



CORPORATE TRAVEL COMMUNITY

Empowering a new community of travel managers

Chairman's Welcome

Dr. Benson Tang
Executive Director
Corporate Travel Community

23rd MAY 2023







BANK OF AMERICA

Bloomberg



FRAGOMEN



Morgan Stanley



SIEMENS

Schroders



The Government of the Hong Kong Special Administrative Region



嘉里控股
KERRY HOLDINGS



RICHEMONT



JABIL

Norton Rowland



flex

Tamty McGill Consultants International Limited
泰田·麥基爾國際顧問有限公司



China Development Research Foundation | 中文

CHINA DEVELOPMENT FORUM

2023

*Engaging With the World for
Common Prosperity*

March 25-27, 2023
Beijing Diaoyutai State Guesthouse

Sponsor: Development Research Center of the State Council
Organiser: China Development Research Foundation

CDF WeChat



CDRF WeChat



CDRF Weibo



- 1) Which company is ranked number 1 in Fortune 500 in 2022?
- 2) What is the global annual revenue in USD?
- 3) How many headcounts in this firm globally?

Fortune 500 Firms

Fortune Global 500 list of 2022

Rank ↕	Company ↕	Country ↕	Industry ↕	Revenue in USD ↕
1	Walmart	United States	Retail	\$572.8 billion
2	Amazon	United States	Internet Services and Retailing	\$469.8 billion
3	State Grid	China	Energy	\$460.6 billion
4	China National Petroleum	China	Petroleum	\$411.7 billion
5	Sinopec Group	China	Petroleum	\$401.3 billion
6	Saudi Aramco	Saudi Arabia	Energy	\$400.4 billion
7	Apple	United States	Technology	\$365.8 billion
8	Volkswagen	Germany	Automobiles	\$295.8 billion
9	China State Construction Engineering	China	Construction & Engineering	\$293.7 billion
10	CVS Health	United States	Health care	\$292.1 billion

Rank ↕	Name ↕	Employees ↕	Price ↕	Today ↕	Price (30 days) ↕	Country ↕
1	Walmart WMT	2,300,000	\$99.34	▼ 0.49%		USA
2	Amazon AMZN	1,541,000	\$97.83	▼ 2.09%		USA
3	Foxconn (Hon Hai Precision Industry) 2317.TW	826,608	\$3.40	▲ 0.49%		Taiwan
4	Accenture ACN	738,000	\$283.76	▼ 0.51%		Ireland
5	Volkswagen VOW3.DE	645,868	\$136.32	▲ 0.02%		Germany
6	Tata Consultancy Services TCS.NS	616,171	\$39.58	▲ 0.87%		India
7	Deutsche Post DPW.DE	583,816	\$46.03	▲ 0.01%		Germany
8	United Parcel Service UPS	500,000	\$189.85	▼ 1.35%		USA
9	Kroger KR	500,000	\$47.32	▼ 1.33%		USA

- 1) Corporate Travel Management / Economy
- 2) Sustainability
- 3) Human Resources Management

WITH THANKS TO OUR EVENT PARTNERS

Diamond Partner



Venue Partner



Gold Partner



Gold Partner



Gold Partner



Gold Partner



Gold Partner



Event Partner



Event Partner



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CORPORATE TRAVEL COMMUNITY

Empowering a new community of travel managers

Proudly Associated with





CORPORATE TRAVEL COMMUNITY

Empowering a new community of travel managers

State of The Corporate Travel Industry

Dr. Benson Tang
Executive Director
Corporate Travel Community

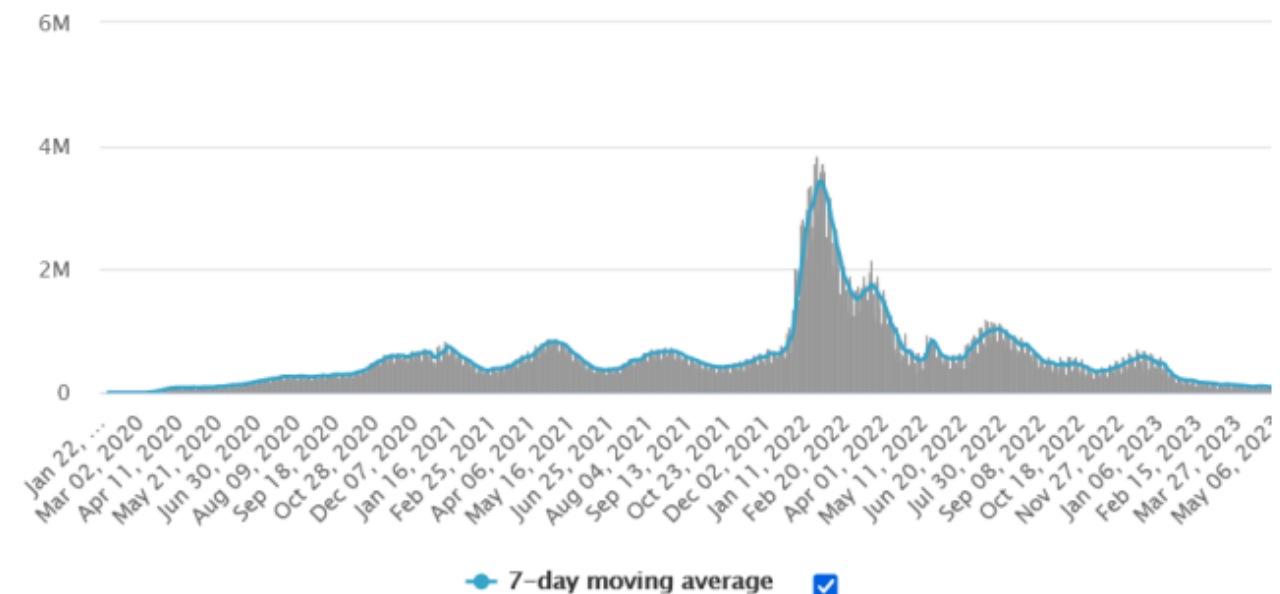
23rd MAY 2023

- 1) Strategic Overall Global Health / Economy
- 2) Pulse Check in Corporate Travel
- 3) Corporate Travel Sustainability Trend

WHO ends global health emergency designation for COVID-19

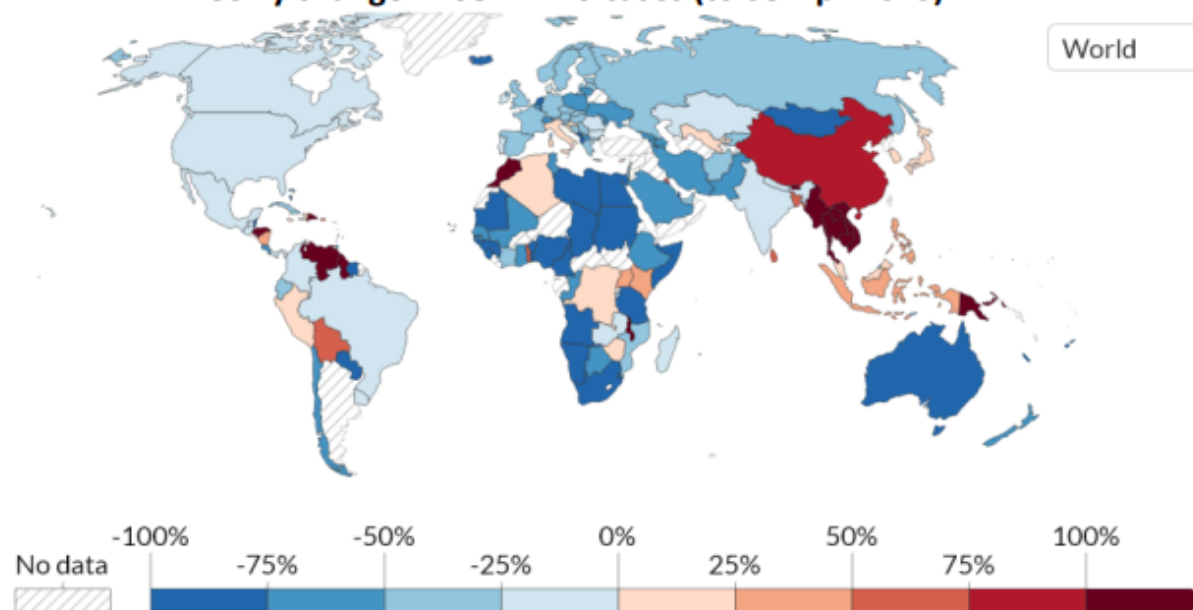
- UN World Health Organization (WHO) announced on 05-May-2023 that COVID-19 is now an “established and ongoing health issue which no longer constitutes a public health emergency of international concern (PHEIC)”. With the PHEIC over, global coordinated action on COVID-19 will be replaced with management on an individual country basis
- The WHO noted factors contributing to the decision included the decreasing trend in COVID-19 deaths, the decline in COVID-19 related hospitalisations and ICU admissions, along with high levels of population immunity
- WHO cautioned that removing the emergency designation does not mean the crisis is over and the emergency status could be reinstated if there is a change in the COVID-19 situation

Global recorded new COVID-19 cases to 08-May-2023



Source: Worldometer

Biweekly change in COVID-19 cases (to 08-Apr-2023)

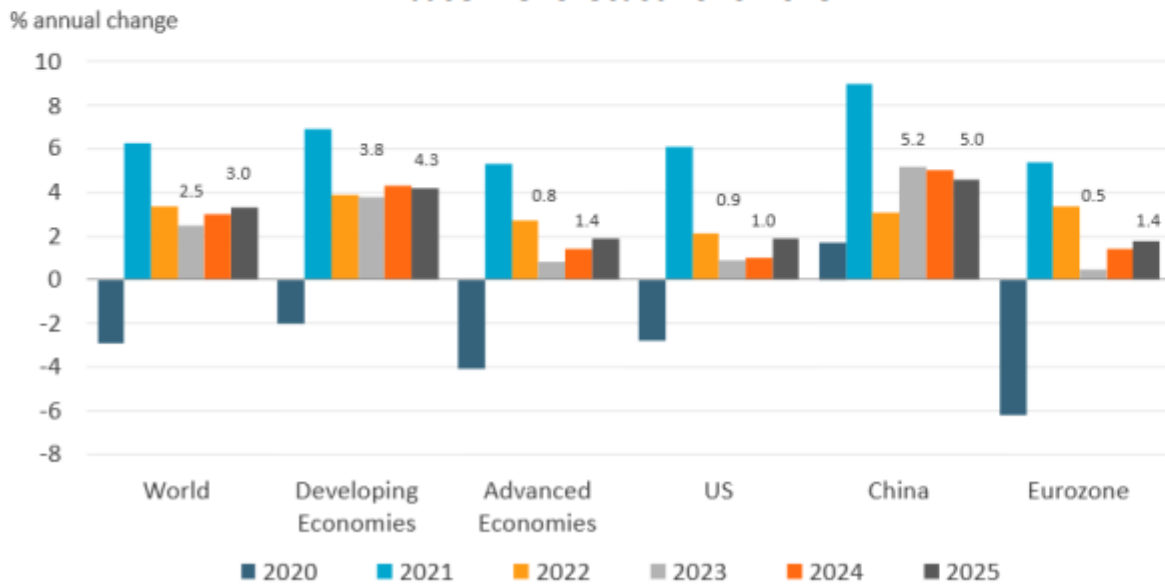


Source: Our World In Data

Euromonitor: Improving global outlook, with some economies more resilient than expected

- Euromonitor International, via its 2Q2023 Global Economic Outlook, forecast global economic growth of 2.4% for 2023 and 3% for 2024. Global economic conditions have improved since the 1Q2023 forecast, although persistent inflation and high interest rates remain a drag on activity and there are considerable degrees of risk and uncertainty
- Euromonitor has revised its outlook upwards for most large advanced economies, with the exceptions of Canada, Japan and South Korea. Emerging markets in the Asia Pacific are expected to continue to outperform wider global activity, supported by a post-pandemic economic rebound in China
- Global inflation remains high (6.9% forecast for 2023), and is not expected to return to pre-pandemic levels until 2025
- Risks remain tilted towards the downside, with stagflation identified as the key downside risk

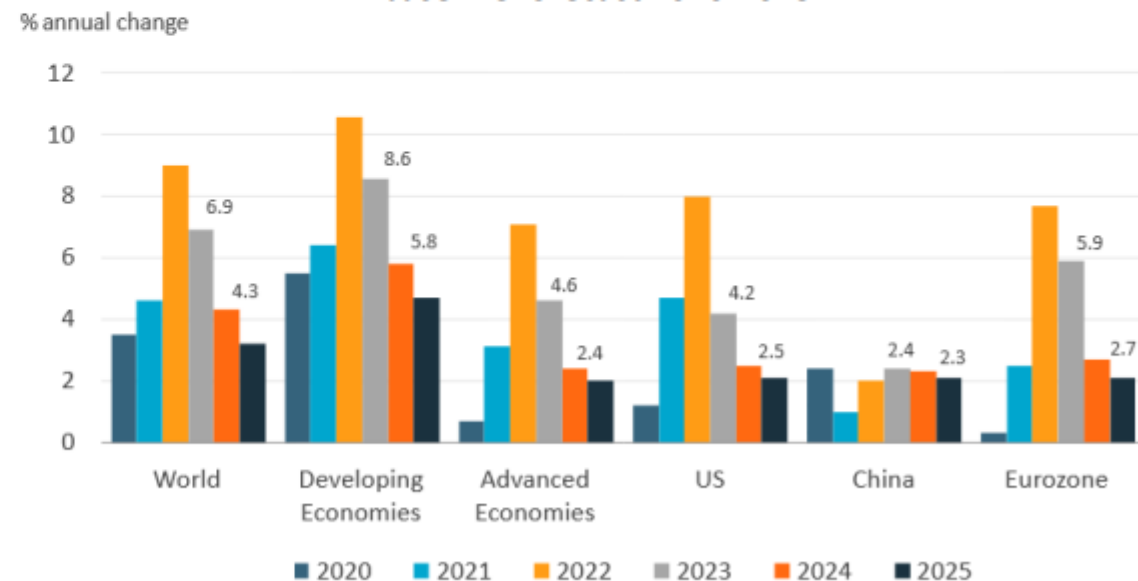
**Global real GDP growth
baseline forecast 2020-2025**



Source: Euromonitor International Macro Model
Notes: (1) Data from 2023 onwards is forecast, updated 3 April 2023; (2) Regional aggregates calculated using PPP weights

Source: Euromonitor International Macro Model

**Global consumer price inflation
baseline forecast 2020-2025**



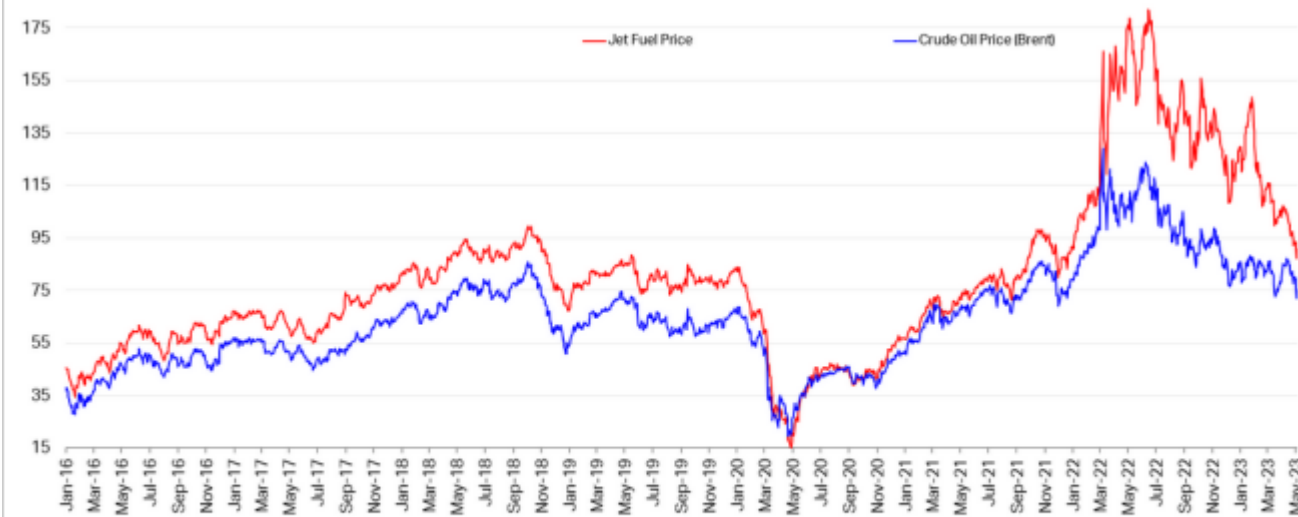
Source: Euromonitor International Macro Model
Notes: (1) Data from 2023 onwards is forecast, updated 3 April 2023; (2) Regional aggregates calculated using PPP weights

Source: Euromonitor International Macro Model

Jet fuel prices continue downward trend, but oil demand is growing

- Jet fuel prices ended the week to 05-May-2023 at USD90.9 per barrel. Prices fell almost 15% month-to-month. Jet fuel prices are now down almost 50% on where they were at the same point in 2022
- IATA forecasts airlines will face lower fuel costs overall in 2023. Jet fuel prices climbed sharply around the end of 1Q2022 and then peaked during 3Q2022 at more than USD175 per barrel with record crack spreads
- Stronger than expected global economic activity is contributing to greater than anticipated global oil consumption, which could lead to increased prices and greater price instability. During Apr-2023, US jet fuel demand reached its highest level since Dec-2019 and domestic consumption grew in China. Global inventories of oil and refined products remain near record lows, although there has been some recovery since late 2022

Oil and jet fuel prices 2016-2023



Source: IATA, S&P Global, Macrobond

IATA jet fuel price index Jan-2022 to May-2023 (2000 = 100)

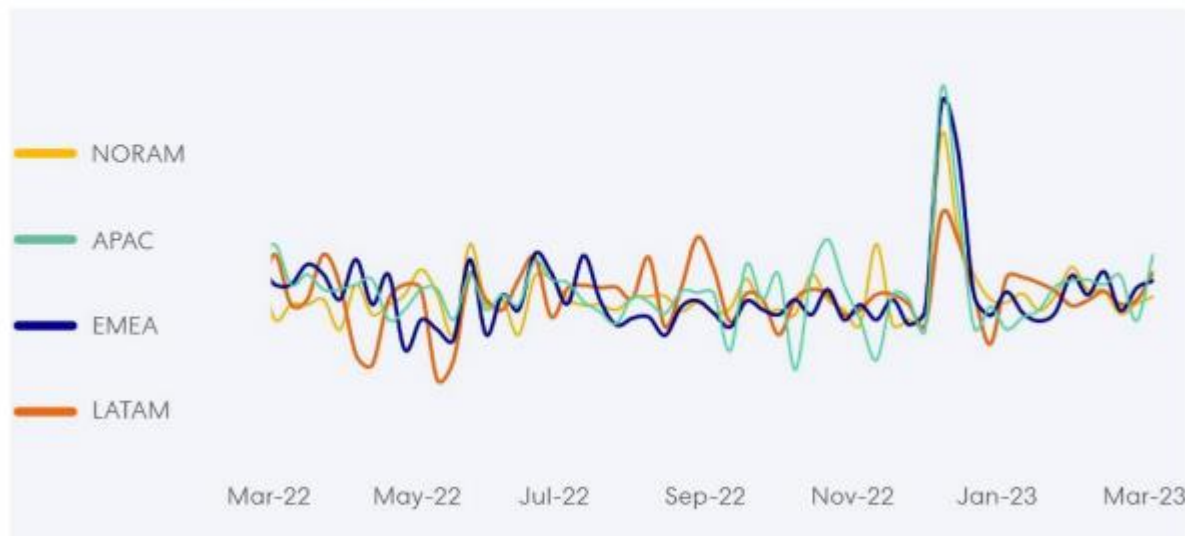


Source: IATA, S&P Global

Expedia: Global travel searches up 10% in 1Q2023

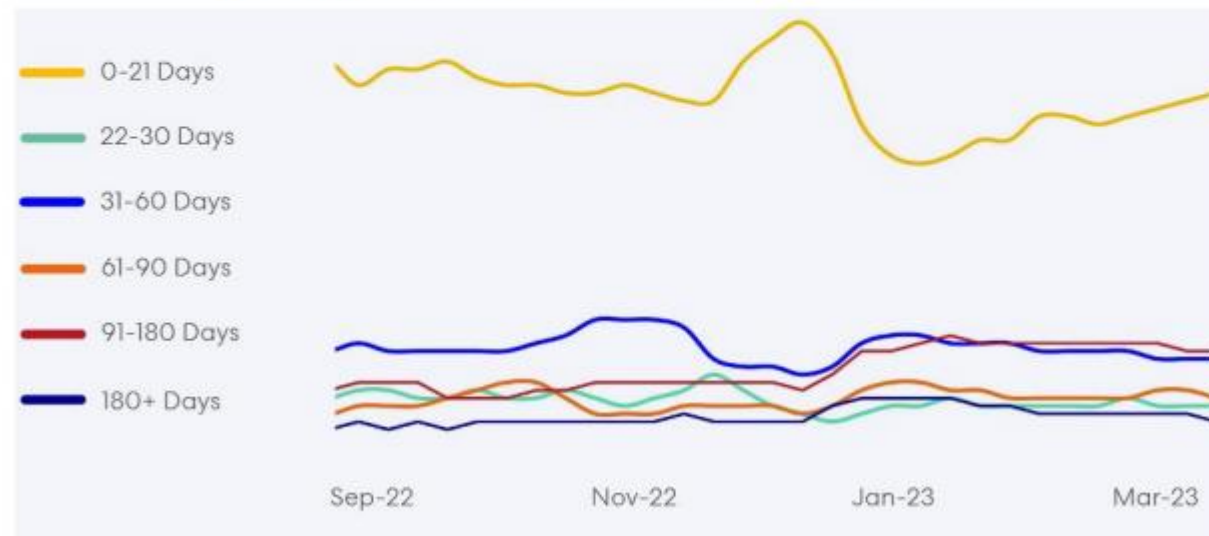
- Expedia, via its 2Q2023 Travel Insights report, stated 1Q2023 travel searches across its group sites increased 10% year-on-year and 25% quarter-on-quarter. The strongest growth was in the Asia Pacific (+65% y-o-y)
- Travel search and booking windows continue to lengthen globally, with searches for departures more than 180+ days out from travel up 30% quarter-on-quarter, and searches in the 91- to 180-day window up 60%
- 1Q2023 saw a 50% increase in searches for travel in the Jun-2023 to Sep-2023 period. This continues strong demand for mid year travel seen during 4Q2022. Search and booking activity was strongest in Asia Pacific, Europe, the Middle East and Africa
- The top trending destinations were major global cities such as New York, Tokyo and London, as well as beach locations

Week to week changes in global travel searches



Source: Expedia Group

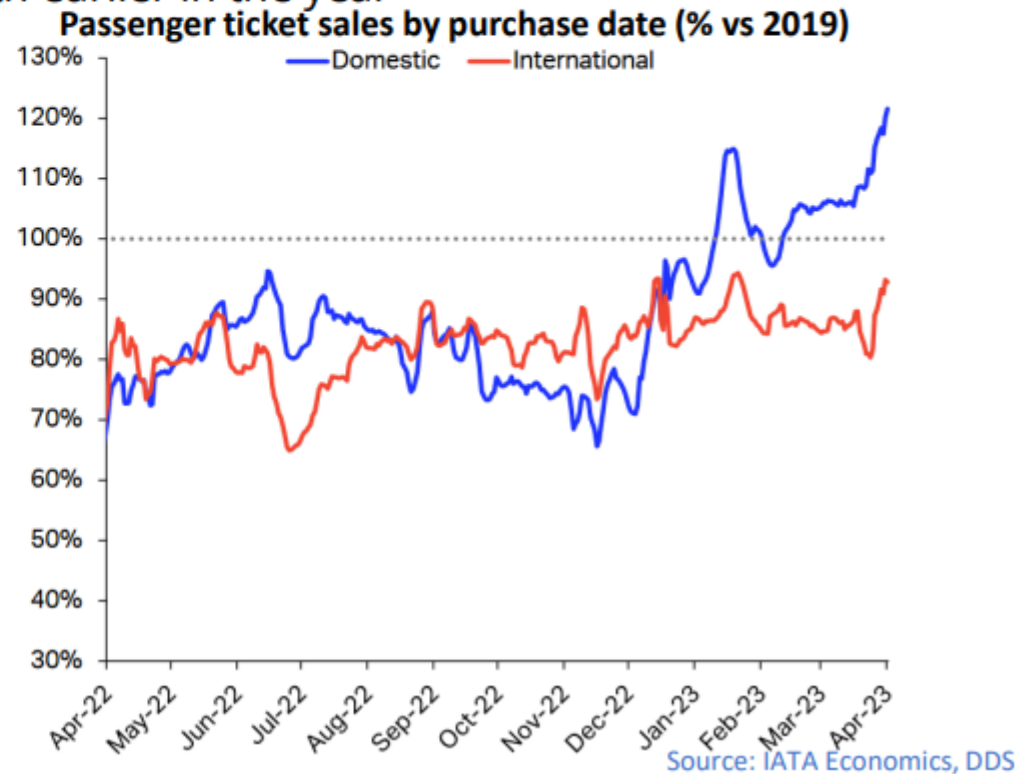
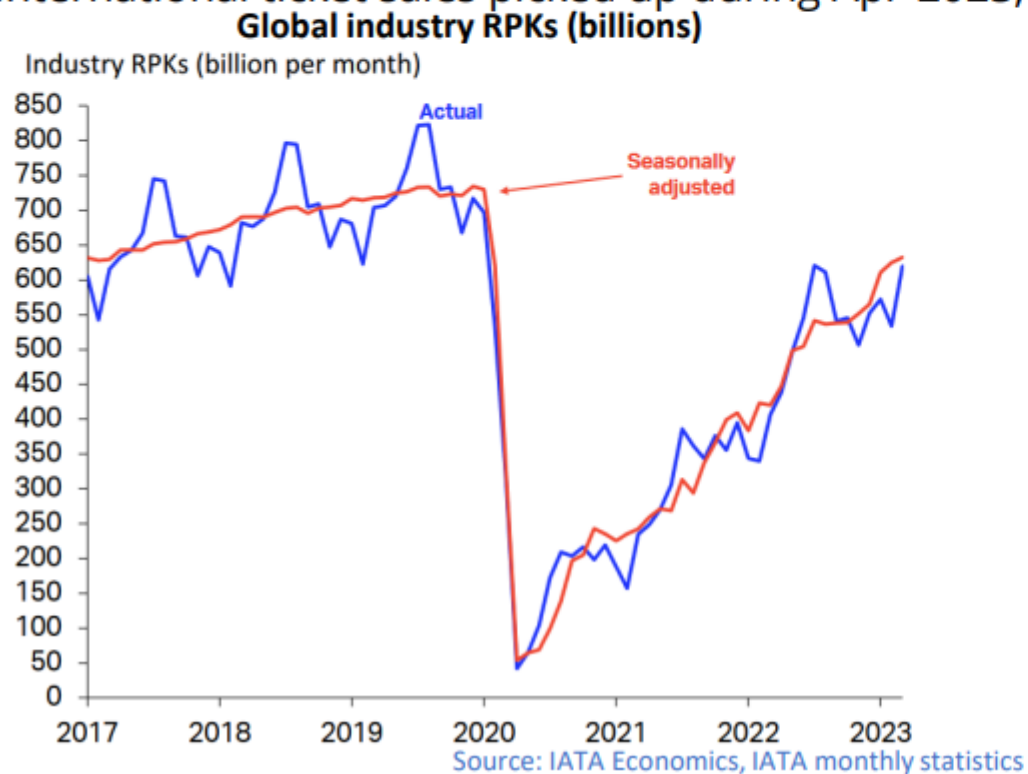
Week to week changes in global travel search windows



Source: Expedia Group

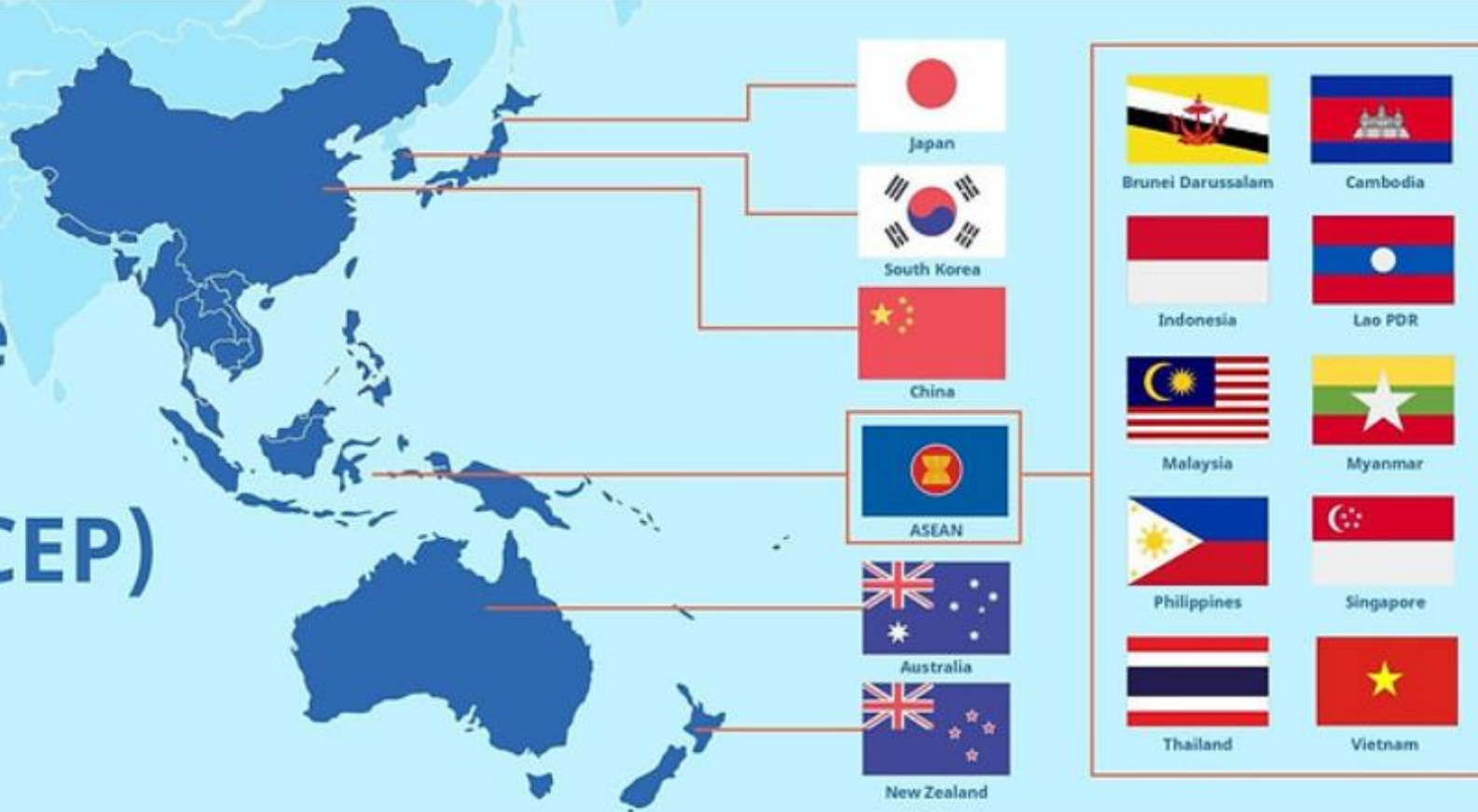
IATA: Global air travel shows strong growth in Mar-2023

- IATA reported airline industry passenger traffic (RPKs) grew 52.4% year-on-year in Mar-2023, reaching 88% of 2019 levels. Month-on-month was 1.2%, consistent with a recent moderating of growth trends
- Domestic markets were at 98.9% of pre-pandemic periods, with year-on-year growth of 34.1% in Mar-2023
- International RPKs were at 68.9% of 2019 volumes, with Asia Pacific carriers experiencing the fastest growth (+158.4%). The end of travel restrictions and China's reopening have triggered has seen substantial capacity added between the Asia Pacific and the rest of the world
- Global bookings for domestic air travel continue to grow, reaching 20% above 2019 levels as of mid Apr-2023. International ticket sales picked up during Apr-2023, after slow growth earlier in the year



2) Pulse Check in Corporate Travel

Regional Comprehensive Economic Partnership (RCEP) Agreement



**Signing of the
agreement**



**World's largest free
trade agreement**



**Comprising 30% of global GDP and
about 1/3 world population**

Graphic by Ministry of Trade and Industry Singapore

Digital Economy Partnership Agreement (DEPA)

2020
12
JUN

Signed by Singapore, Chile and New Zealand



The **first of its kind agreement** representing a new form of economic engagement and trade in the digital era.

DEPA will:

Facilitate seamless end-to-end digital trade



Enable trusted data flows



Build trust in digital systems



Facilitate end-to-end digital trade:

Digital Identities

Develop safe and secure digital identities that are mutually recognised.



E-invoicing

Shorter invoice processing time, faster payment and cost savings when similar e-invoicing standards are adopted.

Paperless Trade

Reduce time for document transit and cargo clearance, resulting in lower operating costs.

FinTech and E-Payments

Promote cooperation among companies in the FinTech sector and develop FinTech solutions for businesses.



Build trust in digital systems and facilitate opportunities for participation in the Digital Economy:

Artificial Intelligence

Notes the adoption of ethical AI governance frameworks, which factor in principles that the countries have agreed to, in order to harness AI in a responsible manner.

These include: (i) AI should be transparent, fair and accountable, and (ii) AI must have human-centred values.

Business Cooperation

Facilitate city-building efforts such as a Digital SME Dialogue to promote information sharing and exchange.



Online Consumer Protection

Adopt or maintain laws and regulations that guard against fraudulent, misleading or deceptive conduct that causes harm to consumers engaged in online commercial activities.

Digital Inclusion

Remove barriers to the digital economy and promote digital inclusion and participation.



Enable trusted data flows:

Personal Data Protection

Develop mechanisms to protect personal data being transferred across borders, based on international frameworks.

Open Government Data

Expand access to, and use of, open government data to generate new opportunities for businesses, especially SMEs.



Cross-border Data Flows

Businesses can transfer information across borders and serve their customers, regardless of where they are located.

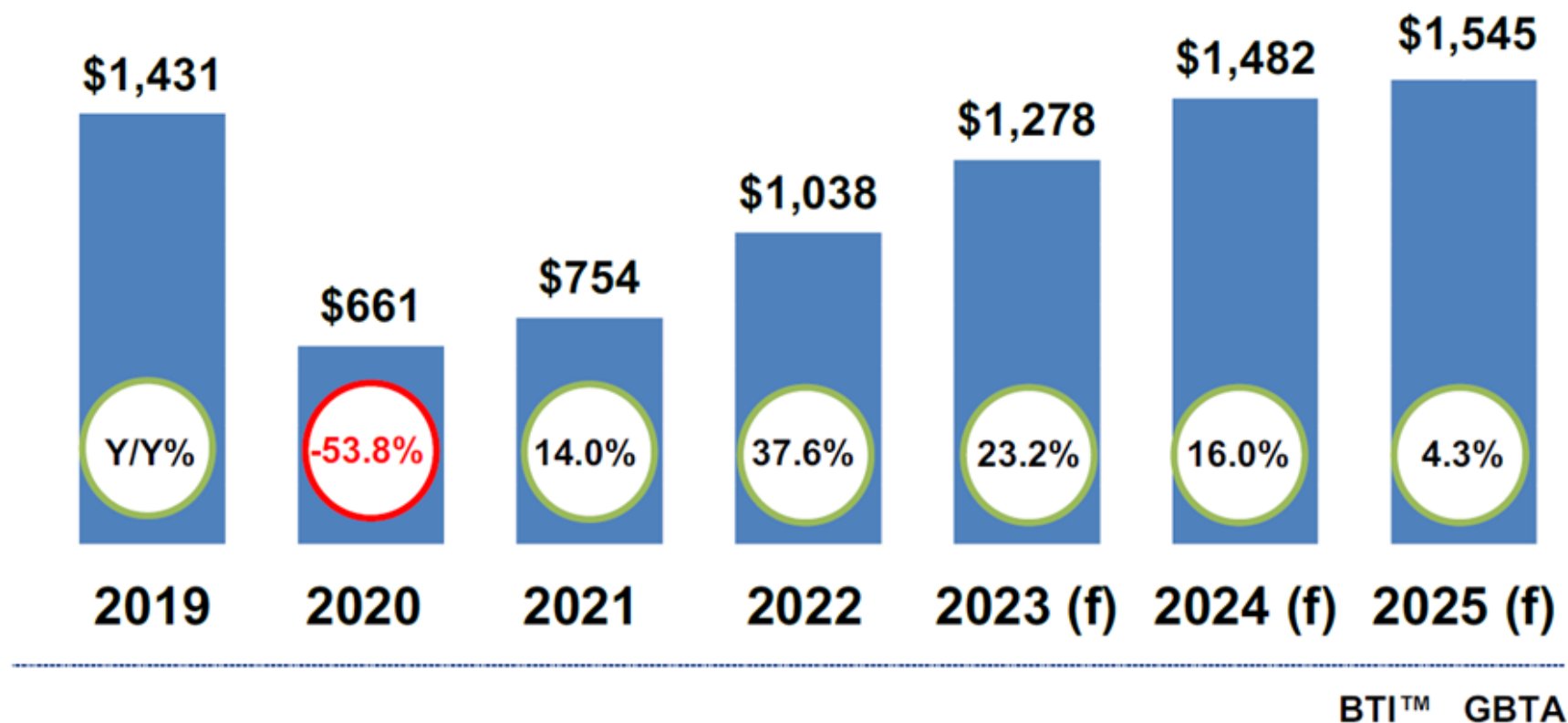
Data Innovation and Regulatory Sandboxes

Facilitate the development of new products and services by promoting data-driven innovation across borders.



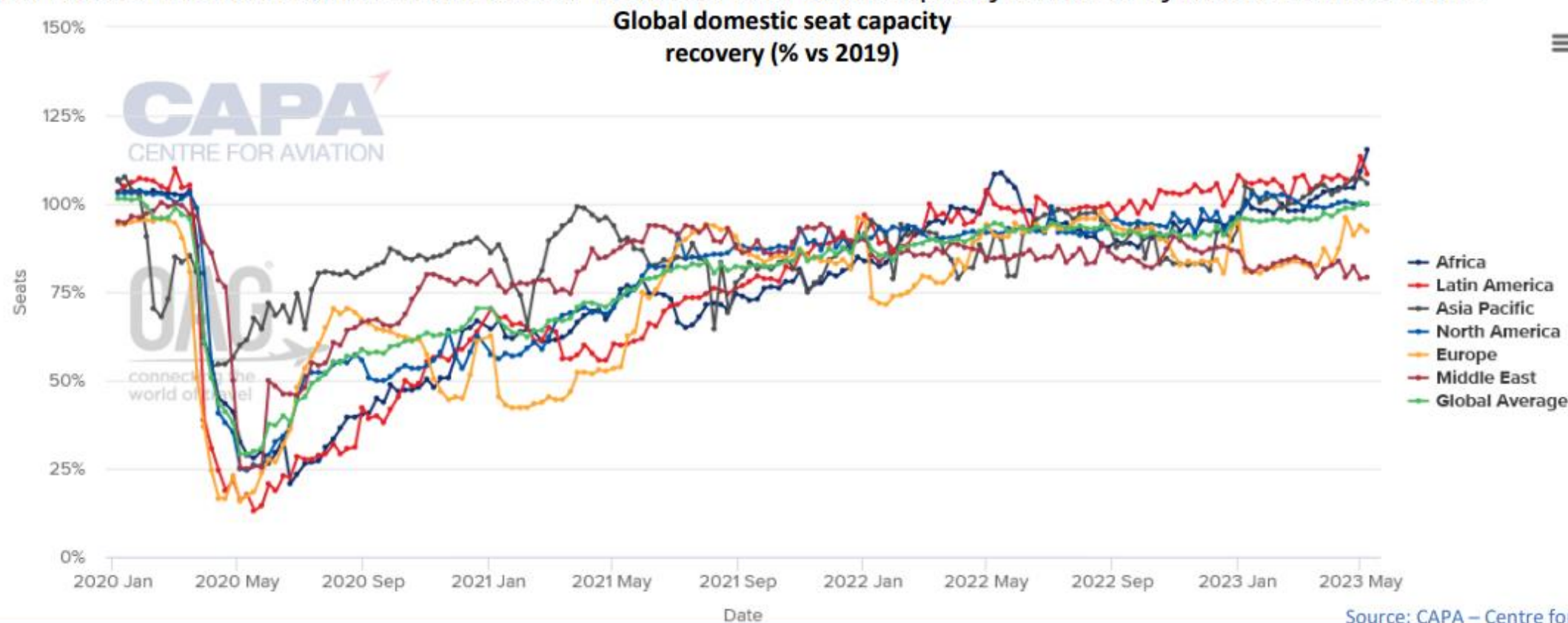
Corporate Travel Recovering

**Business Travel Spend (Billions U.S. \$)
Forecast and Year Over Year Growth (%)**



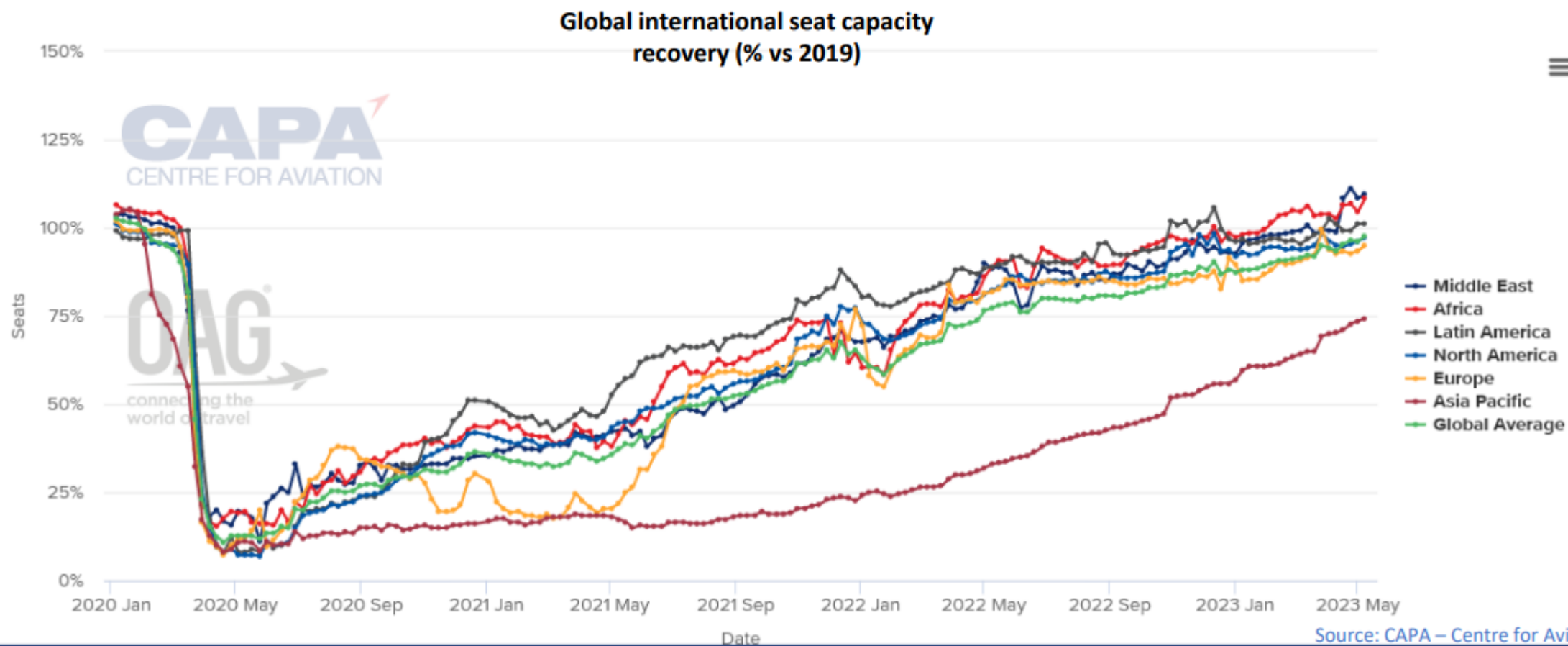
Global domestic seats return to pre-pandemic levels

- Global scheduled domestic seat capacity was 65.3 million seats for the week to 08-May-2023, matching capacity in the same week for 2019. Domestic capacity in Africa is now 15% above pre-pandemic levels, while Latin American is 8% above 2019 and Asia Pacific markets are up by 6%. Only Europe and the Middle East remain substantially below pre-pandemic volumes
- Over the last four weeks, changes in capacity have been relatively minor. Airlines in Europe have added 240,000 seats and North American carriers have added 190,000. Asia Pacific capacity has fallen by about 245,000 seats



International seats at 55 million per week, reaching 97% of 2019 levels

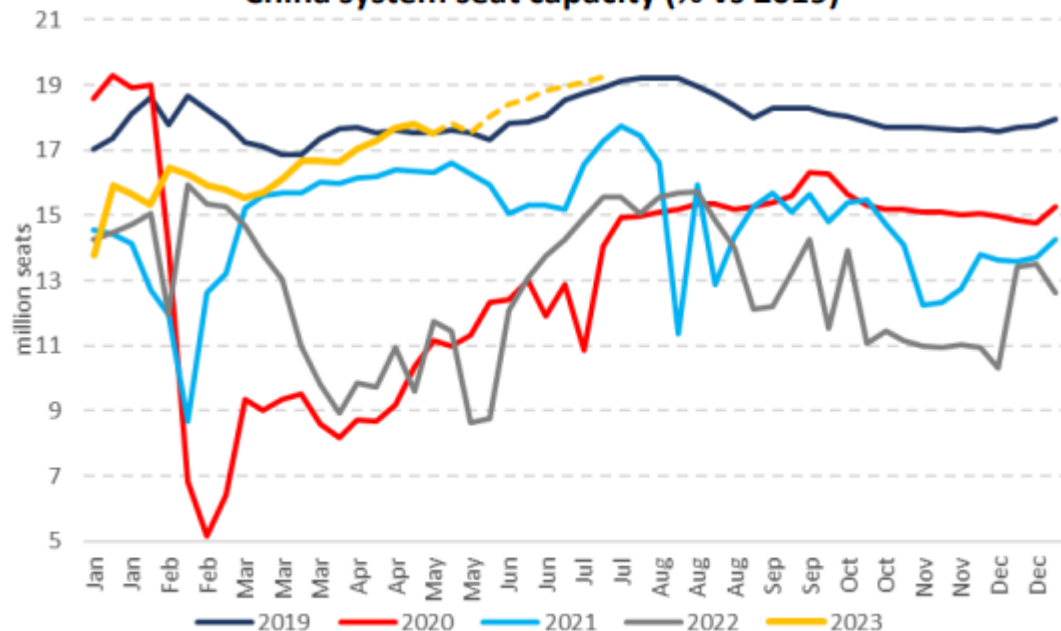
- Global international scheduled seat capacity on offer for the week to 08-May-2023 reached 56 million seats, 97% of 2019 volumes. Compared to the same week in 2022, airlines are offering an extra 12.7 million international seats
- Airlines added just under 1 million new international seats over the past four weeks. Europe has been responsible for most of this increase, with smaller growth in Asia Pacific. North American capacity continues to plateau, while small decreases were seen in Africa, the Middle East and Latin America



China Overview

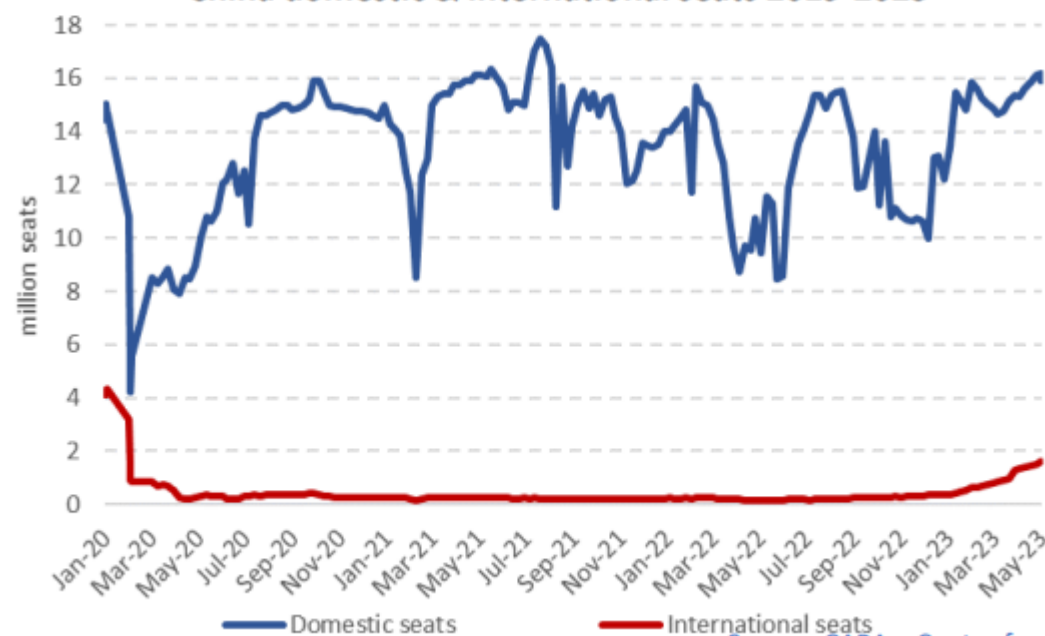
- Scheduled system capacity for China was 17.5 million seats for the week to 08-Apr-2023, with capacity remaining at pre-pandemic volumes for the past three weeks. Forward capacity projections have eased in the last month
- Domestic capacity was 15.9 million seats, down 285,000 seats over the week. The decline is largely due to schedules returning to normal following the short Labour Day holiday period. COVID-19 case growth may have also contributed
- Around 100,000 seats were added in international markets, reaching 1.6 million per week. The China-US market remains the standout, but for the wrong reasons, with capacity 94% below 2019 levels as of late Apr-2023

China system seat capacity (% vs 2019)



Source: CAPA – Centre for Aviation

China domestic & international seats 2019-2023

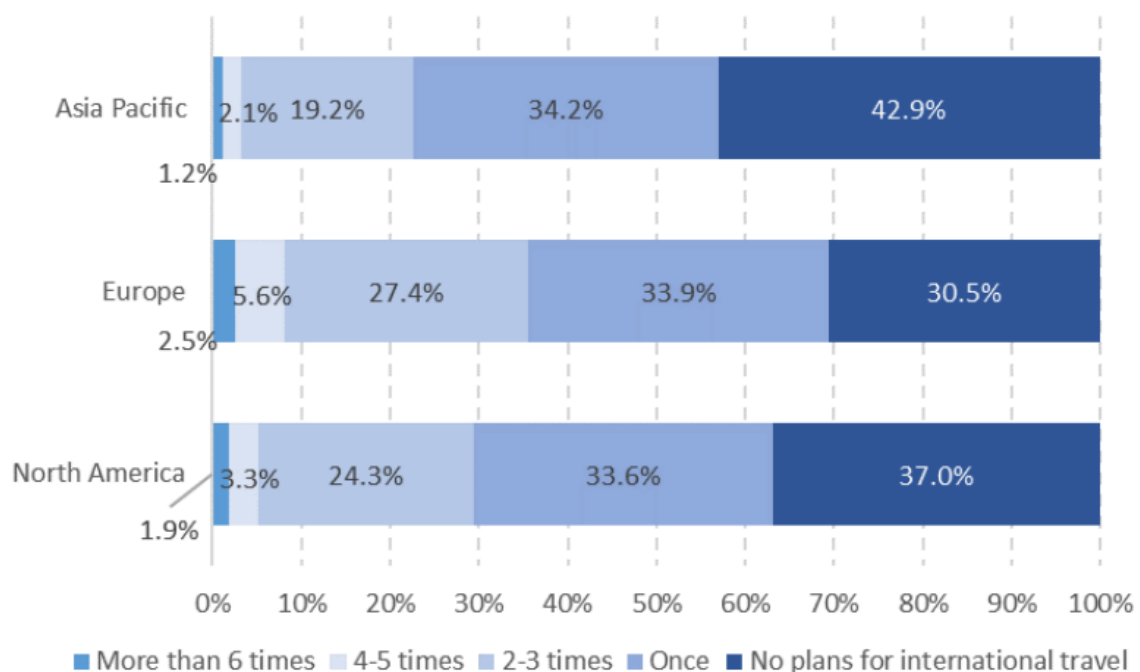


Source: CAPA – Centre for Aviation

GMO Research: Majority of consumers plan travel in 2023

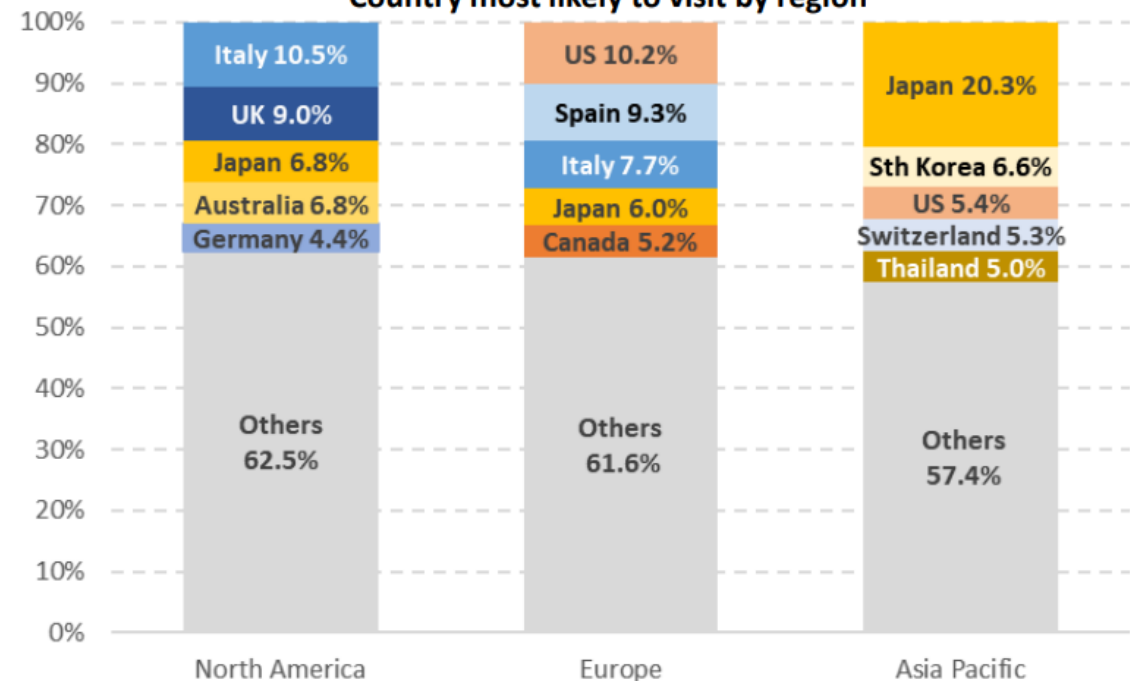
- GMO Research survey of 3,000 consumers found a majority of respondents in North America (63.1%), Europe (69.4%) and the Asia Pacific (56.9%) plan to travel overseas at least once in the next 12 months
- The survey found strong willingness to travel multiple times in the UK, Germany, France and Canada. Consumers in Japan and Indonesia were more cautious, with a majority yet to have formed any international travel plans
- The top ranked tourism categories included unique cultural experiences, natural landscapes and traditional food/drink
- Personal recommendations on destinations were also a highly ranked deciding factor, while the importance of social media word of mouth varied significantly between markets

Intended frequency on international travel in coming year



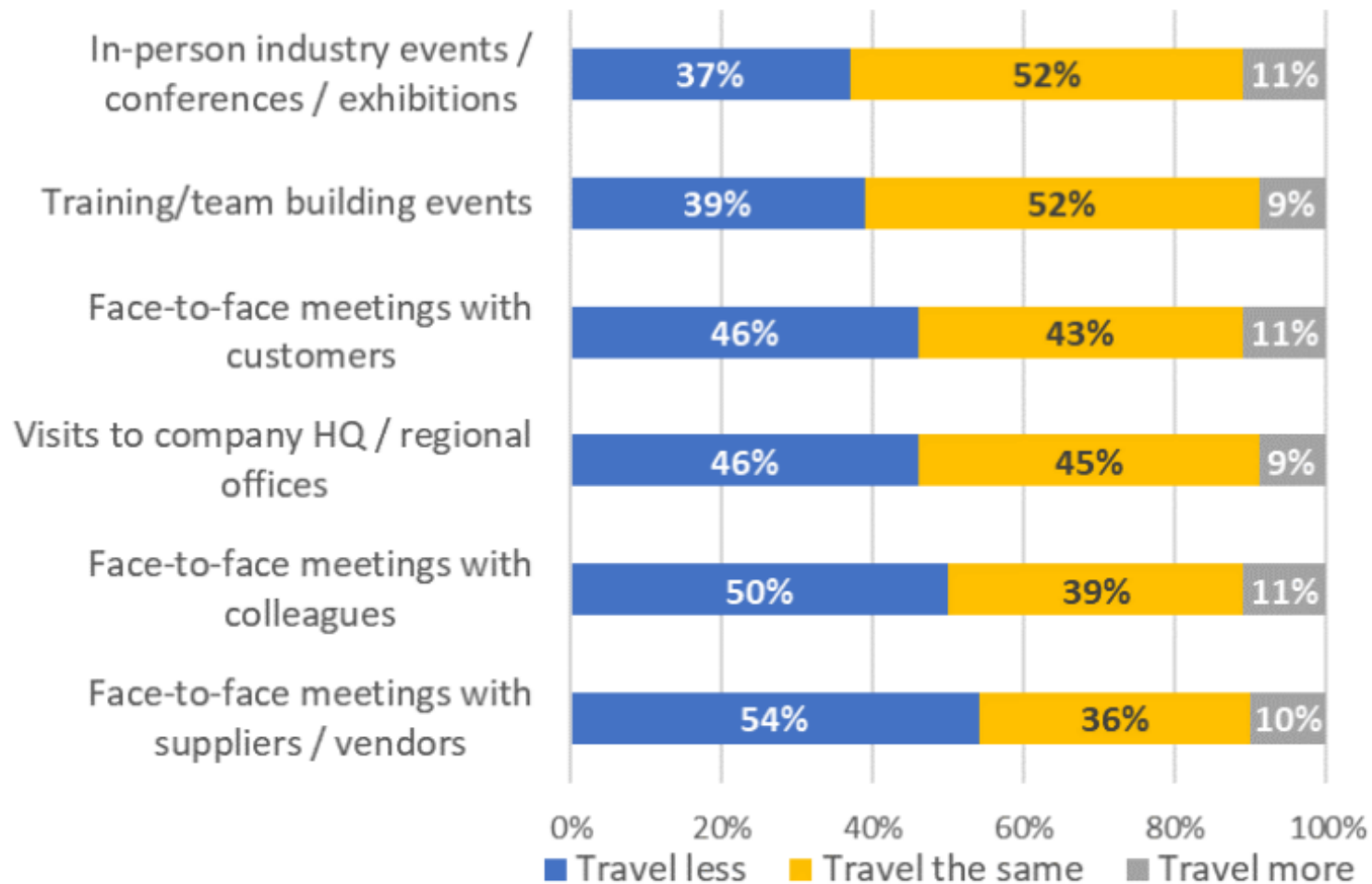
Source: GMO Research

Country most likely to visit by region



Source: GMO Research

Business travel intent compared to pre-COVID-19



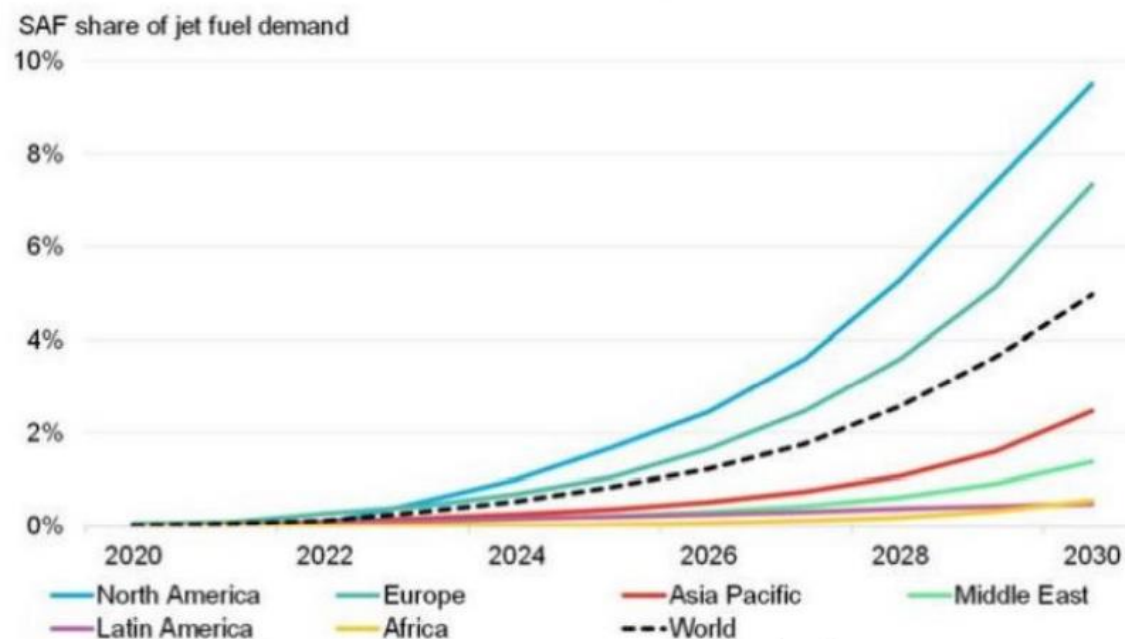
Source: STR / CoStar Group

3) Corporate Travel Sustainability Trend

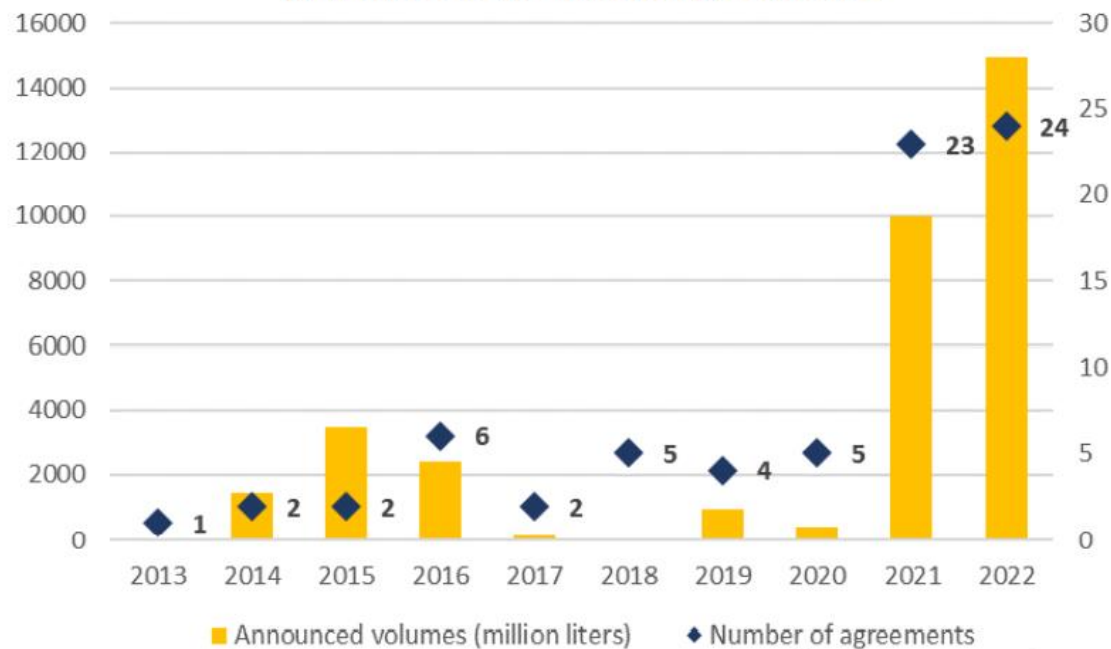
BloombergNEF: SAF to account for 5% of aviation fuel use by 2030

- Bloomberg New Energy Finance (NEF) estimates global demand for sustainable aviation fuel (SAF) will reach 7 billion gallons in 2030, potentially up to 10.6 billion gallons (7.5%) of global demand under an accelerated policy scenario
- US and Europe are leading adoption, although supply is scarce and concentrated with a few suppliers. Other large are markets beginning to establish policies, roadmaps and targets
- For 2022 year to date, announced uptake volumes for commercial airline SAF deals has reached 1.5 billion liters, compared to 1.9 billion liters in the previous nine years combined

Sustainable aviation fuel blend by region - Economic Transition Scenario



Announced SAF offtake agreements



Cathay Pacific Sustainable Aviation Fuel



2021 SUSTAINABLE DEVELOPMENT PERFORMANCE HIGHLIGHTS

A pioneer in sustainable aviation fuel development – Fulcrum

One of the major obstacles for widespread SAF use is supply volume and infrastructure. Since 2014, when Cathay Pacific became the first airline investor to take an equity stake in Fulcrum BioEnergy, Inc., we have focused on developing the supply side. Fulcrum is a US-based sustainable aviation fuel developer, which is a world pioneer in the development and commercialisation of converting municipal solid waste into sustainable aviation fuel. The plant can convert 175,000 tonnes of waste into more than 11 million gallons of zero-carbon transportation fuel each year.



Fulcrum BioEnergy's Sierra BioFuels Plant in start-up operations, January 2022

Cathay Pacific's SAF flights

Our target to have SAF represent 10% of our fuel consumption by 2030 builds on our commitment to buying 1.1 million tonnes of SAF over 10 years. Our modern fleet provides an ideal platform for the use of SAF given the craft's cutting-edge technology and high fuel efficiency.



We pledged to use SAF for

10%

of jet fuel consumption by
Cathay Pacific by 2030.

Our sustainable aviation fuel:
From waste to wing



Collection

Municipal waste
is collected.



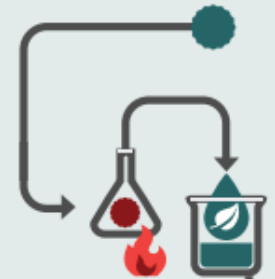
Segregation

Materials are
sorted. Suitable
waste for jet fuel
is consolidated.



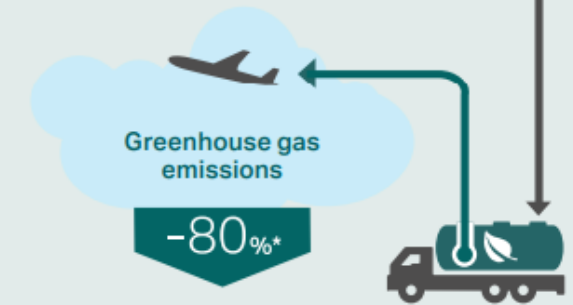
Conversion

Waste is converted
into jet fuel through
a thermochemical
process.



Delivery

Fuel is blended, tested and
delivered into wing.



* Compared to traditional jet fuel, Fulcrum BioEnergy's SAF can reduce life cycle greenhouse gas emissions by up to 80%.

An aerial photograph of a construction site. A large yellow and black crane is positioned diagonally across the frame. To the right, a long barrier made of yellow and green striped tarps runs along the edge of the site. The ground is covered with various construction materials, including wooden planks, metal beams, and bags of cement. The scene is brightly lit, suggesting a sunny day.

Autodesk FY22 Impact Report

A better world designed
and made for all



A message from our President and CEO

Autodesk's journey began in 1982, with a group of young technologists working to democratize CAD tools—they believed that a proliferation of design technology would be good for industries, and for society overall.

We've come a long way in the last 40 years, while maintaining the same core values. Technology, deployed appropriately, can help to solve some of our most challenging global issues: to measure, manage, and reduce greenhouse gas emissions, to improve global health and resilience, and to provide skills and opportunities for those seeking to advance their careers.

This work is more important than ever. As we look to the long term, climate change and labor market inequities demand increasingly bold and urgent action. And in the near term, global conflict, high inflation, prolonged supply chain disruptions, and increasingly distributed workforces have immediate economic and social implications. We acknowledge the magnitude and importance of this moment. I believe the volatility around the globe requires that we get back to basics—leaning into our communities, recognizing the importance of resilience, and driving toward positive societal outcomes.

Last year we unveiled our impact strategy. While we have made substantial progress, much work remains to be done. We have multiple levers to drive progress across important environmental, social, and governance issues: how we manage our own business operations, the solutions we provide to our customers, and our collective efforts to accelerate industry transformation.

This report outlines our approach and performance across these interconnected areas. Each builds on the former. Measuring and managing our own impacts better equips us to help our customers do the same. And deploying outcomes-based solutions for our customers supports broader industry transition to the sustainable, resilient, and inclusive future we collectively aim to achieve.

We recognize the importance of improving our operations to demonstrate our commitment to sustainability and help enable a low-carbon, inclusive future. Our Carbon Fund underpins Autodesk's work to deliver on our net-zero and renewable energy commitments, and we recently doubled our internal price on carbon to align with market pricing. We also continue to drive progress toward our three-year diversity and belonging strategic goals. To support our efforts, we have strengthened our governance and accountability across the expanding range of ESG issues.

As we deepen our partnership with customers, we are empowering them to create solutions, connect their data, and accelerate the outcomes that matter to them. This helps them address the unprecedented demand for net-zero buildings, resilient infrastructure, and waste reduction for consumer packaged goods—just to name a few. Last year, we further enhanced our platform capabilities to help our customers scale their positive impact. We released microclimate analysis tools, digital twin solutions, and new features to improve efficiency in building design and construction; and we introduced new factory efficiency solutions for manufacturing. We've also expanded

our portfolio of water management solutions. These capabilities help our customers mitigate risk and respond to unprecedented demand for sustainable solutions.

By investing in technologies that enable dramatic changes in our customers' processes, we can help transform the industries we serve. Through the convergence of design and make, the integration of adjacent industry verticals, and the expansion of our partner and developer ecosystem, we enable insights that empower customers to reduce carbon emissions, water use, and waste. Through our certification programs and policy efforts we strive to support more inclusive opportunities in the industries we serve, and we advocate for broader impact through the global institutions with which we engage.

I'm grateful to our customers, employees, and investors for their support of this work, and I welcome continued collaboration on this journey. By staying true to our values, investing in our broader community, and focusing relentlessly on the outcomes we seek, I believe we will fulfill our vision of a better world, designed and made for all.

Sincerely,

Andrew Anagnost
President and Chief Executive Officer



Improve our operations

Our carbon footprint

Procurement

We strive to embed sustainability into our purchasing practices, from our events and IT equipment to vendors and office supplies such as paper. Since fiscal year 2021, we have partnered with CDP to engage our suppliers and enhance collaboration and disclosure. During fiscal year 2022, we asked 89 of our top suppliers (by GHG emissions) to report information about climate-related programs and GHG emissions to CDP and had a 58% response rate. Through fiscal year 2022, 18 of our top suppliers (by GHG emissions) set science-based GHG emissions reduction targets.

→ [Learn more](#) about our expanded Partner Code of Conduct and our programs with suppliers and business partners.

Business travel

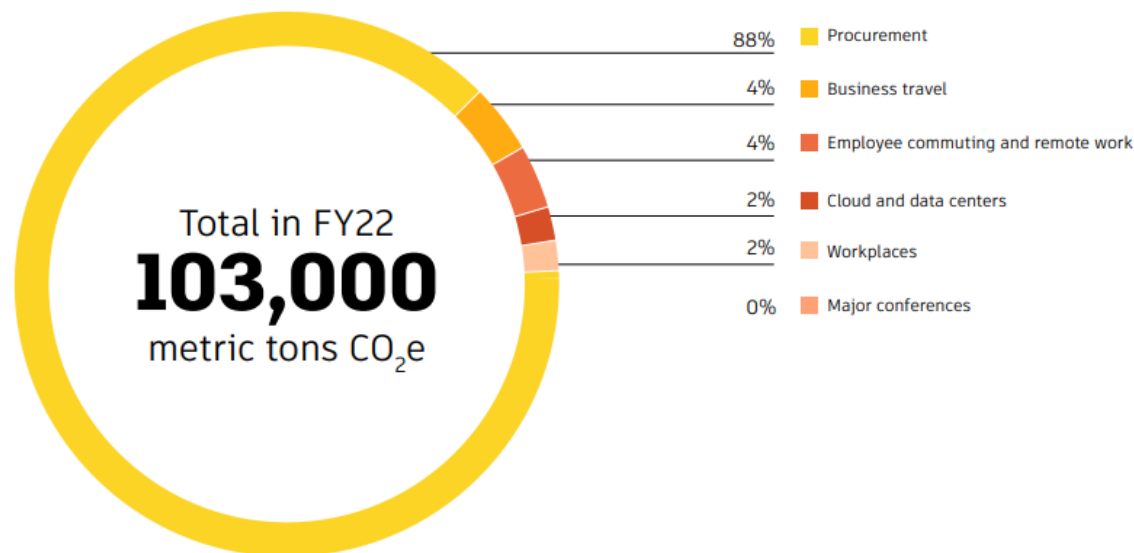
We seek to reduce business travel-related GHG emissions by promoting virtual/hybrid meetings, educating employees and partners, implementing a green rating system for hotels, and incorporating sustainability expectations into our standard meeting contracts. To help advance sustainable air travel, during 2021 we joined the United Airlines Eco-Skies Alliance, which supports the increased use of sustainable aviation fuel through member contributions. Employees have visibility into estimated GHG emissions for each flight segment purchased through our online booking system, enabling more informed decisions about air travel. We are also working to decarbonize our fleet using hybrid and electric leased vehicles, and we are on target to convert at least 80% of our leased vehicles to hybrid or electric by the end of 2023. Emissions from business travel were 95% lower than in fiscal year 2020 (the year before the pandemic), largely due to COVID-19 travel restrictions.¹

Employee commuting and remote work

To account for the impact of remote workers, in fiscal year 2022 (similar to fiscal year 2021) we included GHG emissions associated with home office energy consumption in our footprint (as a part of the employee commuting category based on the GHG Protocol) and purchased corresponding amounts of additional renewable energy and carbon offsets.^{1,2} We plan to continue this practice moving forward.

Major conferences

Autodesk University and One Team Conference (our annual channel partner and sales summit) are both carbon neutral, including the events, attendee travel, and GHG emissions related to virtual participation.³ We achieve this by enhancing efficiency, providing virtual attendance options, reducing waste, and purchasing carbon offsets.¹ In fiscal year 2022, all of our conferences were held virtually due to COVID-19 travel restrictions.



Cloud and data centers

Over the past three years, we have shifted more of our data centers from Autodesk facilities to cloud infrastructure providers, increasing efficiency due to higher infrastructure capacity utilization. In addition, we strive to minimize data center energy use through server virtualization and selection of efficient equipment that meets respected industry standards and by streamlining our code.

We source 100% renewable energy for our cloud services and data centers, and our cloud services have been carbon neutral since fiscal year 2016. These efforts help us provide customers with a faster, more reliable experience with reduced environmental impacts.¹

Workplaces

We assess our facilities' environmental operating practices related to energy use and other impact areas, and we work to continuously review and make sustainability improvements. We use our operations as test cases to help refine the functionality of our solutions, improve our environmental performance, and showcase how customers can use our solutions to meet their sustainability objectives. Due to the pandemic and workplace closures, emissions in this category were 37% lower in fiscal year 2022 than in fiscal year 2020 (the year before the pandemic). Our offices have been powered by 100% renewable energy since fiscal year 2016.

→ See detailed performance metrics in the [Data summary](#).



Charles Dickens – Tale of Two Cities

- It was the worst of times, it was the best of times.
- It was the season of darkness, it was the season of light.
- It was the winter of despair, it was the spring of hope.

