# Flying by nature



Global Market Forecast 2007 - 2026





## Air transport has a role in most people life ...



**Share** time with friends and family



**Discover** new horizons and cultures



**Open** new markets



*Increase* opportunities and business

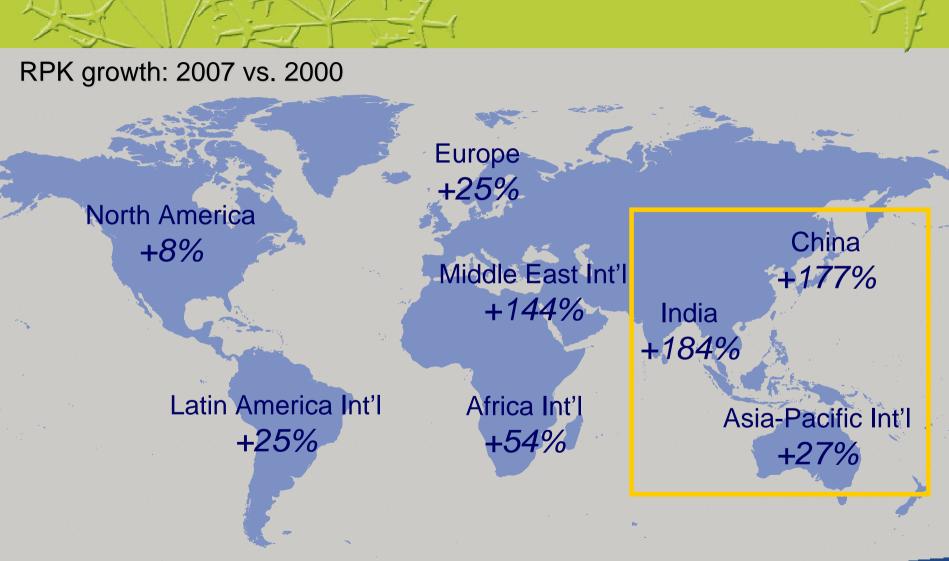


**Resolve** global issues

... people and goods need to fly



## Today's passenger traffic 36% above 2000 level





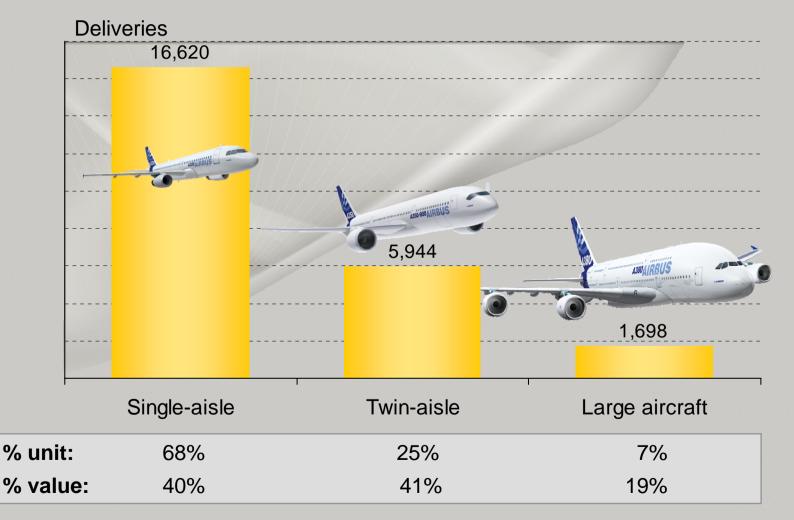
## The main drivers of tomorrow's traffic growth

- Growing Middle East passenger and cargo hubs
- Asia: a new economic paradigm in the making
- LCCs in Asia growing in number and traffic share
- Accelerating deregulation in Asia
- Continuing high growth rate for domestic China and emerging China international outbound traffic



# 20-year demand for 24,262 new passenger & freighter aircraft

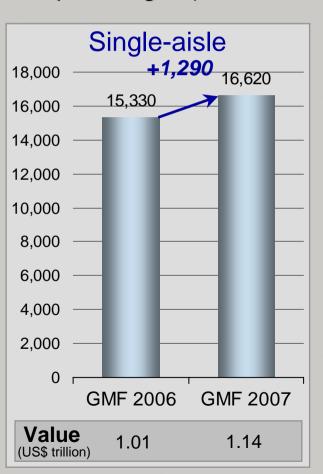


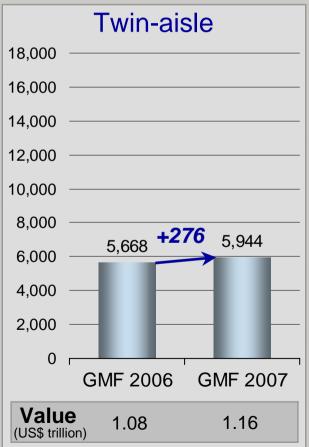




## 24,262 GMF 2007 vs. 22,663 GMF 2006 results

### All passenger (≥100 seats) and freighter aircraft new deliveries









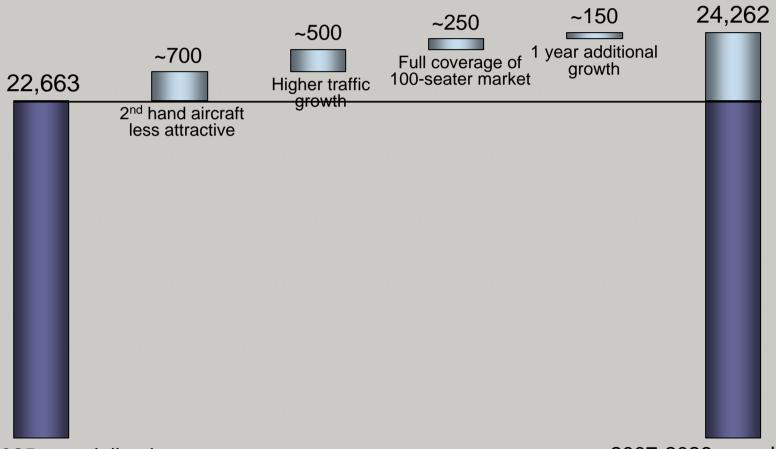
1,599 units more demand than anticipated in 2006



## GMF 2007 vs. GMF 2006 results



All passenger (≥100 seats) and freighter aircraft new deliveries



2006-2025 new deliveries

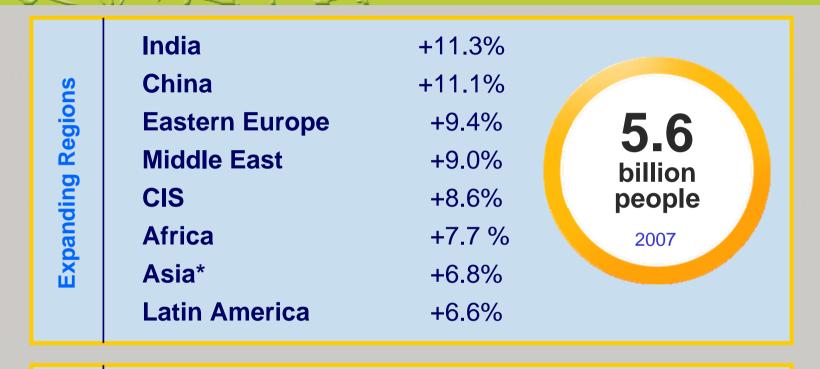
**GMF 2006** 

2007-2026 new deliveries

**GMF 2007** 



# 2007-2011: highest yearly traffic growth in emerging and large population regions



Developed Regions

Australasia +6.4%
Western Europe +5.6%
Japan +5.2%
North America +4.1%

1 billion people 2007



<sup>\*</sup> Asia excludes India & China

## The world of 2026 will be very different from today

### 1986

- 1- US
- 2- Japan
- 3- Germany
- 4- UK
- 5- France
- 6- Italy
- 7- Brazil
- 8- Canada
- 9- Mexico
- 10- Spain

### 11- China

12- Netherlands

### 2006

- 1- US
- 2- Japan

#### 3- China

- 4- Germany
- 5- UK
- 6- France
- 7- Italy
- 8- Canada
- 9- Brazil

#### 10-India

- 11- Spain
- 12- South Korea

### 2026

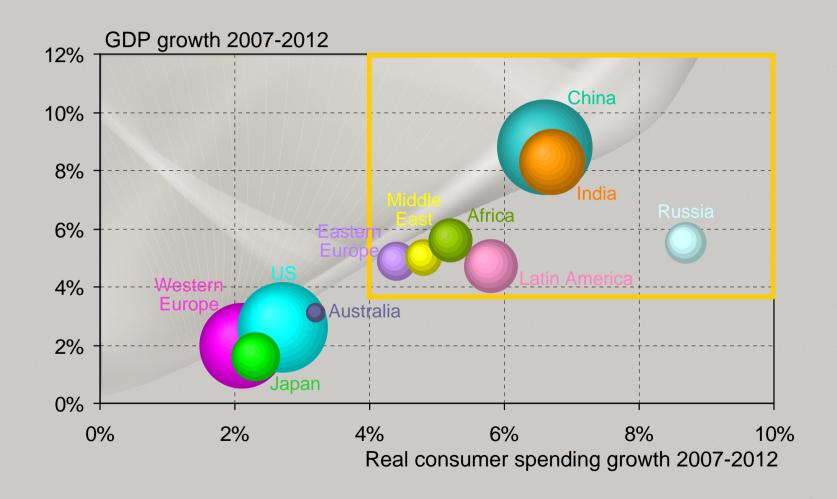
- 1- US
- 2- China
- 3- Japan
- 4- Germany

#### 5- India

- 6- UK
- 7- France
- 8- Brazil
- 9- Italy
- 10- Russia
- 11- Mexico
- 12- South Korea

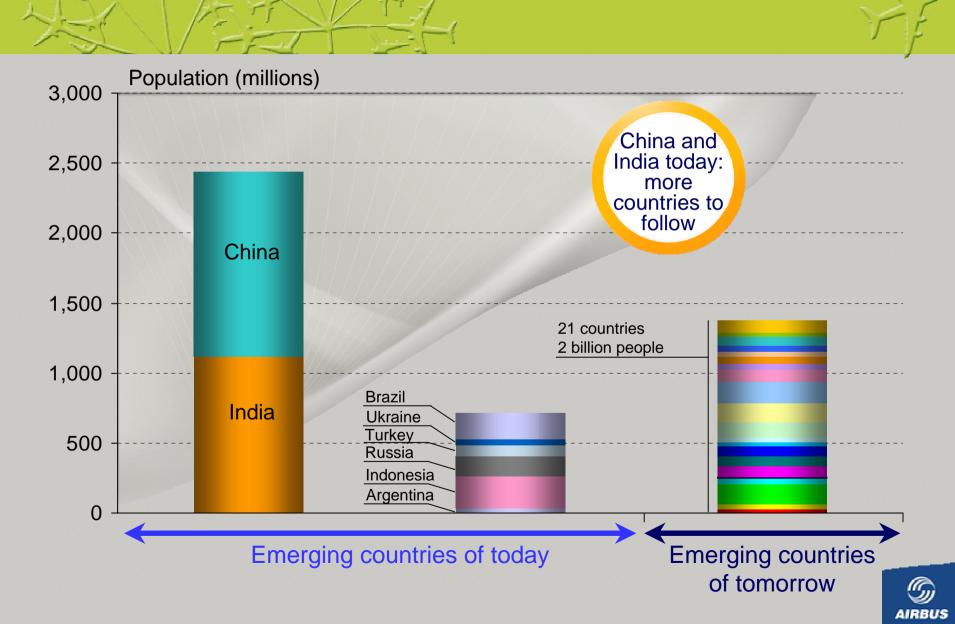


## Emerging countries will drive the world economy





Other emerging countries as big as China and India combined



# Great potential for Low Cost Carriers (LCC) around the world

### **North America**

LCC Market share (seats):

28%

Population: 335m

Number of LCCs: 13 Deregulation: 1978

### **Latin America**

LCC Market share (seats):

20%

Population : \$\frac{1}{2} 560m

Number of LCCs: 10

**Deregulation:** 

acceleration today

### **Europe**

LCC Market share (seats):

30%

Population: 490m

Number of LCCs: 44 Deregulation: 1997

#### **Asia-Pacific**

LCC Market share (seats):

12%

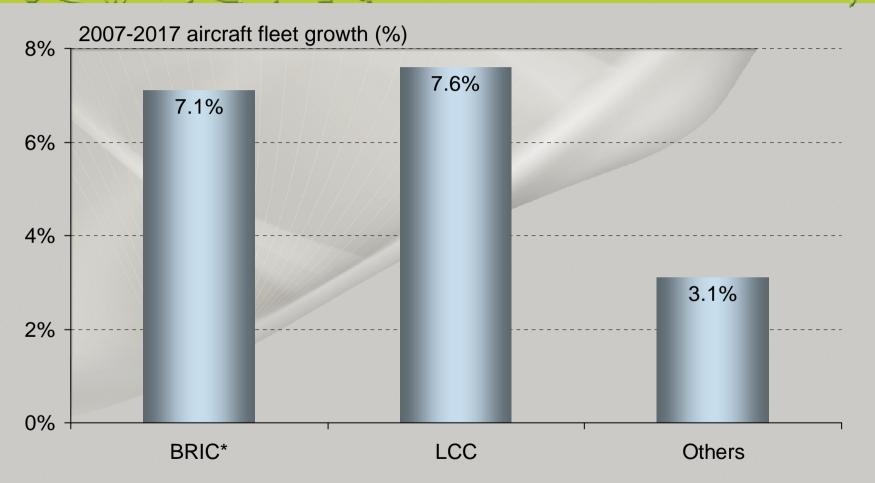
Population: 3.9b Number of LCCs: 43

**Deregulation:** 

acceleration today



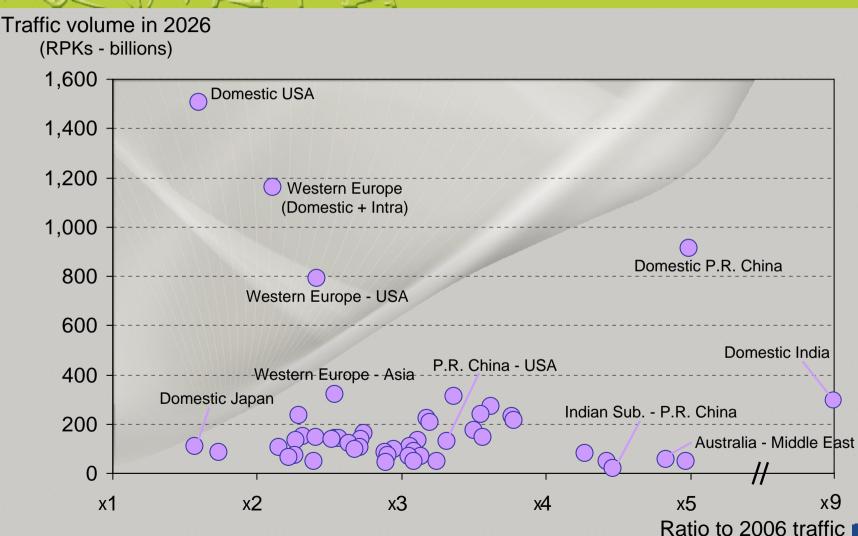
# LCC and emerging market fleets growing more than twice as fast as the others





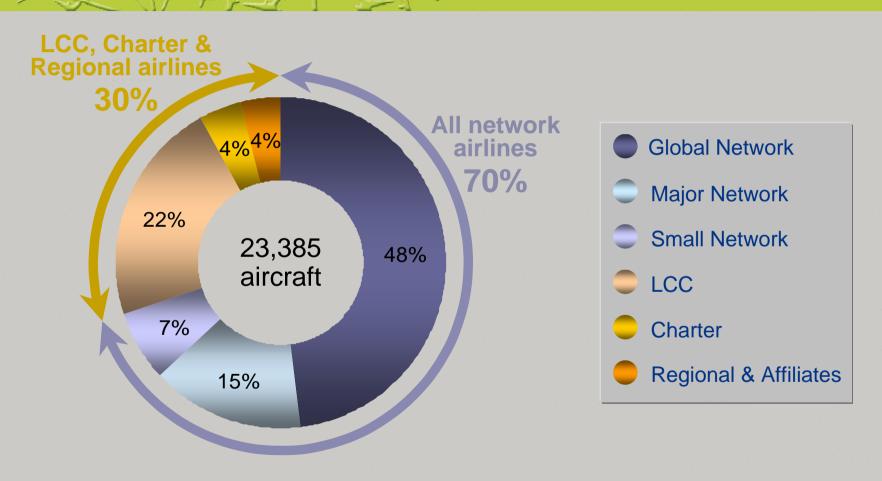


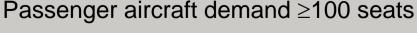
India and China fastest growing, but US remains the largest market





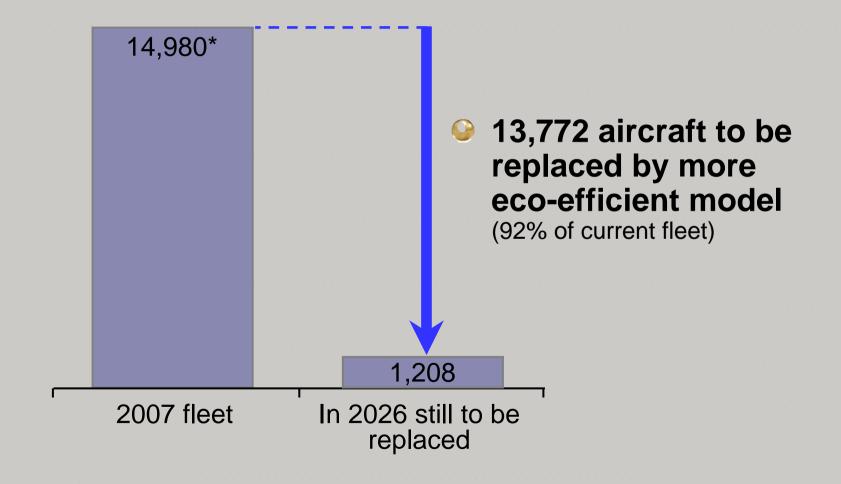
## Network airlines' demand represents 70% of total







# Large replacement opportunity for aircraft driving demand





## 20-year demand for 24,262 aircraft





16,620 single aisles



5,944 twin aisles



1,698 very large aircraft

Market value of \$2.8 trillion



## The world needs the A380

FF

- Air traffic will double in the next 15 years
- Big cities are getting bigger and driving world growth

- Operational constraints limit frequency growth
- Larger capacity means fewer flights and greater environmental responsibility

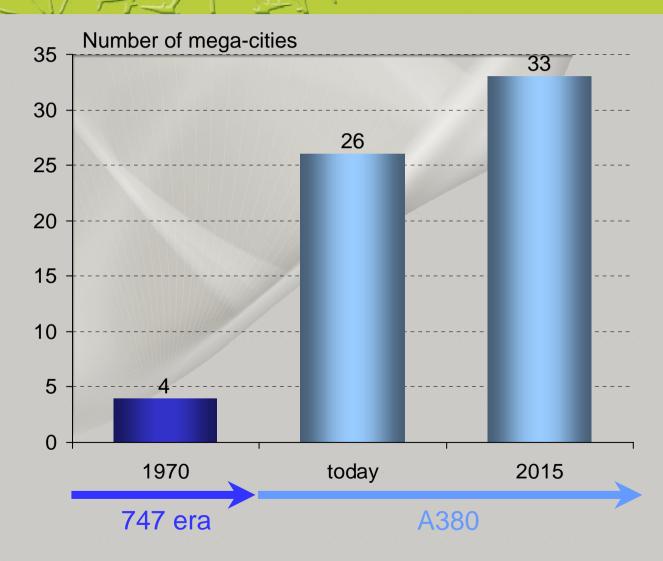


A380 – designed with the future in mind



## More mega-cities







## Larger mega-cities





### **Urban population**

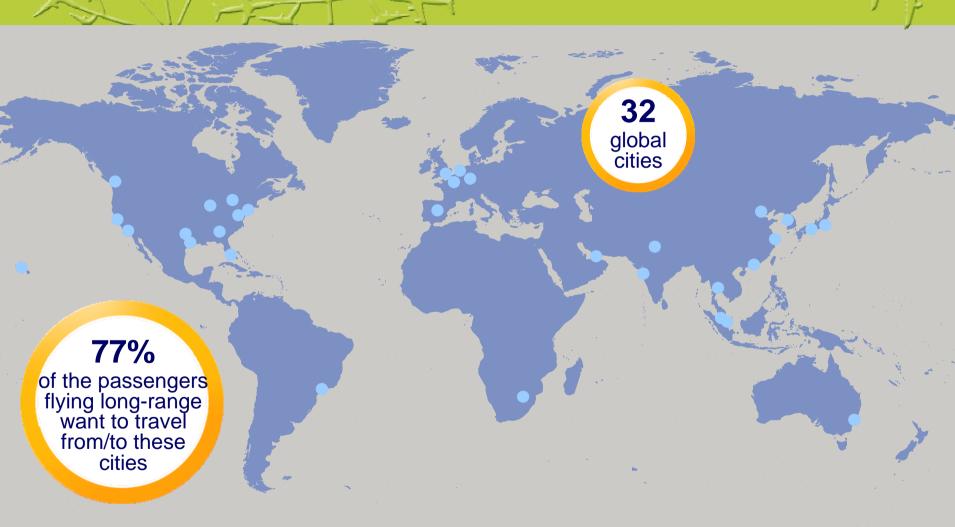
- 5-10 million
- 0 10-15 million
- 15-20 million
- 20-25 million
- >25 million







# Mega hub cities are big points of origin and destination





## The reality about hub-cities

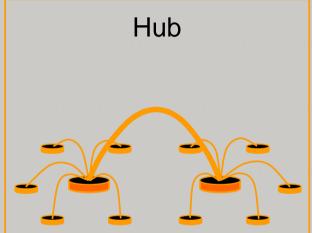
Hub cities are big points

Hub cities are getting bigger

Hub-cities are the most *dynamic* cities Hub traffic to double in 20 years

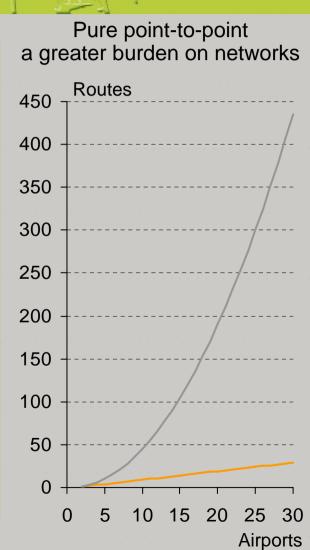


## Stronger hubs and network development

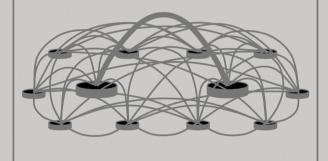


#### More efficient network

- Hubs are points too
- Improve connectivity
- Fewer flights
- Less fuel
- Less emissions
- Less noise



## Pure point-to-point



#### Less efficient network

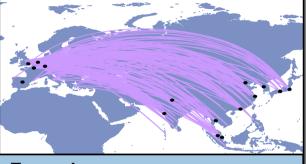
- Market development
- If traffic/frequency sufficient
- More flights
- More fuel
- Higher emissions
- Greater noise



# In 2015 60% of Europe to Asia traffic will be hub-to-hub

# Hub-to-hub **Examples** BJS-FRA, SEL-LON **Growth potential** 48 current and 3 new city pairs **Organic growth:** +14.7 million seats **Million** seats in 2015

## Hub-to-secondary



### **Examples**

TYO-VIE, HEL-BKK

#### **Growth potential**

168 current and 61 new city pairs

#### **Organic growth:**

+8 million seats

31 Million seats in 2015

#### Secondary-to-secondary



### **Examples**

BHX-LHE, MAN-HYD

#### **Growth potential**

37 current and 9 new city pairs

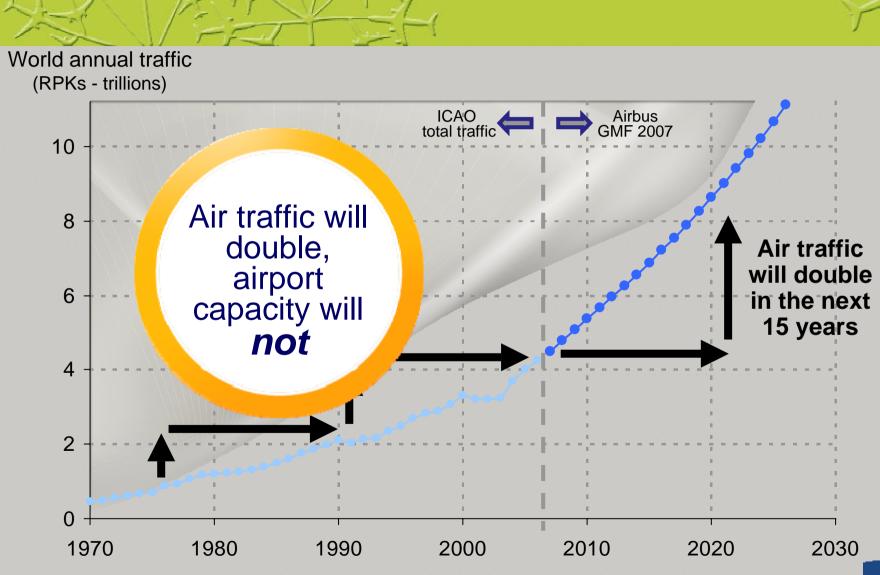
#### Organic growth:

+0.9 million seats

Million seats in 2015



## Air travel is a strong growth market





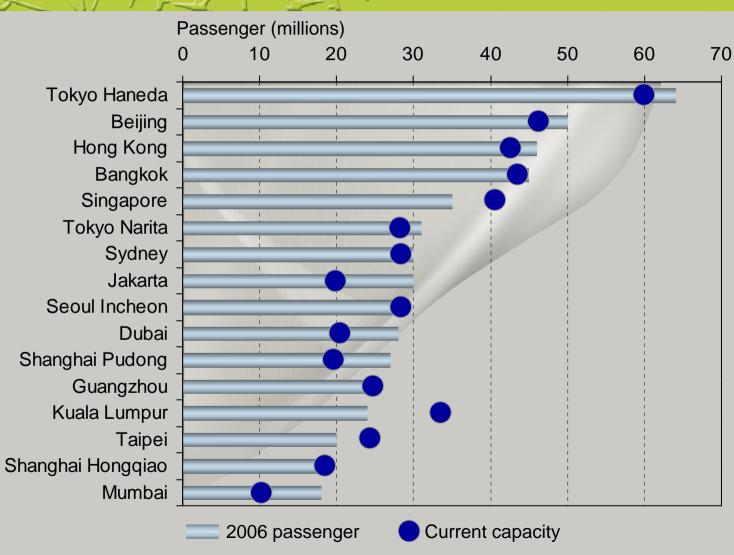
70% of the worldwide traffic concentrated in 250 airports



93 capacity constrained airport represents 64% of worldwide traffic



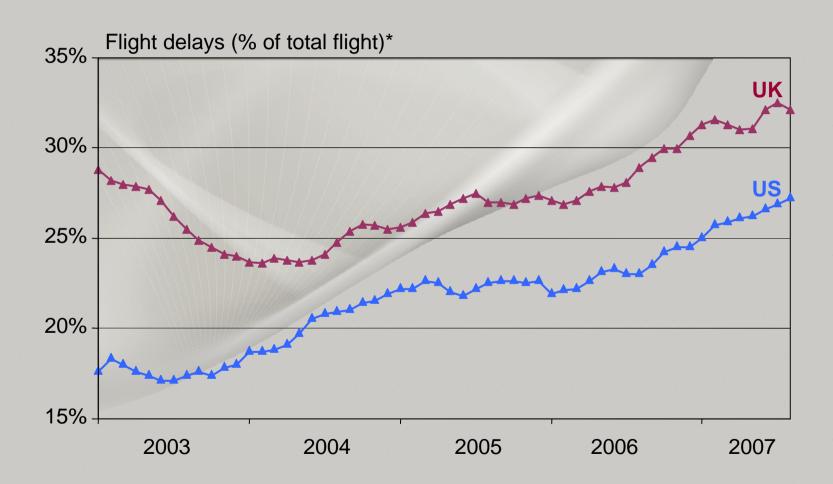
## Already operating at or near design capacity





Source: CAPA, ACI, Airbus

## More flight delays in Europe and in the US

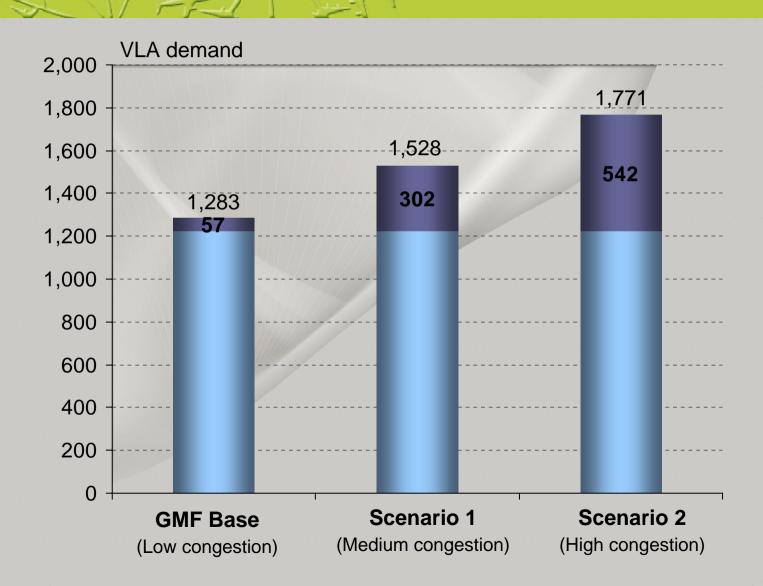


<sup>\* 12</sup> months rolling average at 15 minutes or more delay

Source: FAA, AEA, CAA, Airbus



# Worsening of congestion could push VLA demand higher





## Top ten reasons why bigger is better

- 为公库等于
  - 1. Traffic to almost treble in next 20 years
  - 2. "Hub-to-hub" is just "big point-to-big point"
  - 3. Global Hub Cities getting bigger, inhabitants richer and more internationally mobile
  - 4. People live in and want to go to global hub cities
  - 5. Passengers want more comfort and cheaper flights
  - 6. New large aircraft offer better economics
  - 7. New large aircraft are more eco-efficient
  - 8. Diminishing return of additional frequency
  - 9. Airport congestion worsening
  - 10. Airport capacity improvement limited



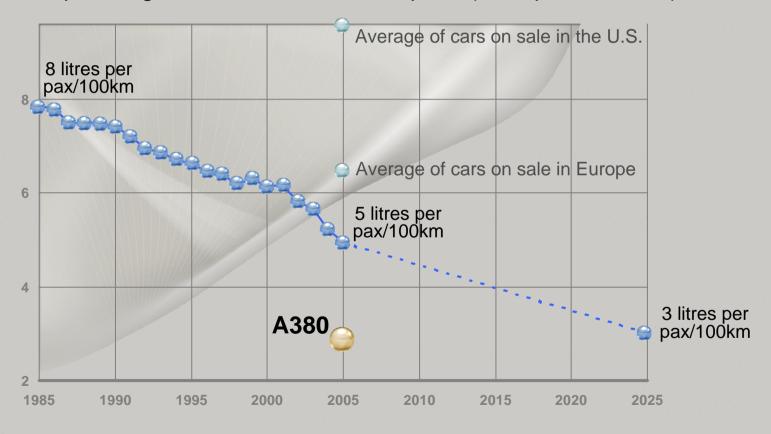
## Airbus doing more with less

- More passengers, less flights
- More passengers, less fuel consumption
- More passengers, less noise
- More passengers, less CO2 emission

## A380: more passengers, less fuel consumption

## Airbus doing more with less

Worldwide passenger air traffic fuel consumption (liters per 100 ASK)



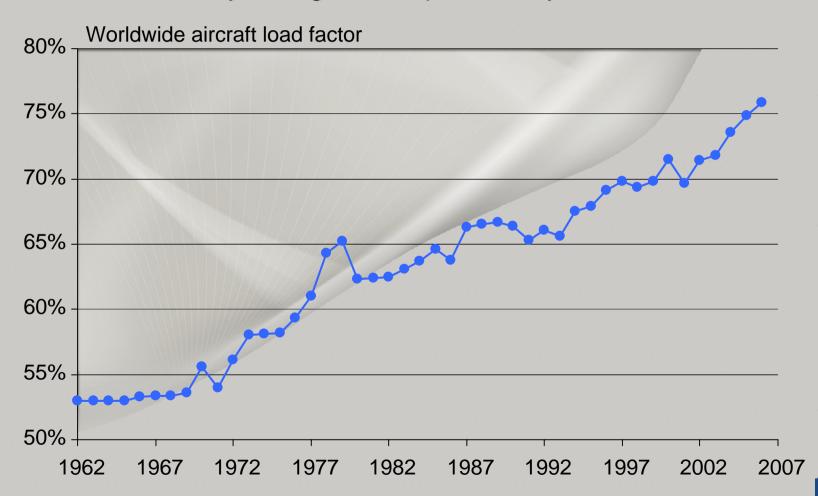
The A380 is the first aircraft to consume less than 3 litres of fuel per 100 ASK



## Like a car pool; only better

# FF

### Environmental efficiency through airline productivity





## A380: more passengers, less flights

Airbus doing more with less

"By 2016, ... the A380 could enable nearly 10 million more passengers to fly to/from Heathrow with no increase in flights"

Eryl Smith
Business Strategy, Planning and
Development Director

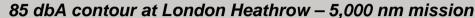
Image of London Heathrow Terminal 5, courtesy BAA

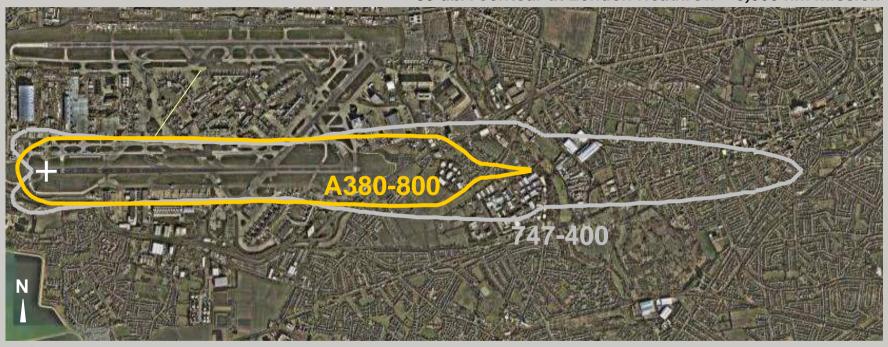
A380 maximises slot and space utilisation to the benefit of airlines, airports and the environment



## A380: more passengers, less noise

# Airbus doing more with less





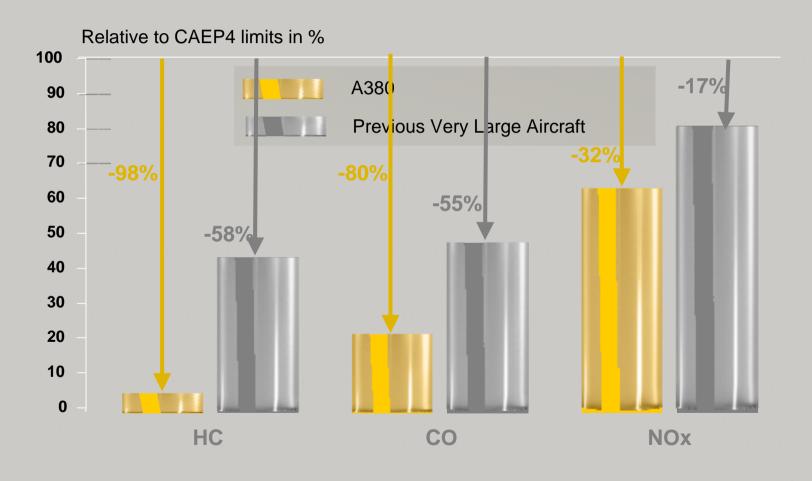
A380... half the noise footprint on departure with 40% more capacity per flight



## A380: more passengers, less emissions

## Airbus doing more with less



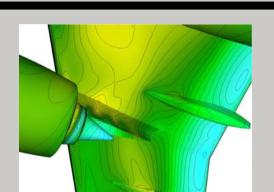




## ACARE's ambitious goals:



50% cut in CO2 emissions > Vision 2020



Aircraft manufacturers 20-25%





Operations 5-10%
Air Traffic Management





## The Airbus Way: Greener, Cleaner, Quieter, Smarter

# Global ISO 14001 Certification











Managing the **supply chain**for a shared vision of
environmental
responsibility





and maintenance for enhanced environmental performance



Mitigating the impact of manufacturing

on the environment thanks to cleaner technologies and processes





transport
solutions for minimal
infrastructure footprint



# February 1st, 2008: groundbreaking first test flight with alternative fuels





## Greener, Cleaner, Quieter, Smarter



- 1st flight from Filton to Toulouse
- GTL provided by Shell
- GTL to be made of gas or organic plant matters
- 1st step in long term testing to evaluate viable and sustainable alternative fuel of the future
- GTL has attractive characteristics for local air quality (no sulphur) and fuel burn

















# Greener by recycling



# Greener, Cleaner, Quieter, Smarter

Developing environmental best practices for aircraft dismantling and recycling



Airbus PAMELA project



## Airbus doing more with less

# Greener, Cleaner, Quieter, Smarter

FF

- Vision
- Ambition
- Innovation
- Determination



Airbus leading the industry in eco-efficiency



# Flying by nature



