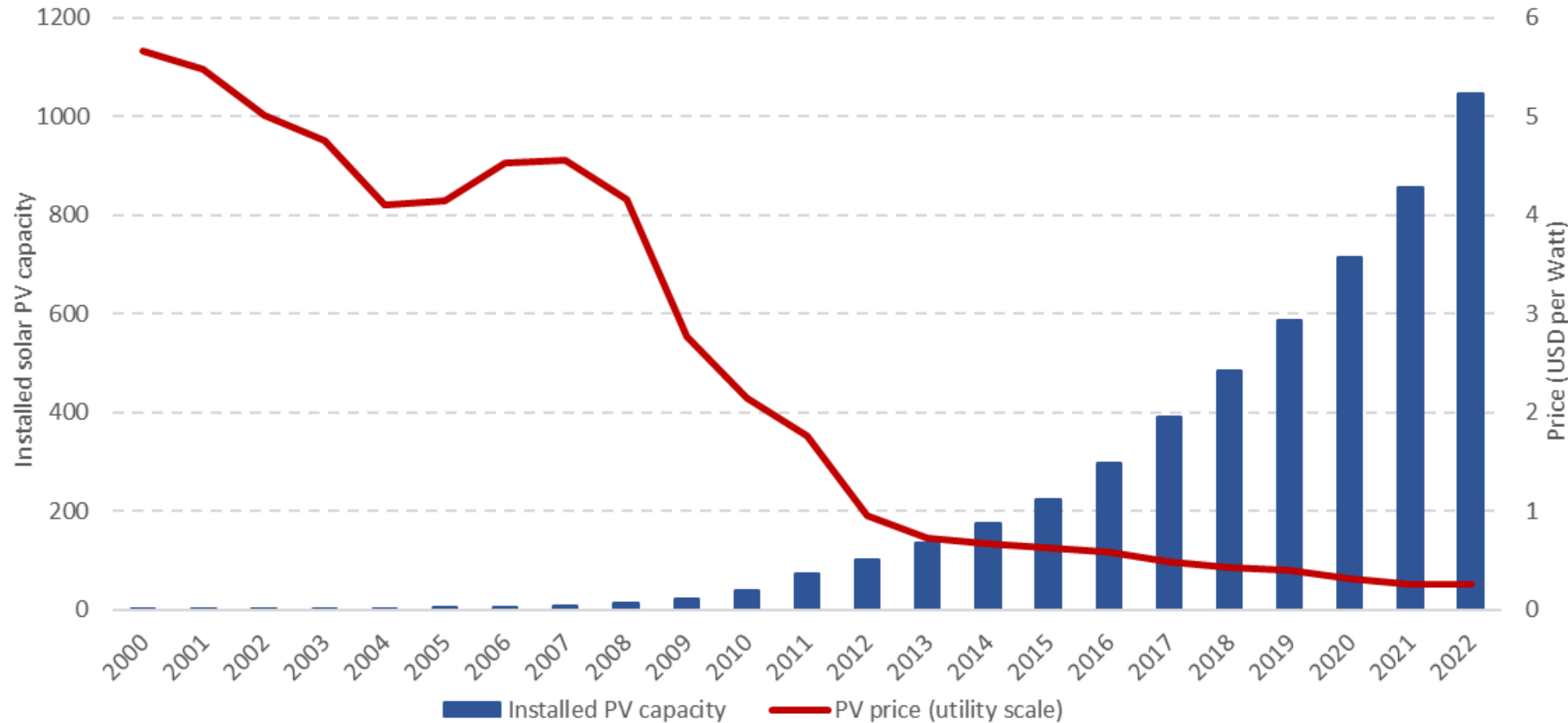
- Sustainability is having an impact on every part of the air travel business
Even in optimistic scenarios, aviation emissions will continue to grow beyond 2030
- Sustainable aviation fuel will account for up to two thirds of emissions reductions – but scale up is slow and expensive
- SAF prices will come down, but achieving net zero is going to increase the cost of flying

SAF production vs installed PV capacity



- Sustainability is having an impact on every part of the air travel business
Even in optimistic scenarios, aviation emissions will continue to grow beyond 2030
- Sustainable aviation fuel will account for up to two thirds of emissions reductions – but scale up is slow and expensive
- SAF prices will come down, but achieving net zero is going to increase the cost of flying

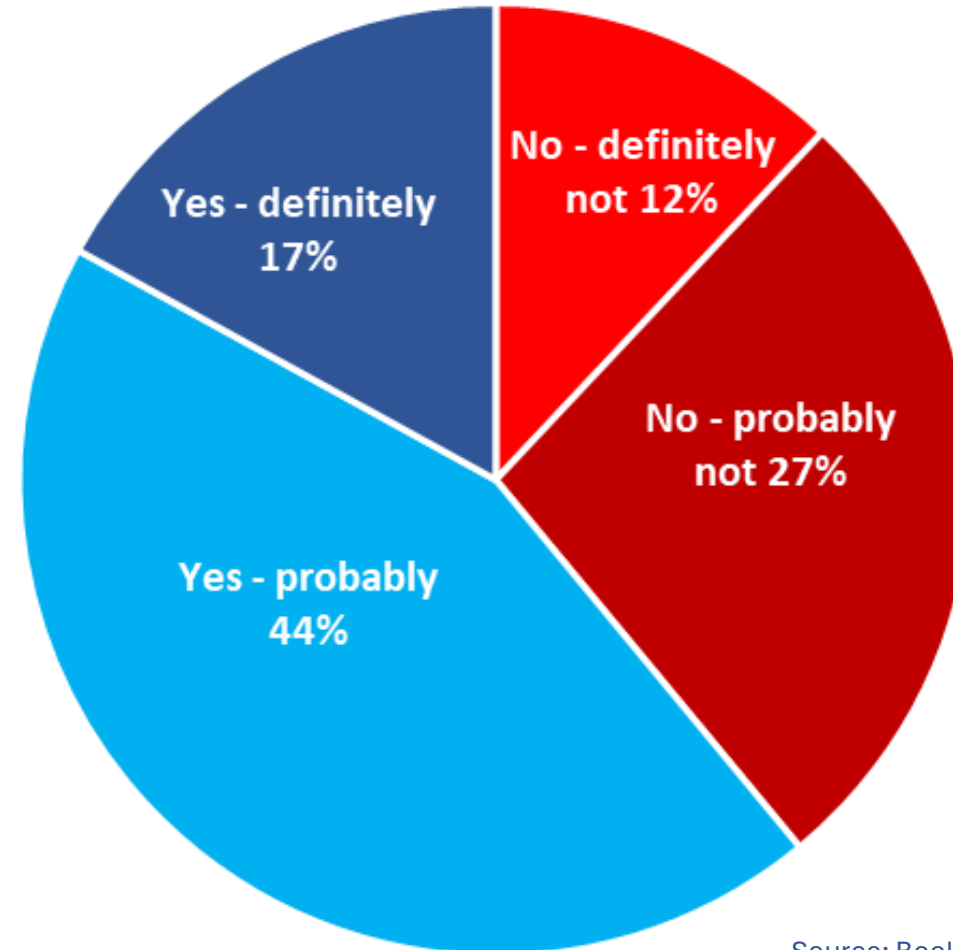
Installed PV capacity and PV price per Watt



Source: International Energy Agency

Willingness to use AI in travel booking process

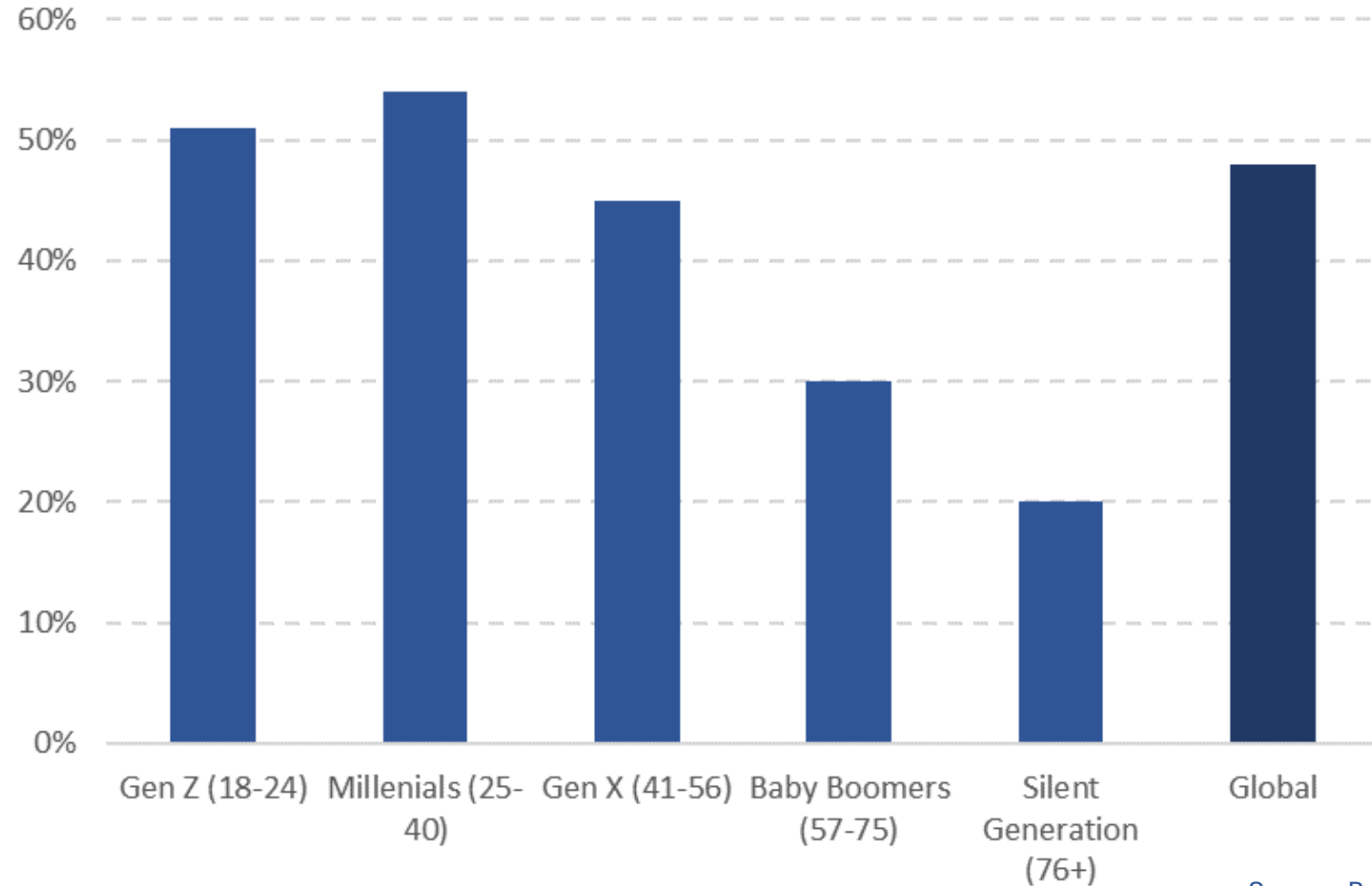
- Large language models and generative AI have started making a noticeable impact on the consumer side
- A plurality of travellers now say they would trust AI to help plan or book a trip



Source: Booking.com

- Large language models and generative AI have started making a noticeable impact on the consumer side
- A plurality of travellers now say they would trust AI to help plan or book a trip
- Acceptance varies by age group and by region
- Price and convenience are the main use cases – these are aviation's largest pain points

Traveller trust in AI by generation



Source: Booking.com