# Growing Horizons

## Global Market Forecast

2017 - 2036

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AIRBUS

# Global Market Forecast 2017: Highlights

| World Fleet Forecast | 2016 | 2036 | vs. GMF16 | % change 2016-2036 |
|---|---|---|---|---|
| RPK (trillions) | 7.0 | **16.5** | **+3.1%** | 135% |
| Passenger Aircraft Fleet | 18,890 | **40,120** | **+6.4%** | 112% |
| New passenger aircraft deliveries | | **34,166** | **+1,741** | |
| Dedicated Freighters | 1,610 | **2,410** | **+14.2%** | 50% |
| New freighter aircraft deliveries | | **733** | **+88** | |
| **Total New Aircraft Deliveries** | | **34,899** | **+1,829** | |

Notes: Passenger aircraft (≥ 100 seats) | Jet freight aircraft (>10 tonnes)
Source: Airbus GMF 2017

# 20-year demand for almost 35,000 new passenger and freighter aircraft


***24,807*** single-aisle aircraft

**+1,277 vs GMF 2016**

***8,686*** twin-aisle aircraft

**+626**

***1,406*** very large aircraft

**-74**

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***34,899*** new aircraft

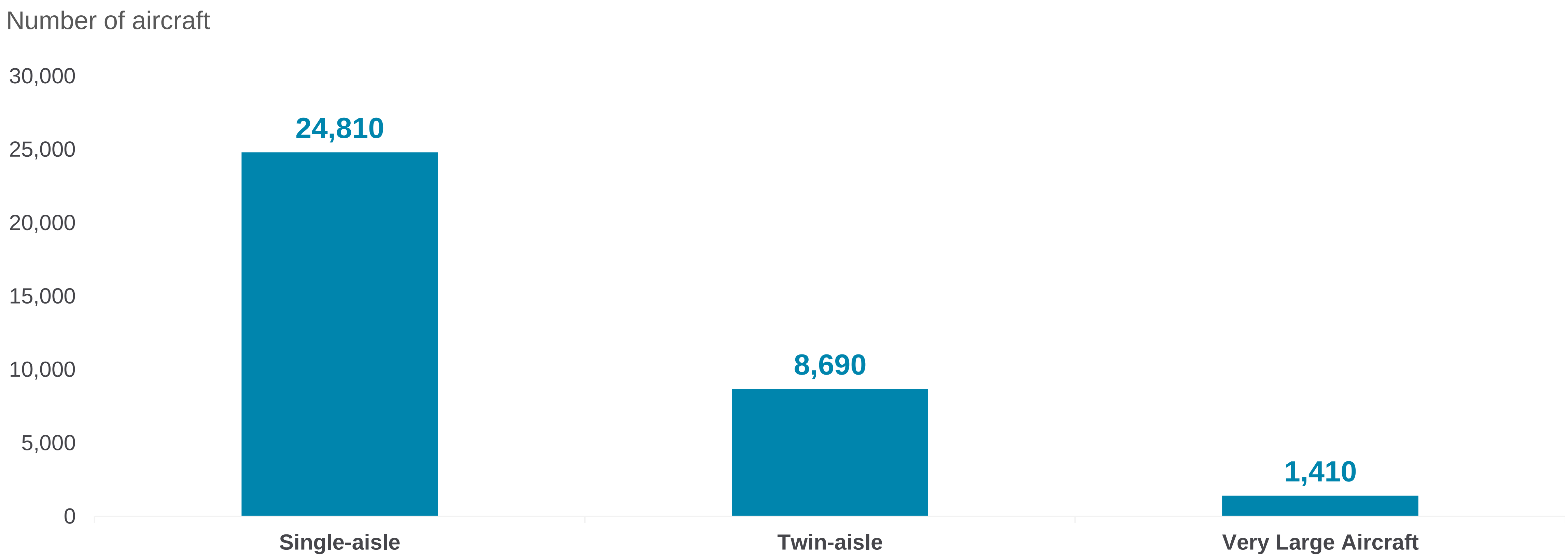
**+1,829**

**5.3**

$US trillion

Notes: Passenger aircraft (≥ 100 seats) | Jet freight aircraft (>10 tonnes)
Source: Airbus GMF 2017

# Single-aisle represent 71% of units, and widebodies represent 54% of value




| | Single-aisle | Twin-aisle | Very Large Aircraft |
|---|---|---|---|
| **% units** | **71%** | **25%** | **4%** |
| **% value** | **46%** | **44%** | **10%** |

Notes: Passenger aircraft (≥ 100 seats) | Jet freight aircraft (>10 tonnes), Rounded figures to the nearest 10
Source: Airbus GMF 2017



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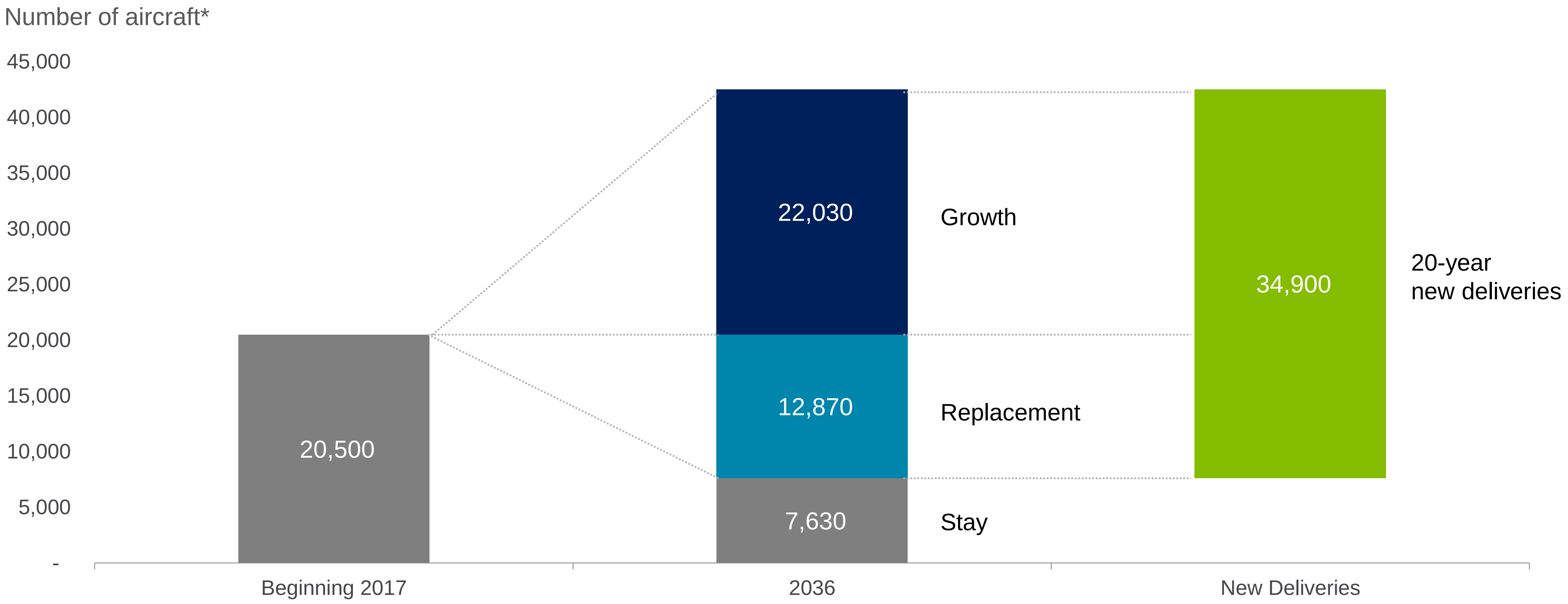
# Fleet in service evolution




Notes: Passenger aircraft (≥ 100 seats) | Jet freight aircraft (>10 tonnes), Rounded figures to the nearest 10
Source: Airbus GMF 2017



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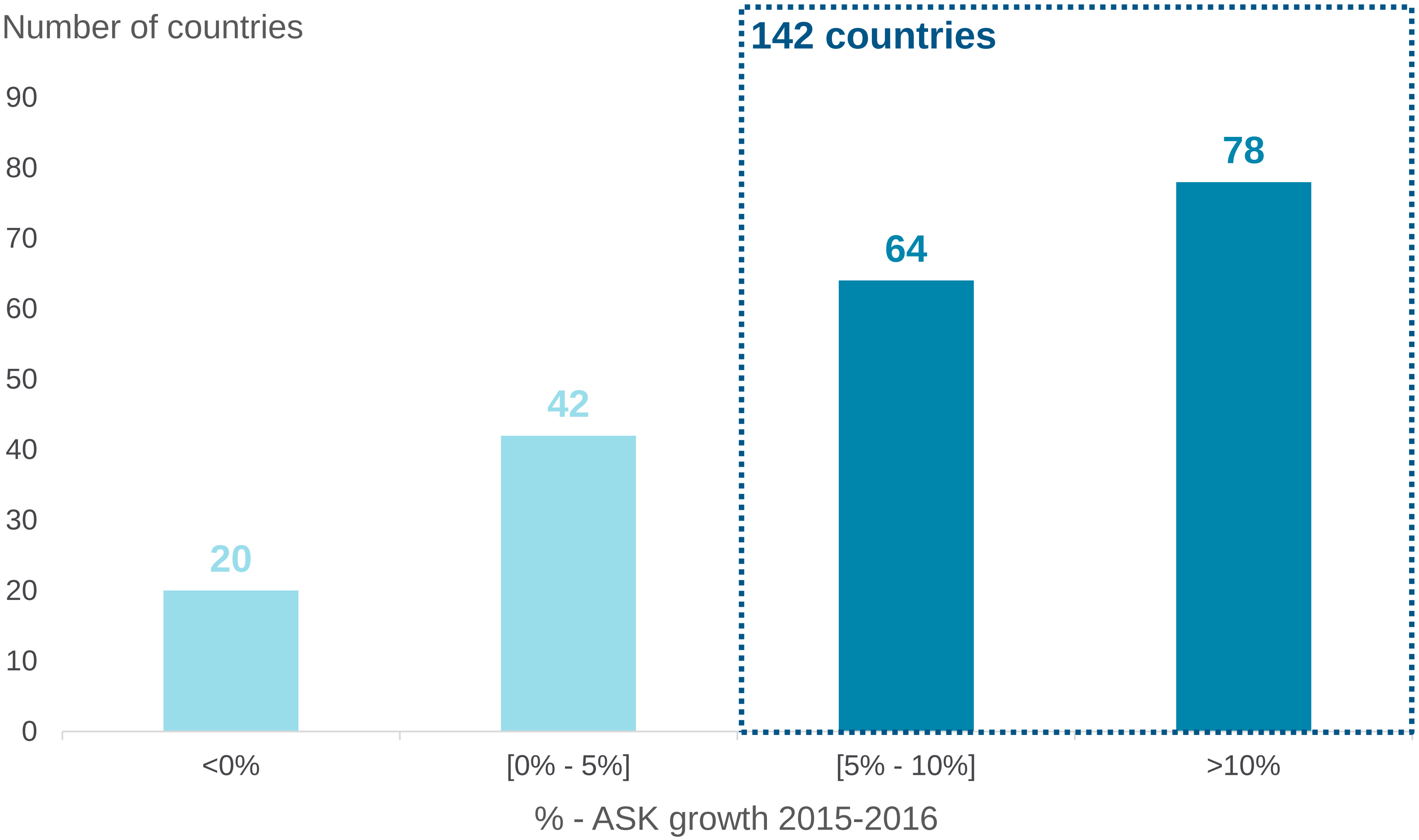
# 2016 was a good year



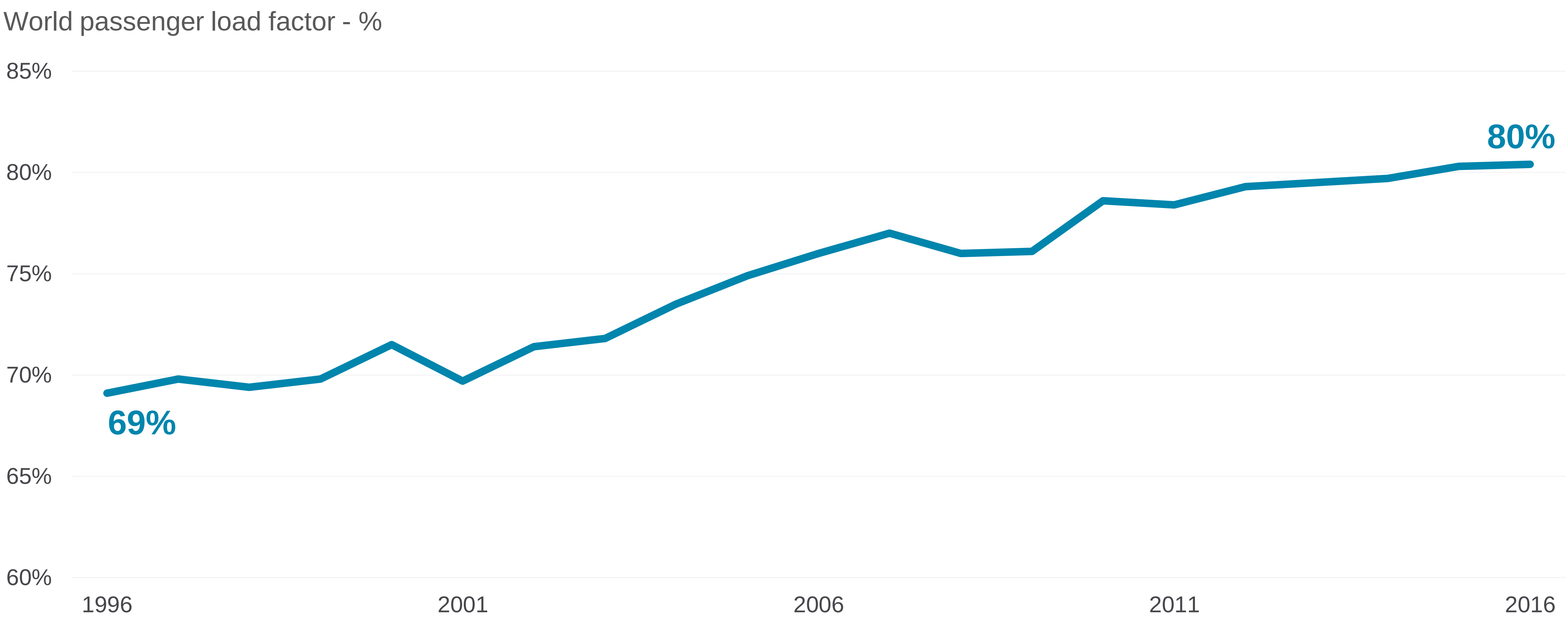

**81%** of world population

**88%** of world GDP



Source: ICAO, OAG, IHS Economics, Airbus GMF

# World load factors remain at record levels




Source: ICAO, OAG, IHS Economics, Airbus GMF

# Air transport growth is highest in expanding regions

Yearly RPK growth
2016 - 2036

## Emerging/Developing

China
India
Middle East
Rest of Asia
Africa
CIS
Latin America
Central Europe

**6.4**
billion people
in 2016

**+5.8 %**

## Advanced

Western Europe
Israel
North America
Japan
Singapore
South Korea
Australia/New Zealand

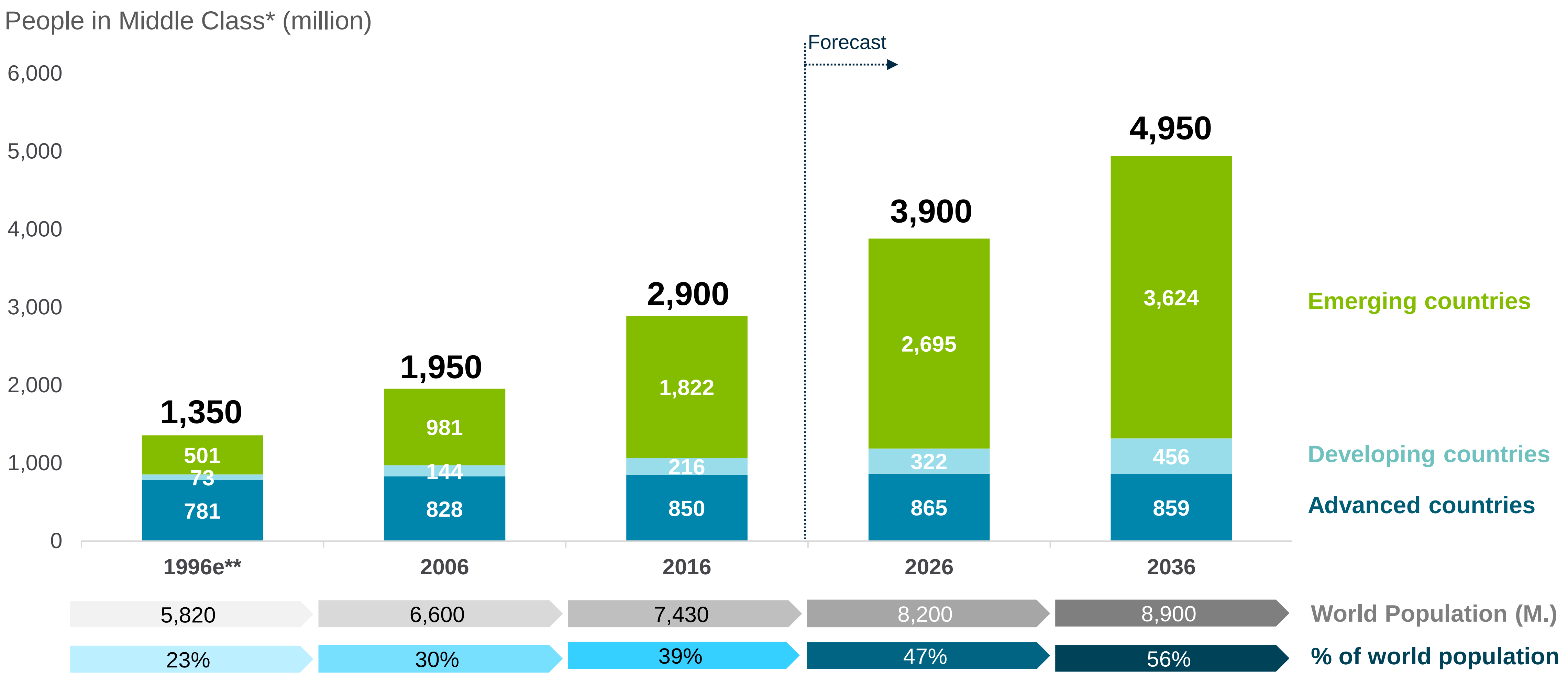
**1**
billion people
in 2016

**+3.2 %**



Source: IHS Economics, Airbus GMF 2017

# Middle Class to almost double over the next 20 years




Rounded total to nearest 50
* Households with yearly income between $20,000 and $150,000 at PPP in constant 2016 prices
** Estimate for 1996 split by region
Source: Oxford Economics, Airbus GMF



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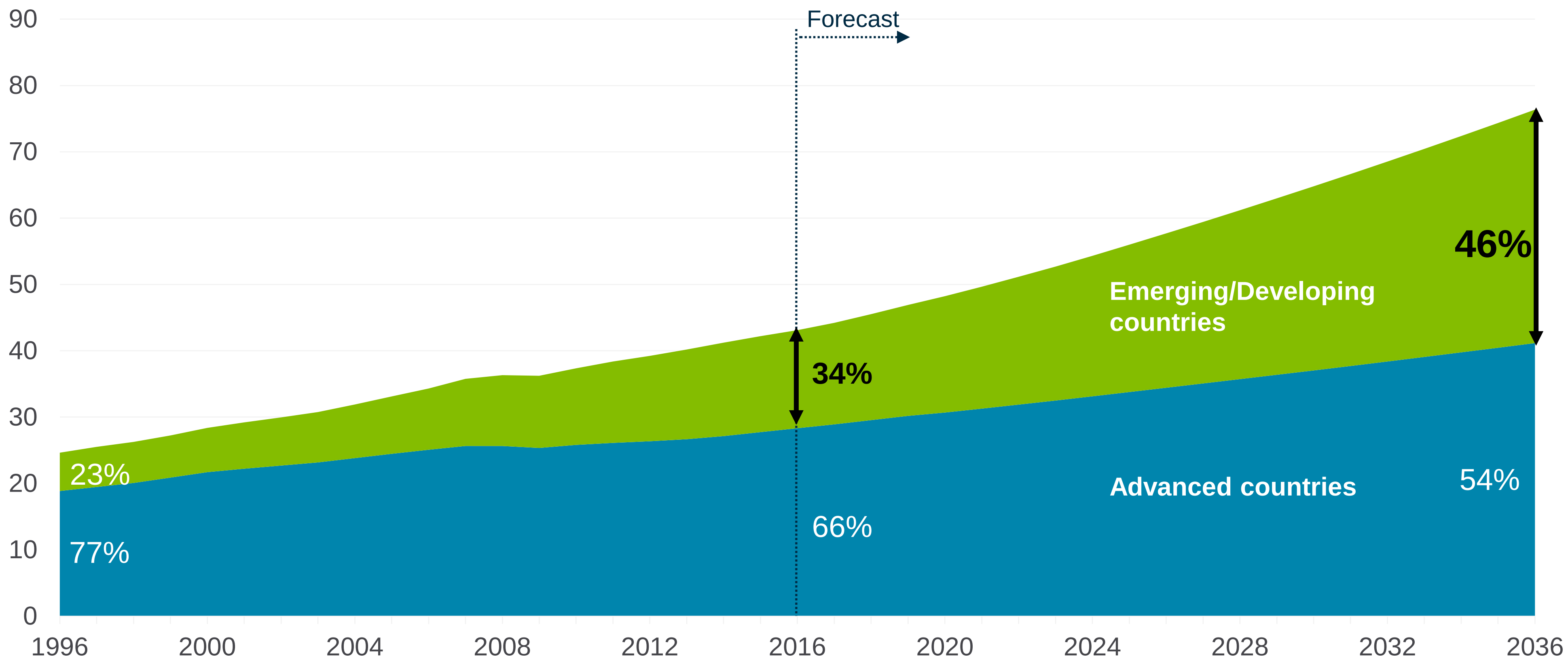
# Almost 50% of world's private consumption to come from emerging markets

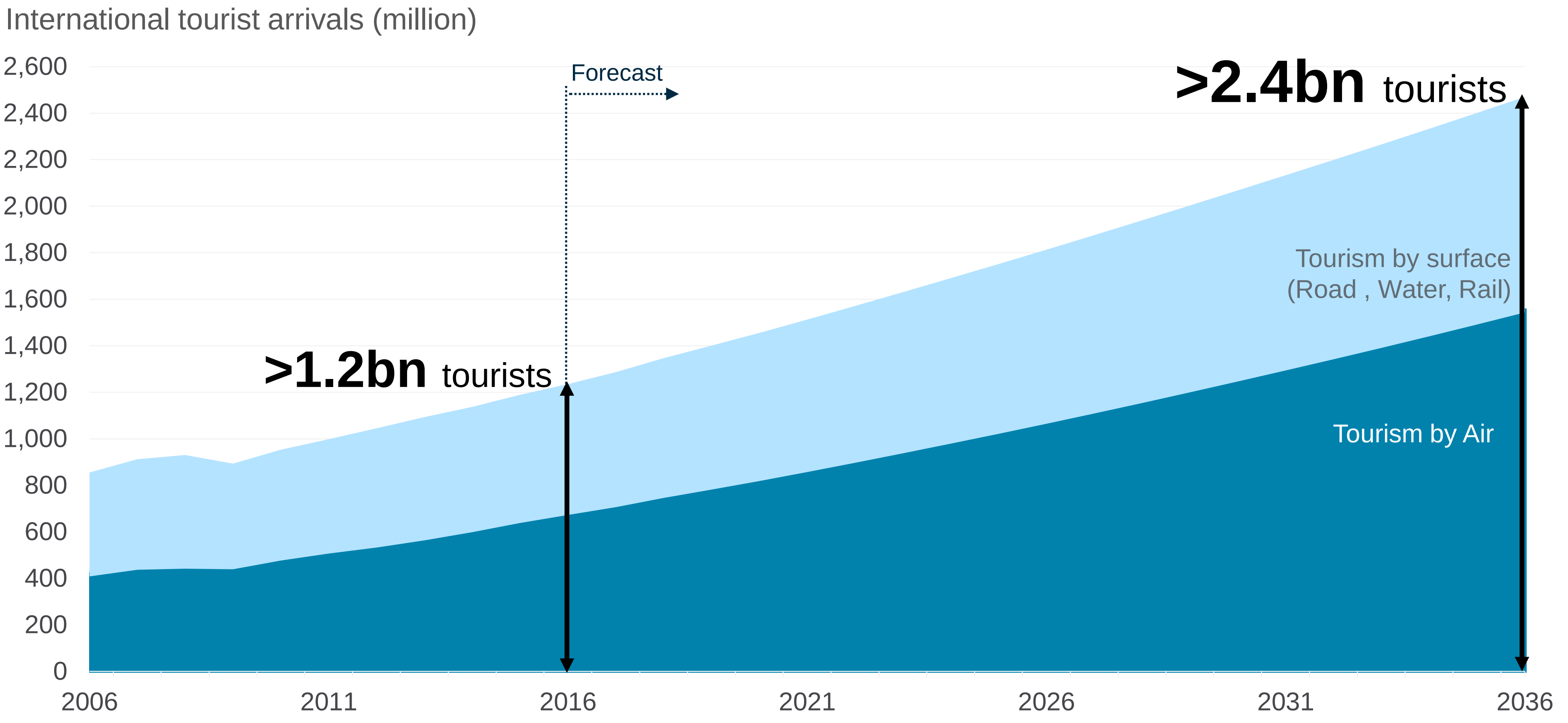
World private consumption (trillion 2010 $US)






Source: IHS Economics, Airbus GMF

# ~60% of international tourists to be transported by air in 2036




Share of tourists travelling by air

| | | | | | | |
|---|---|---|---|---|---|---|
| 48% | 51% | **54%** | 57% | 59% | 61% | **62%** |



Source: UNWTO, Sabre GDD, Airbus GMF

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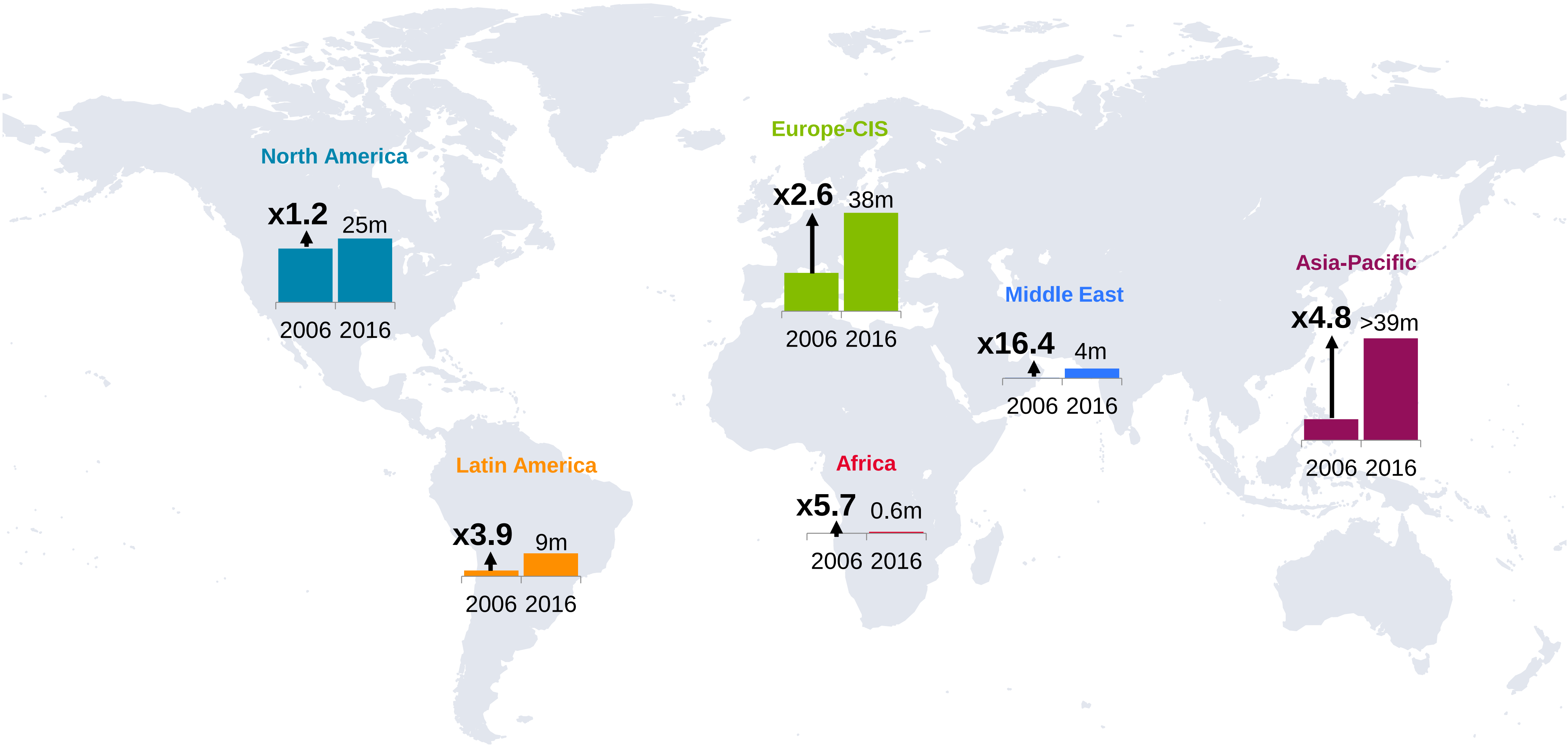
# Low Cost Carrier market penetration has increased significantly since 2006

Low Cost Carrier seats offered on domestic and intra-regional flights (million)




Source: OAG – September of each year, Airbus GMF



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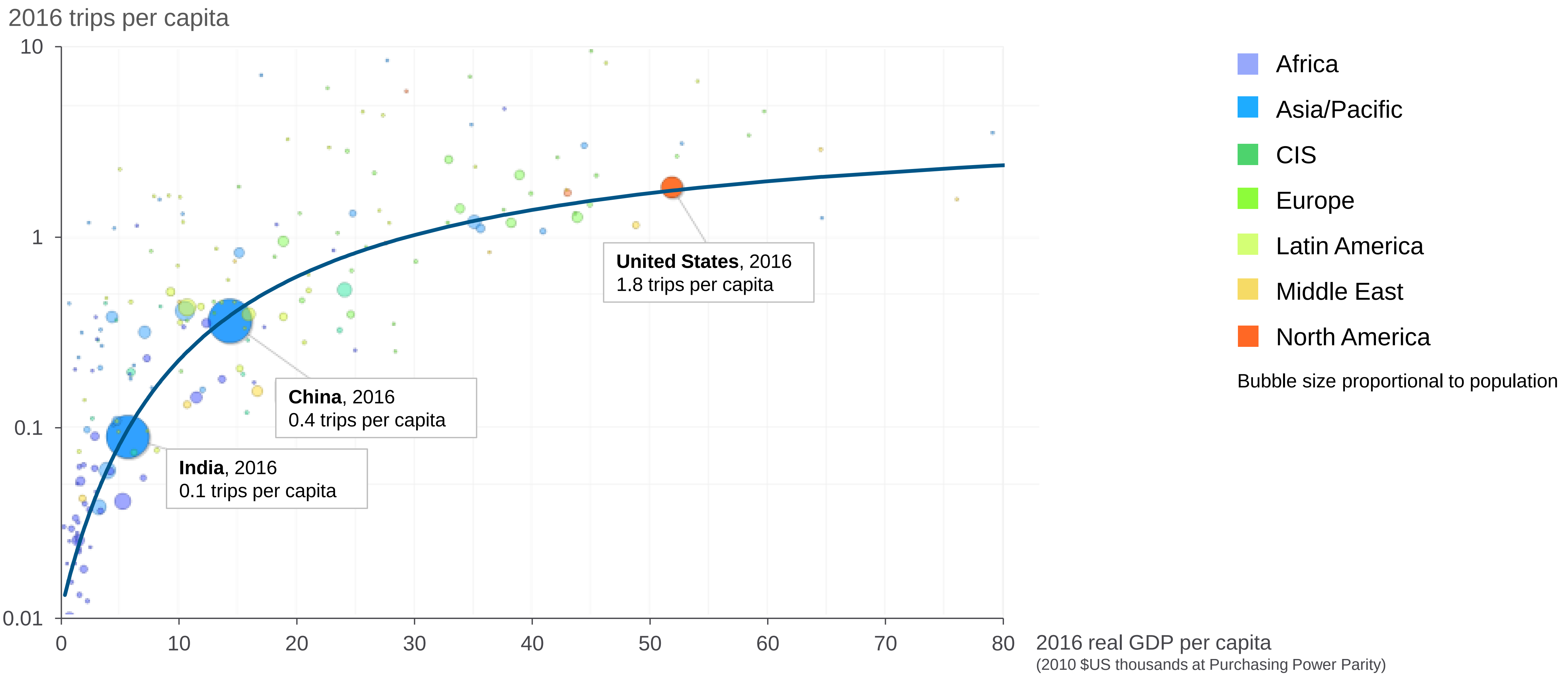
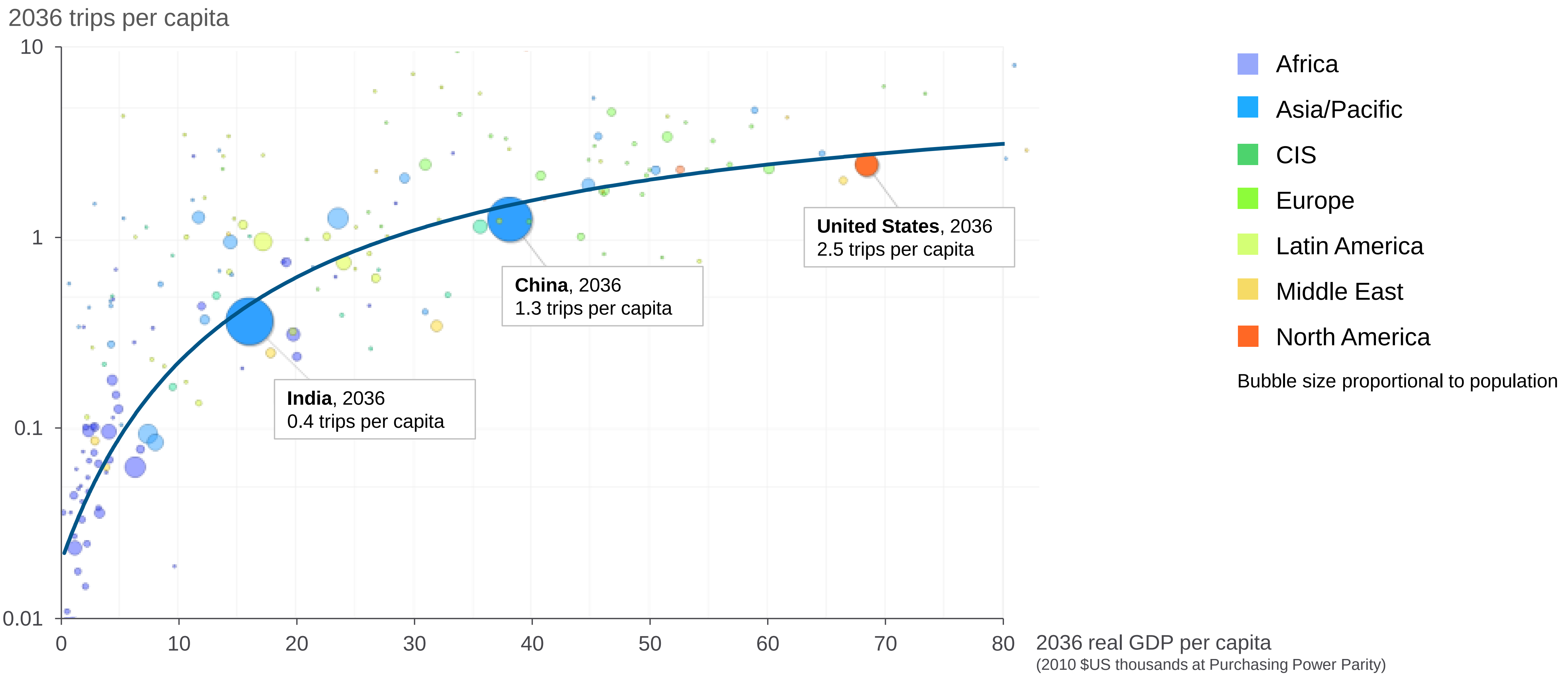
# ~30% of the people from emerging countries took a flight in 2016…






Source: Sabre, IHS Economics, Airbus GMF 2017

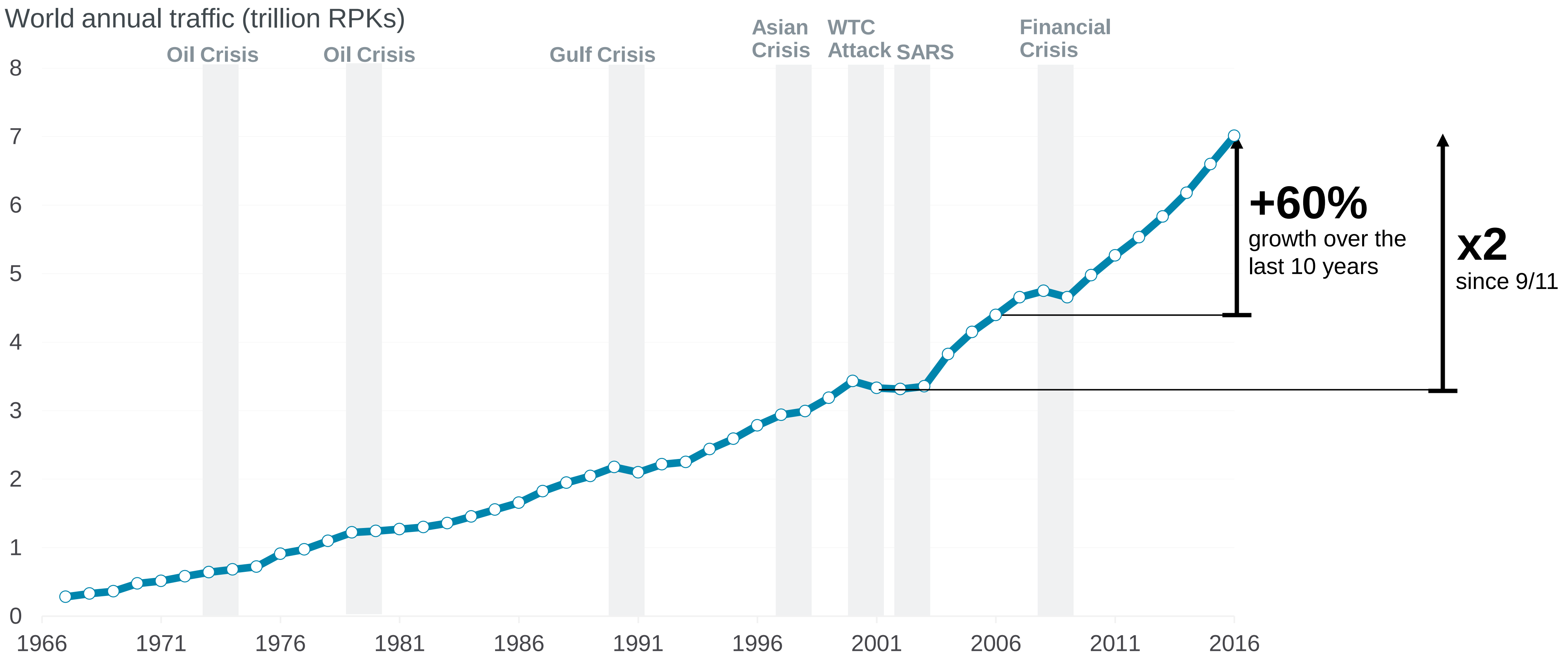
# … in 2036, it will be 83%





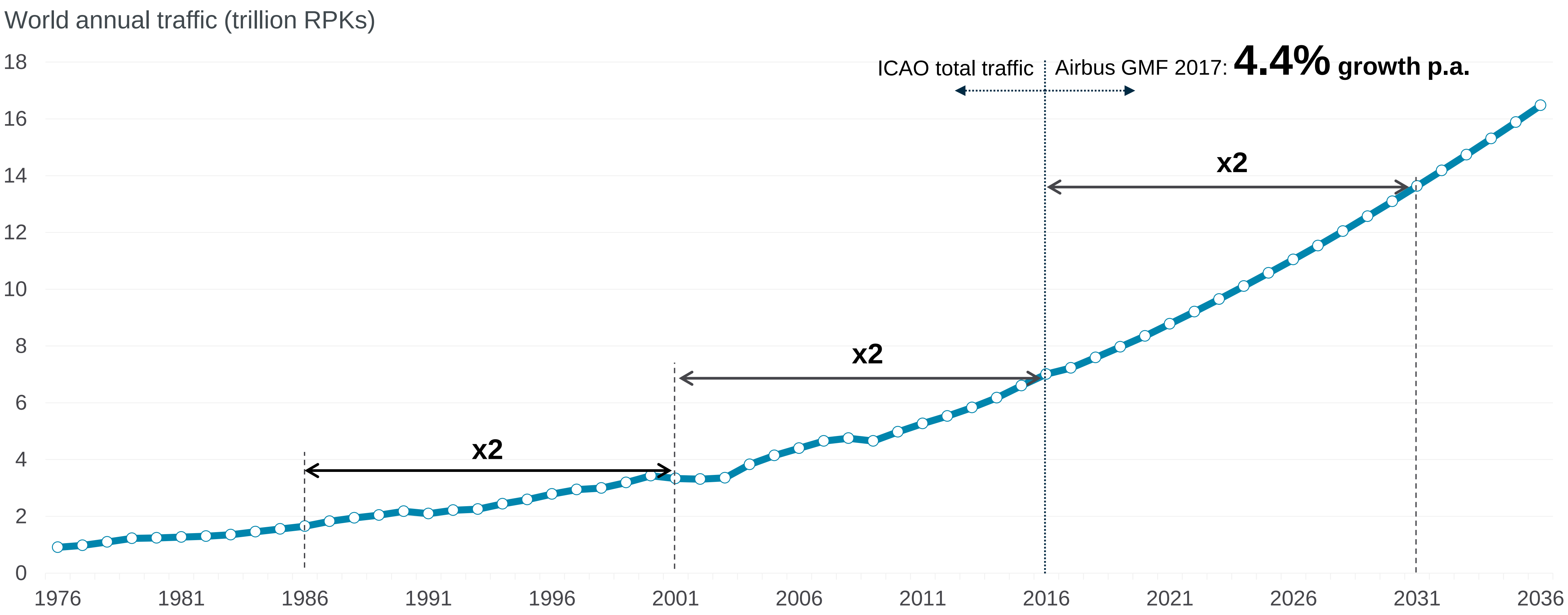

Sources: Sabre, IHS Economics, Airbus GMF 2017

# Air travel has proved to be resilient to external shocks




RPK = Revenue Passenger Kilometre
Source: ICAO, Airbus GMF

# Traffic doubles every 15 years




RPK = Revenue Passenger Kilometre
Source: ICAO, Airbus GMF 2017



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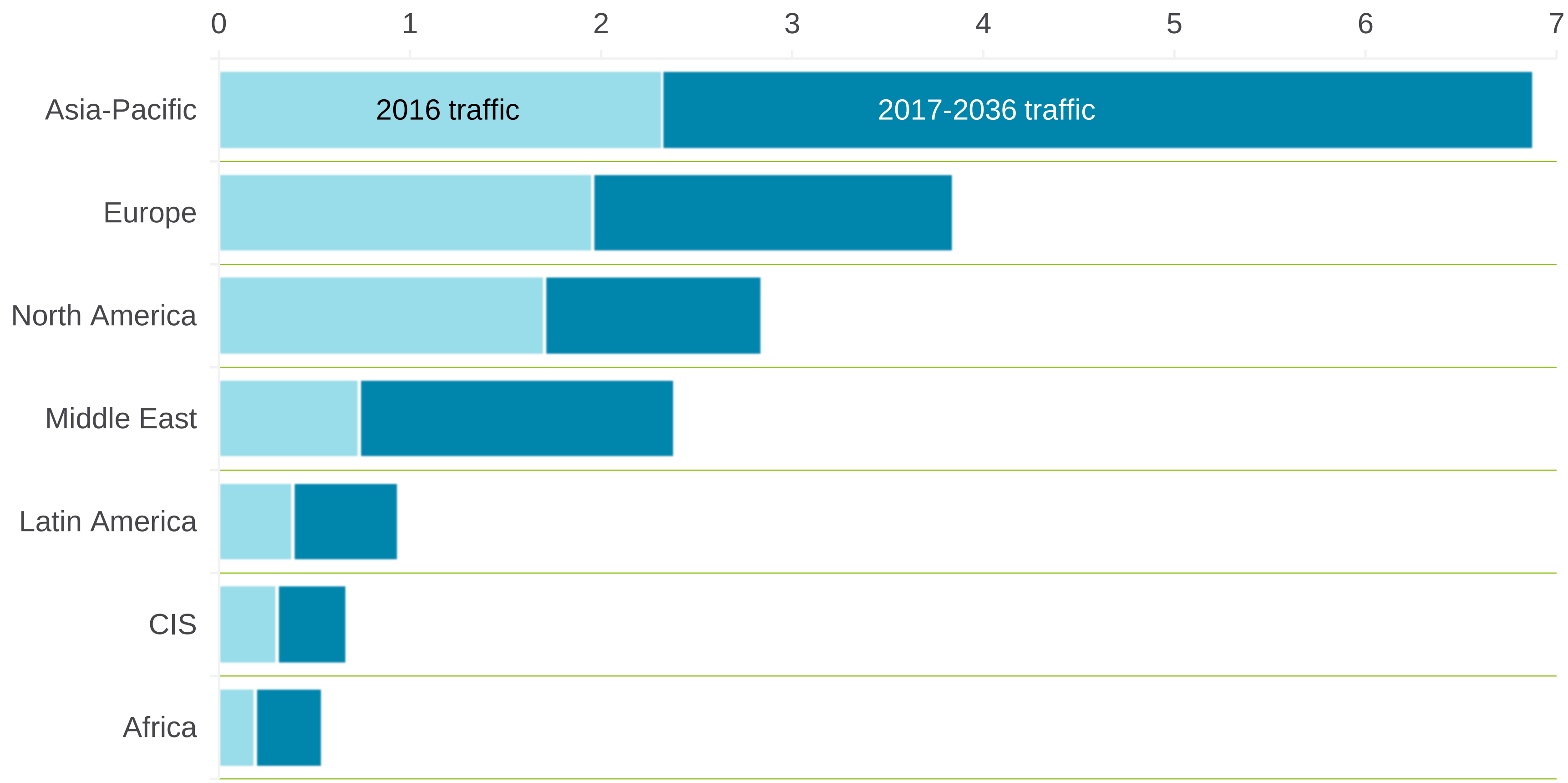
# Asia-Pacific continues to grow in importance

Traffic by airline domicile (trillion RPKs)




| Share of 2016 RPKs | **20-year CAGR** | Share of 2036 RPKs |
|---|---|---|
| 30% | **5.6%** | 38% |
| 26% | **3.4%** | 21% |
| 22% | **2.6%** | 16% |
| 10% | **6.1%** | 13% |
| 5% | **4.5%** | 5% |
| 4% | **4.0%** | 4% |
| 3% | **5.3%** | 3% |



Source: Airbus GMF 2017

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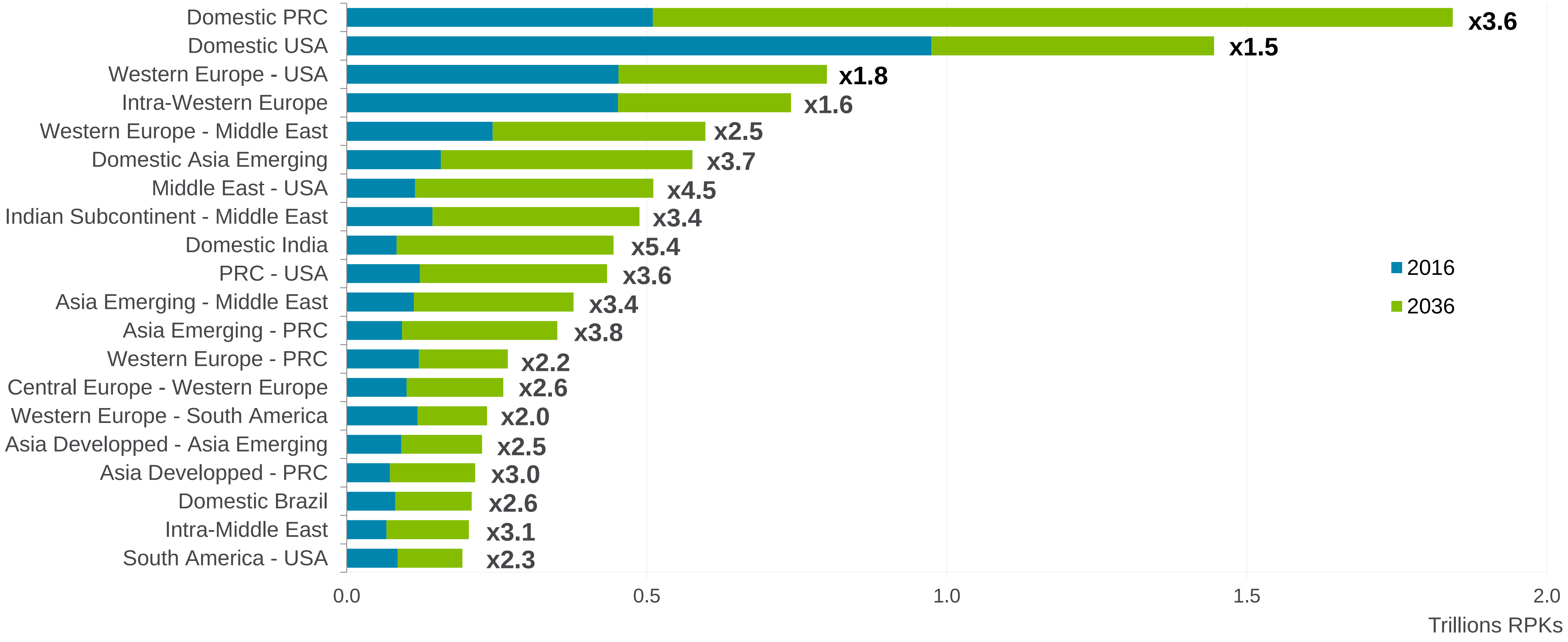
# Domestic Chinese traffic to become number one

## Annual traffic per leg flow

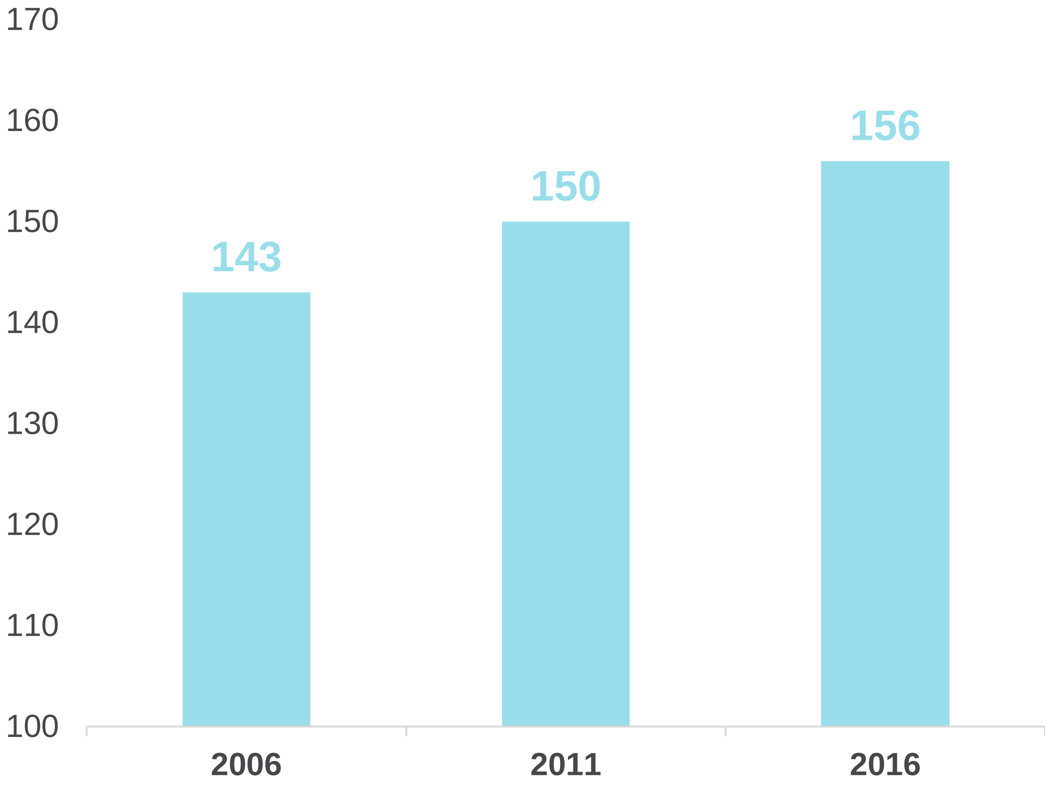




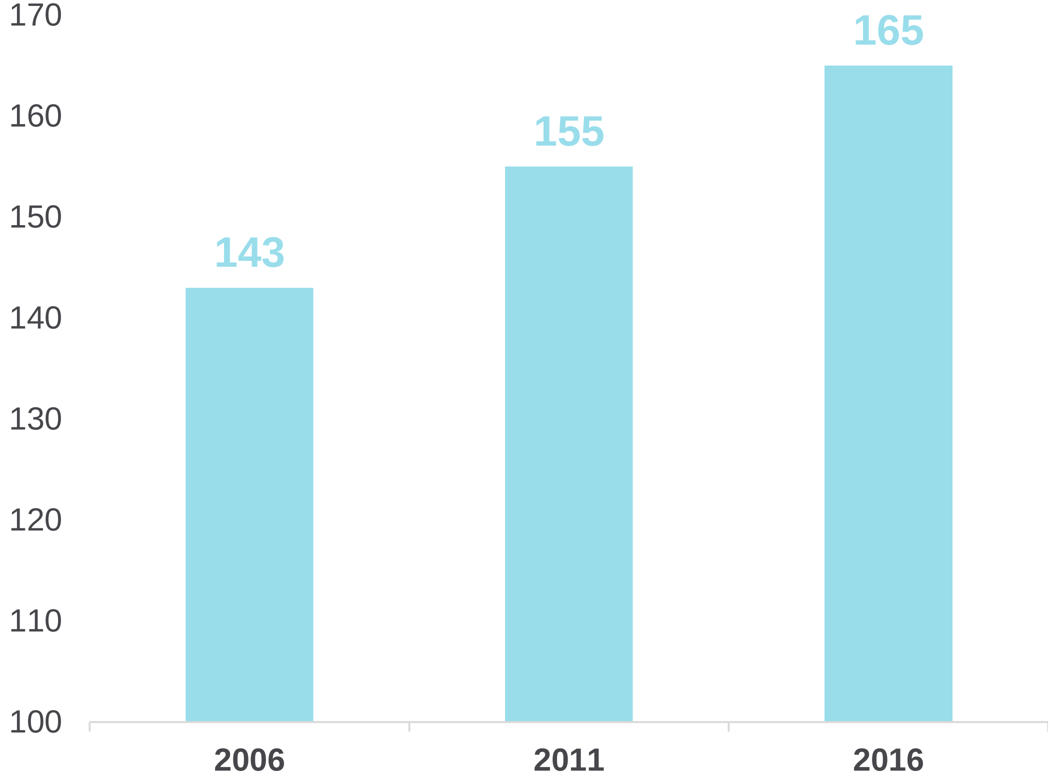

RPK = Revenue Passenger Kilometre
Source: ICAO, Airbus GMF 2017

# Trend towards densification, especially for Low Cost Carriers

All Airlines average single-aisle aircraft capacity per flight




LCCs average single-aisle aircraft capacity per flight






Note: Aircraft capacity above 100 seats and below 210 seats
Source: OAG – September of each year, Airbus GMF

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# A320 Family cabin enablers can raise A320 Family seat counts by up to 10%

Slim-line seats

Space-Flex

New rear galley configuration

Smart-Lav

New lavatory design

New doors rating

Increased exit limit

Airbus Cabin-Flex

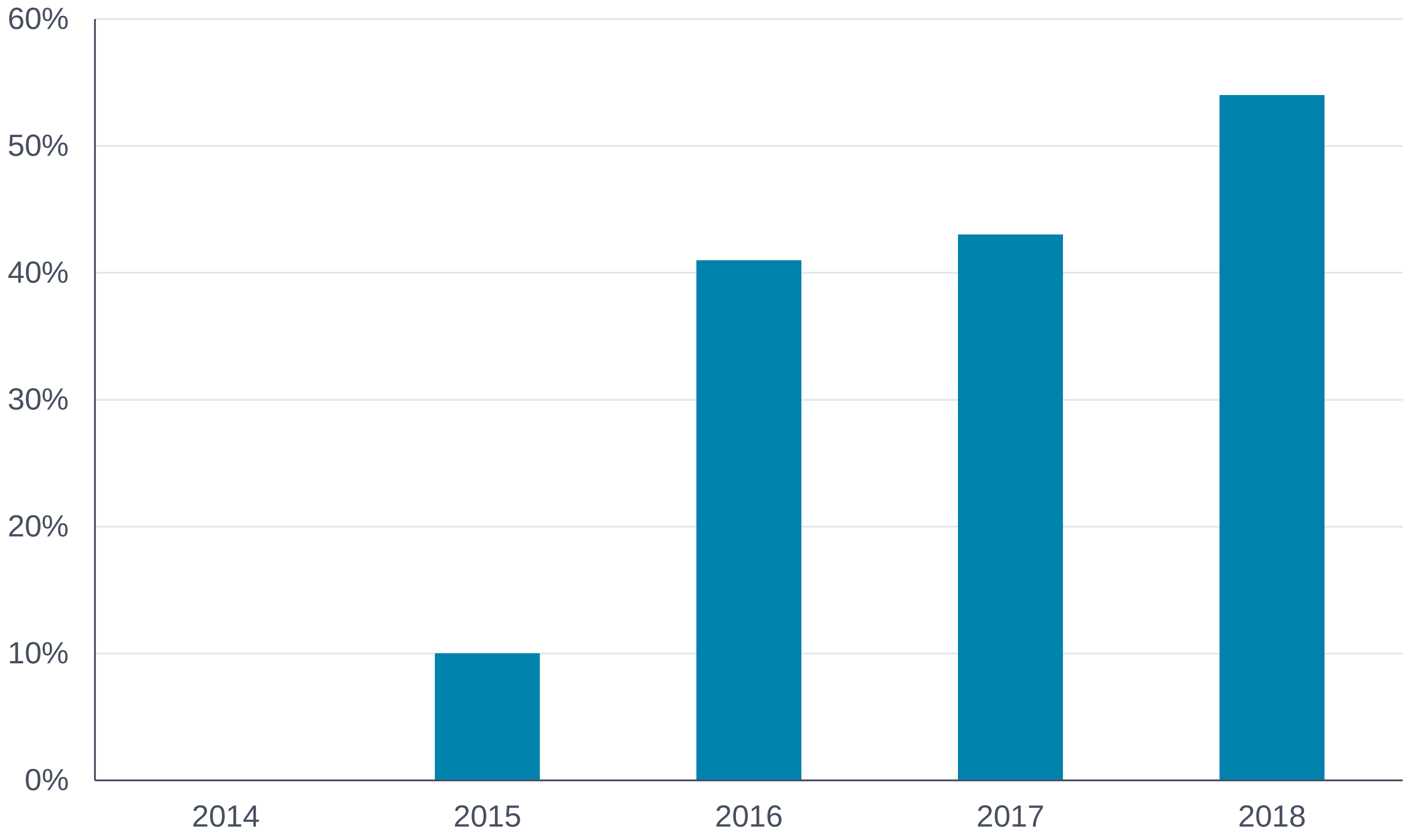
A321neo new door configuration

A319 156 → 160 seats

A320 180 → 189 seats

A321 220 → 240 seats

# A320 deliveries above 180 seats (% total deliveries)




# Densification trend

**Airlines are choosing cabin enablers to increase seat count beyond 180 seats**

Source: Airbus



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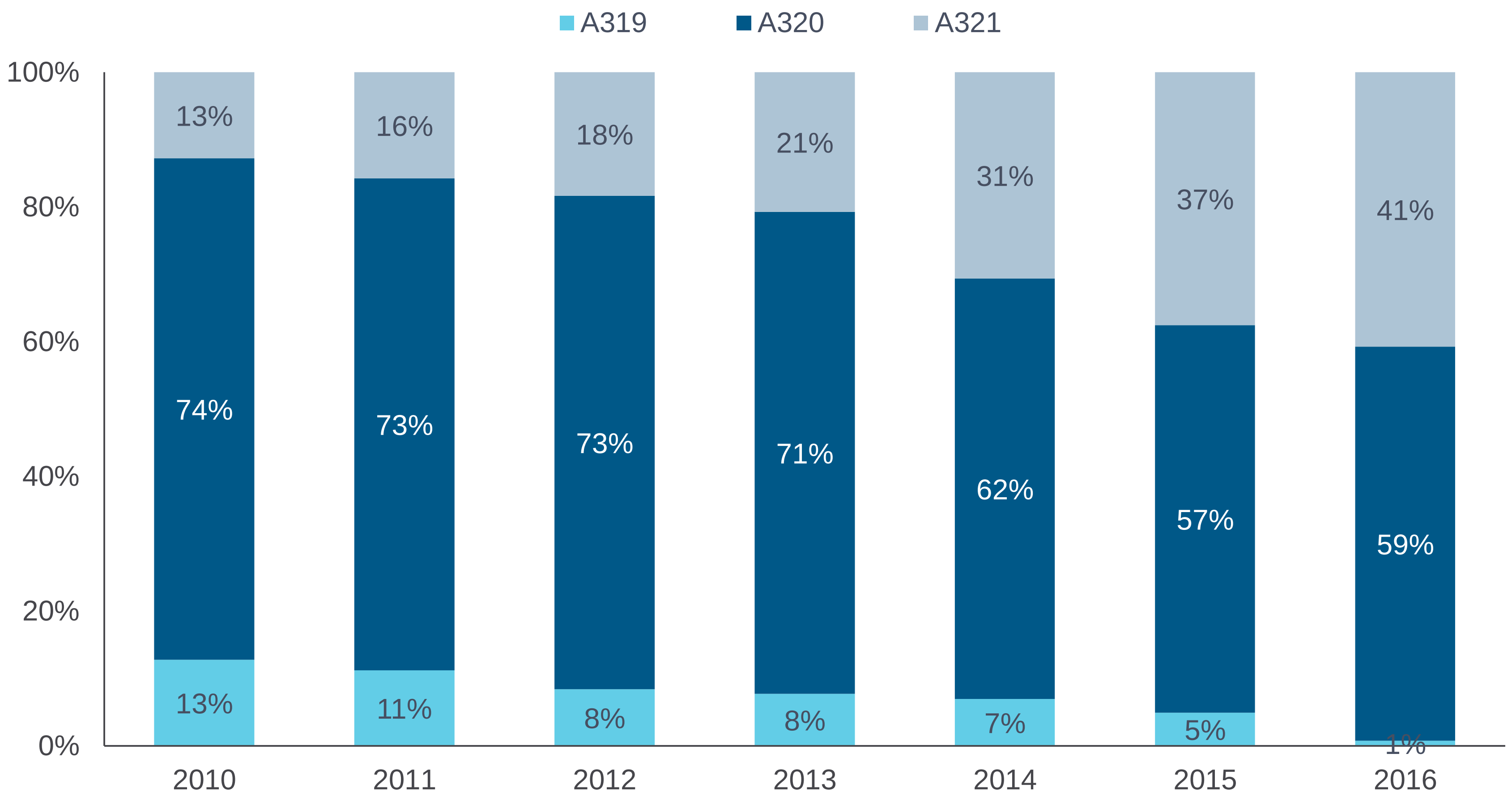
# A320 Family deliveries




# Upsizing

The single-aisle market continues to move towards **higher capacity aircraft**

Source: Airbus, End December 2016, includes NEO



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# A321 – growing in popularity

**65%** of net orders
**41%** of deliveries

of Airbus single aisles in 2016 were **A321**s



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| | Capacity | Range | Fuel per seat |
|---|---|---|---|
| A321neo vs. 737 MAX 10 | +10 seats | +1,000nm | 10% lower |


# A321neo

Up to 240 seats & 4,000nm range with unbeatable fuel efficiency


# A330neo

… beats the 787
on comfort, fuel
and economics
at **$20m** to **$25m**
lower capital cost



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# A350 XWB

25% lower

- operating cost
- fuel burn
- $CO_2$ emissions

Compared to previous generation



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# 10% of all Heathrow passengers

In 2016, 10% of all passengers at London Heathrow travelled on 54 daily A380 flights*

* Inbound and outbound

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# A380 new revenue enablers

Over 80 additional seats with same comfort level as current deliveries

New rear stair

14 seats

Upper deck door 3 deactivation*

8 seats

Upper deck sidewall stowage removal

6 seats

New forward stair*

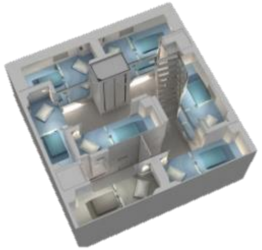
20 seats


Economy class at 11-abreast

23 seats

Combined crew rest compartment

3 seats



Premium Economy Class at 9-abreast

11 seats

* Project development study

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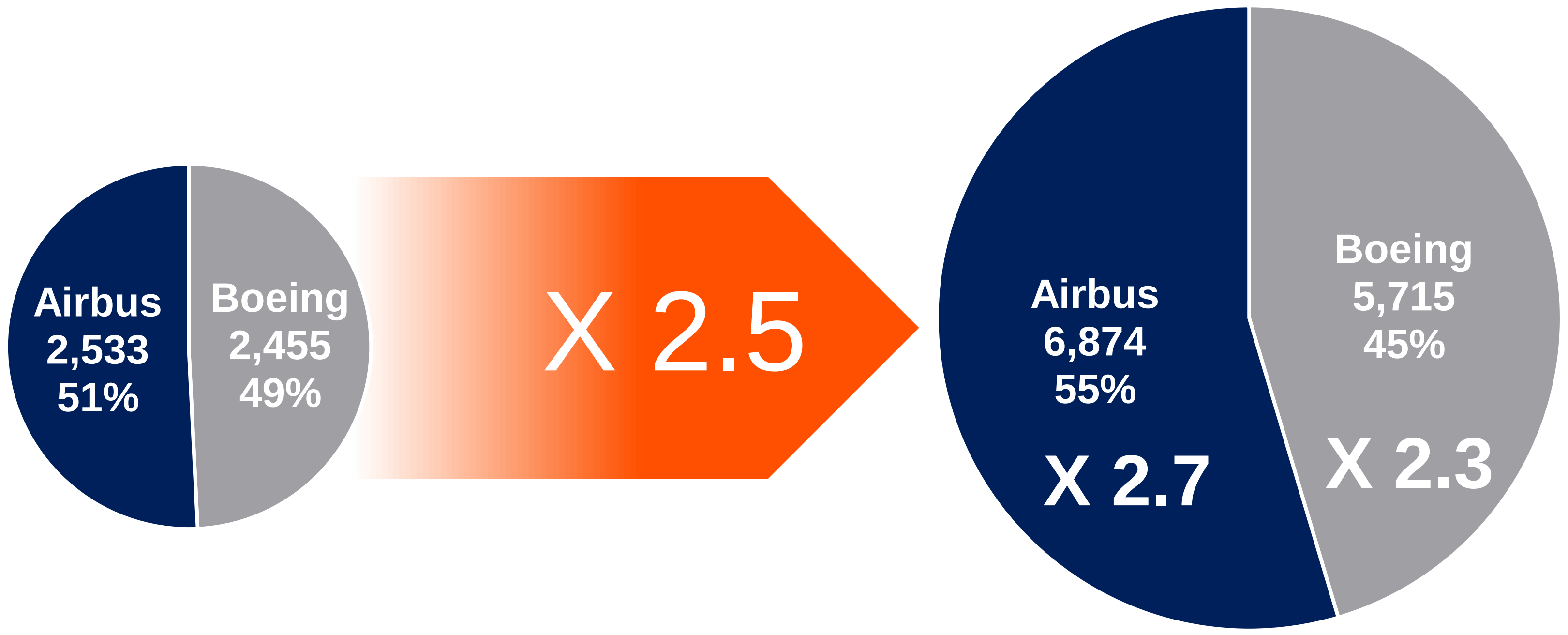
# Backlog development 2007 - 2016

**2007** | **End 2016**

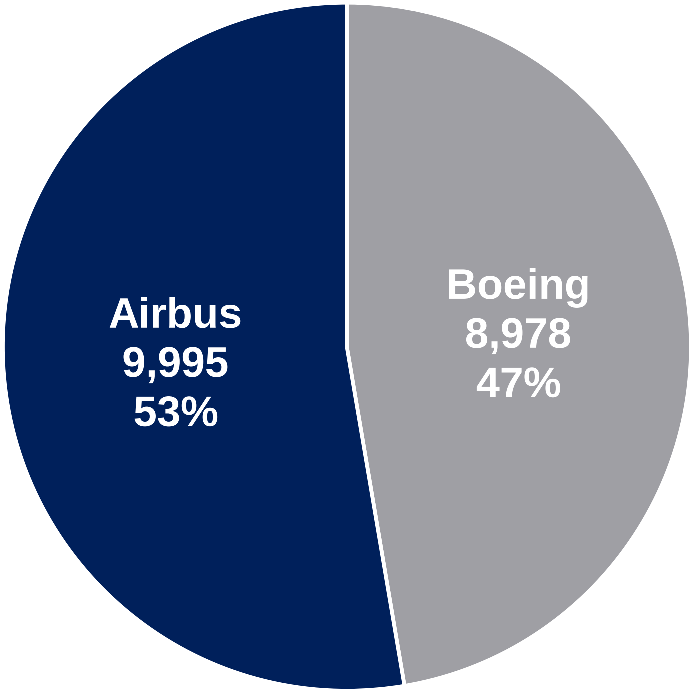



**Industry backlog**
4,988 aircraft

**Industry backlog**
12,589 aircraft

Data to end December 2016

# Net market share last 10 years




Data to end December 2016

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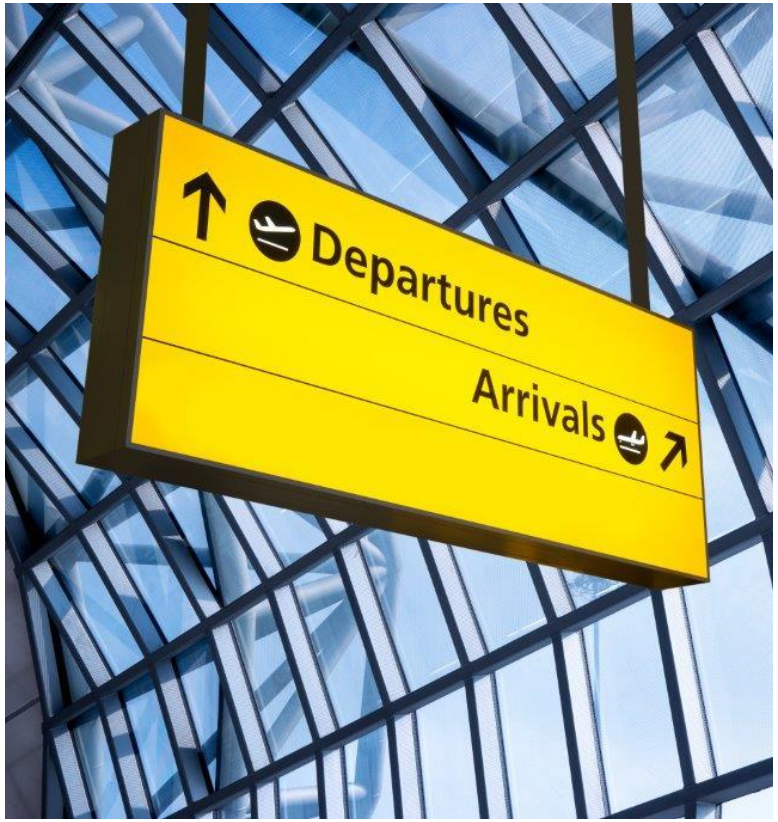
# Summary



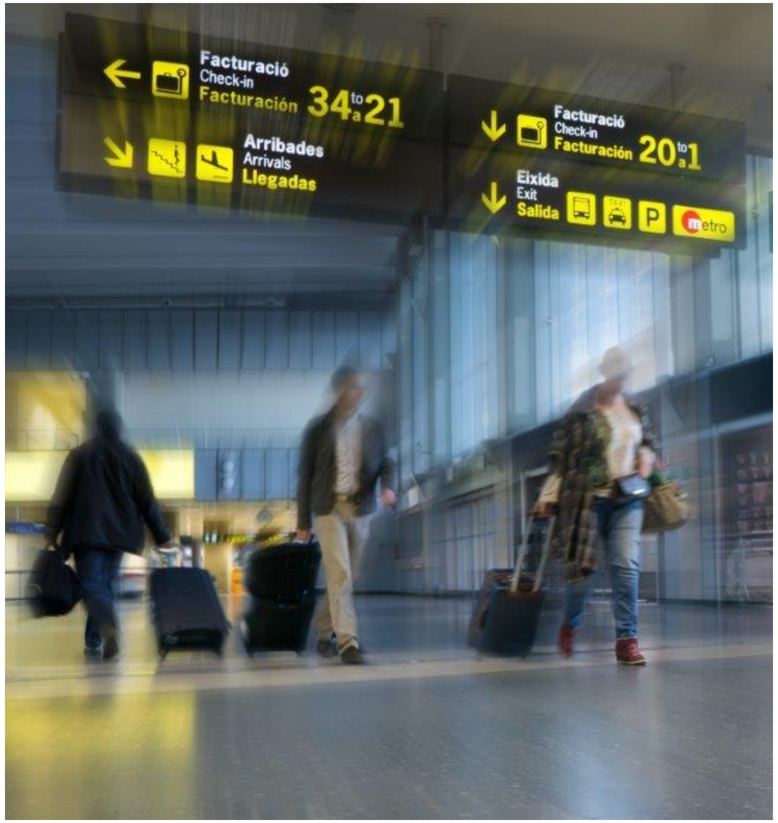

## Drivers

**Strong & resilient** passenger traffic growth

As air transport develops, **new drivers** become more significant

**Middle-class** to almost **double** by 2036

# Summary




## Traffic forecast

Air traffic (RPK) **doubles every 15 years**

Airbus traffic (RPK) forecast to grow **4.4% p.a.**



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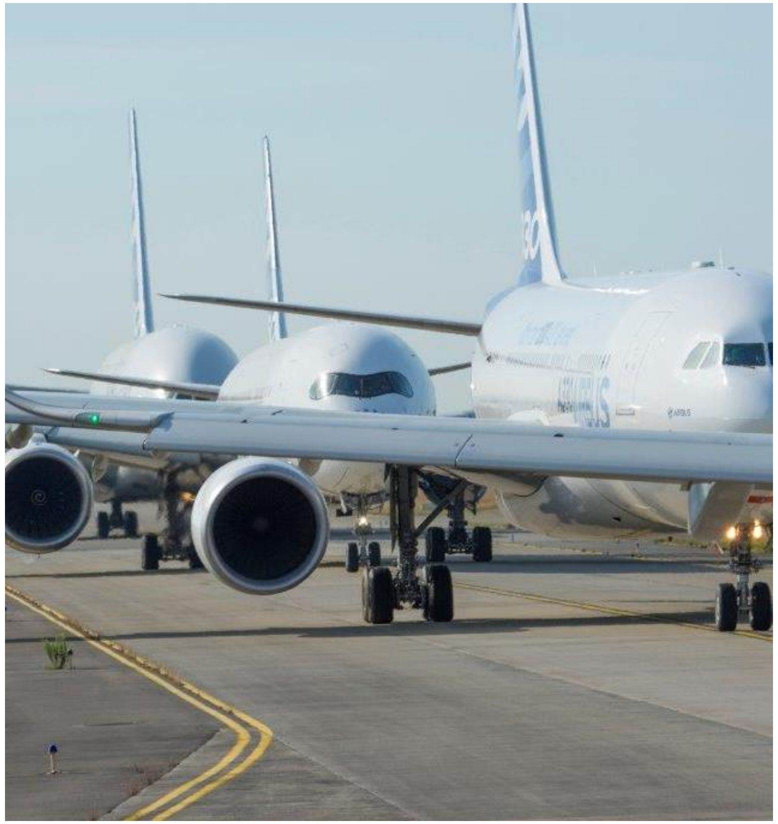
# Summary



## Fleet forecast

**34,900** new deliveries by 2036:

~**34,170** passenger aircraft
**730** freighters

**40%** of new deliveries for **replacement**,
**60% for growth**

**Single-aisle: 71% of units**
**Wide-bodies: 54% of value**



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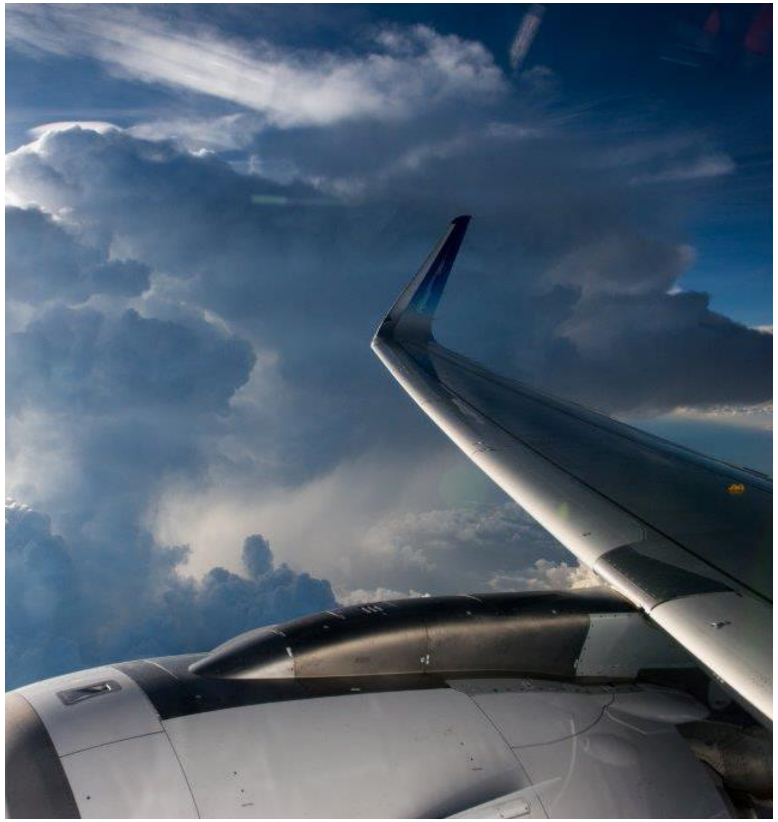
# Summary



## Airbus Family

**A321** an ideal entry-point into **medium to long-haul markets**

**A330neo & A350XWB**:
the **lowest total cost widebody family** with superior comfort levels

**A380: The solution for future traffic growth**



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