



China Aviation Oil (Singapore) Corporation Ltd  
中国航油（新加坡）股份有限公司

21 September 2017

# Enabling Growth through CAO's Global Integrated Value Chain 通过CAO全球一体化价值链实现增长

Corporate Access Day 2017  
2017年投资者接待日



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# Positioned for Growth: Transportation Fuels 为增长奠定基础—运输燃料

# World Energy Supply Chain Today

## 现今的世界能源供应链



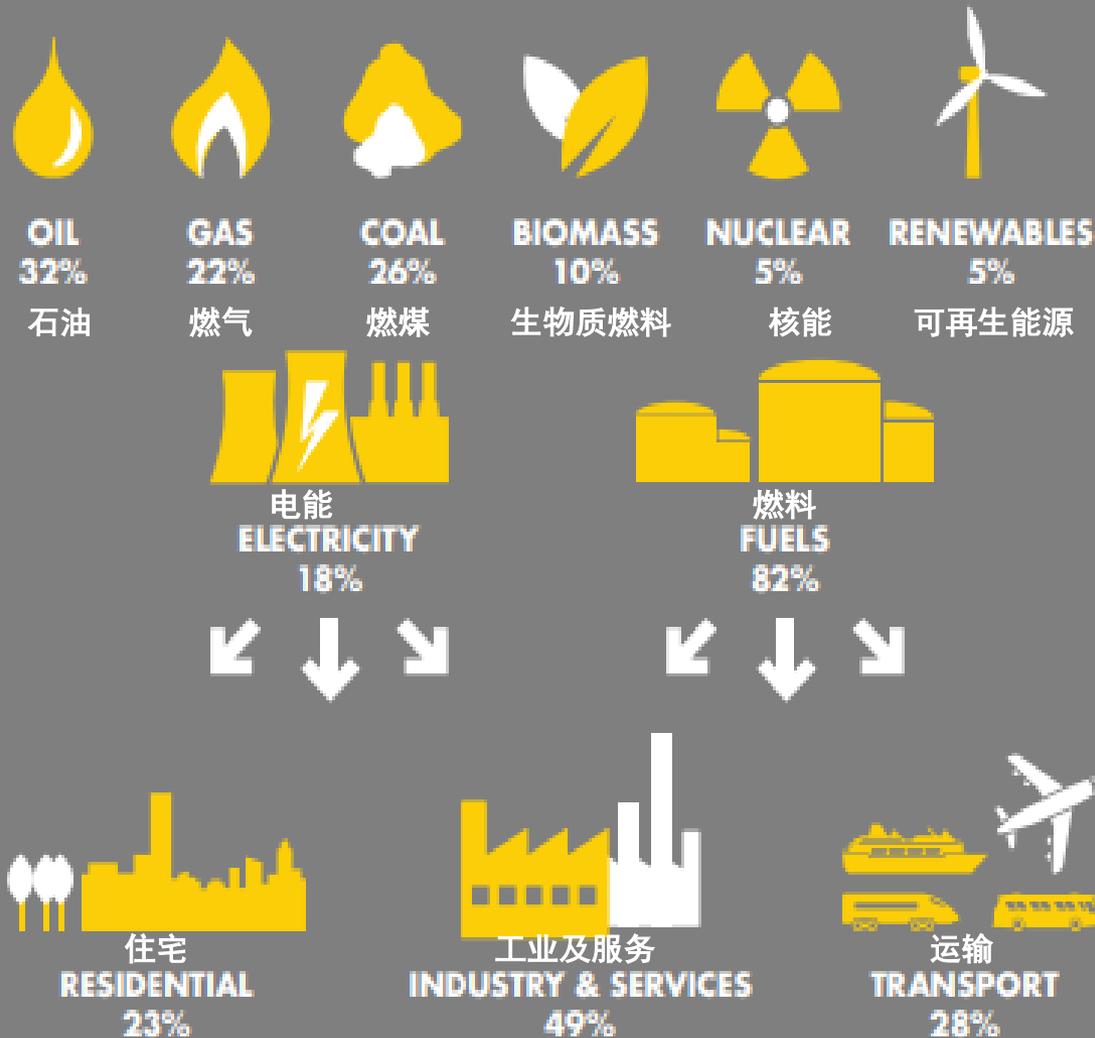
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*Globalisation, increased consumerism from emerging markets will continue to drive growth in transportation fuels as demand for passenger cars, growth in other transportation modes pushes overall demand higher*

*全球化和新兴市场消费的增加,将继续带动运输燃料需求的增长。对车辆的需求以及其他交通方式的增长将增加对运输燃料的总体需求。*

Source: Shell – World Energy Model: A View to 2100 & IEA - EU Refining Forum, Brussels 2017 Presentation

资料来源:壳牌-世界能源模式:展望2100 & 国际能源机构-欧盟炼油论坛,布鲁塞尔2017年报告



# Transportation Fuels Lead World Energy Demand Growth

## 运输燃料引领世界能源需求的增长



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- Global economic growth and population will increasingly spur greater energy demand, impacting the energy mix **with demand for transportation fuels up 25% in 2040** underpinned by :

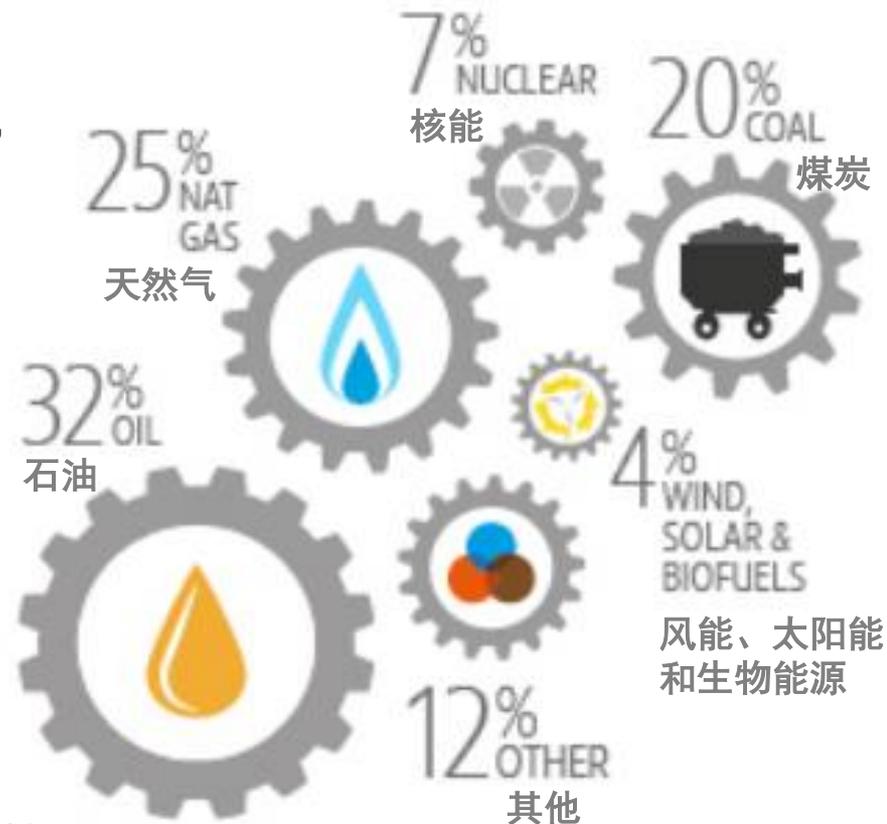
全球经济发展和人口增加将进一步刺激能源需求的增长,影响能源组合,其中运输燃料的需求将在2040年增长25%,推动因素有以下几点:

- ✓ globalisation;  
全球化;
- ✓ rising middle income demographics worldwide;  
全球中产阶级人口的增加;
- ✓ increasing urbanisation;  
城市化进程加快;
- ✓ increase in trade and/or consumption activities including e-commerce and travelling.  
贸易/消费活动,包括电子商务和旅游的不断增长。

- Oil will remain the world's primary energy source, fulfilling 1/3 of all demand notwithstanding the emergence of new/alternative energy.

尽管有新能源/替代能源的崛起,石油仍是全球最主要的燃料来源,满足全球三分之一的能源需求。

## World Energy Supply Chain in 2040 2040年世界能源供应链



Source: Exxon Mobil – 2017 Outlook for Energy: A View to 2040  
资料来源: 埃克森美孚-2017能源展望:展望2040年

# Globalisation Fuels Growing Demand for Transportations Fuels

## 全球化推动运输燃料需求的增长



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Global transportation demand will grow 25% by 2040\*  
至2040年，国际运输需求将增长25%



GDP growth will be up 60% for OECD countries and increase 175% for non-OECD countries  
经合组织国家的国民生产总值将增长60%，非经合组织国家增加175%。



World population to hit 9 billion by 2040; middle income dominates over 50% of global population  
至2040，世界人口将达到90亿；中等收入会占全球人口的50%以上。



Projected 5 % annual increase in global air passenger traffic from 2015  
从2015年开始，预计全球航空客运量的年度增长为5%

**Growth in economic activities, rising middle income demographics coupled with increasing penchant for travel drives trade of goods and services, leading to growing demand for transportation fuels.**

**经济活动的增长、中等收入人口的增加以及旅行需求的增加推动了商品和服务贸易，进而增加了对运输燃料需求。**

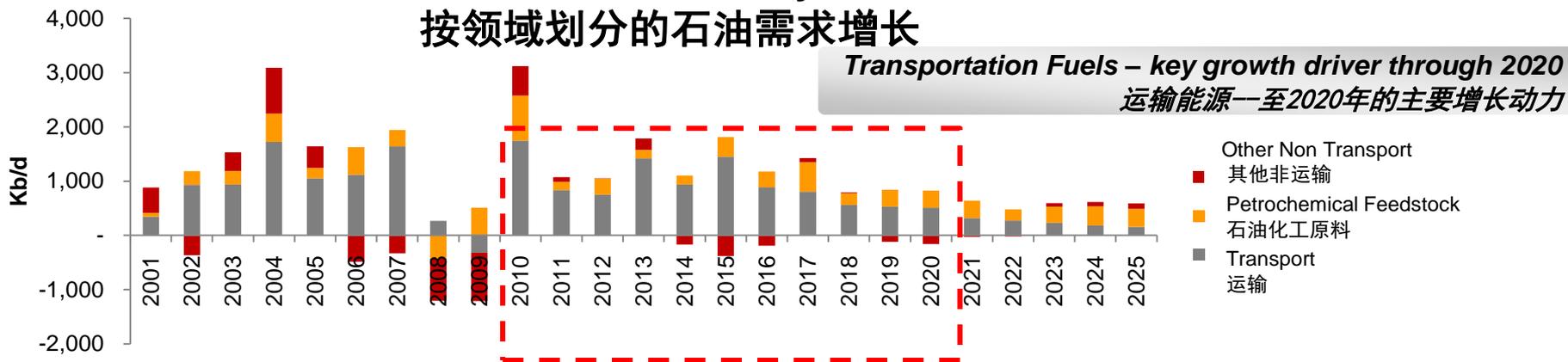
Source: Exxon Mobil – 2017 Outlook for Energy: A View to 2040 & Boeing 资料来源:埃克森美孚-2017能源展望:2040年展望与波音公司

# Transportation Fuels Drive Global Growth for Oil Demand 运输燃料推动全球石油需求的增长

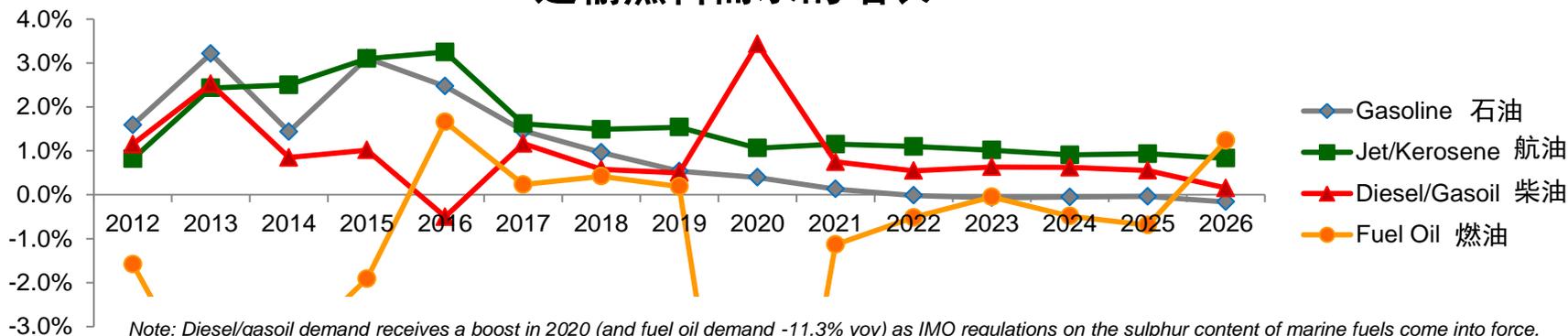


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## Oil Demand Growth by Sector 按领域划分的石油需求增长



## Transportation Fuels Demand Growth 运输燃料需求的增长



Note: Diesel/gasoil demand receives a boost in 2020 (and fuel oil demand -11.3% yoy) as IMO regulations on the sulphur content of marine fuels come into force.  
注：由于国际海事组织关于船用燃料的硫磺含量规定生效，柴油需求会在2020年得到高速增长（燃油需求年同比下降11.3%）。

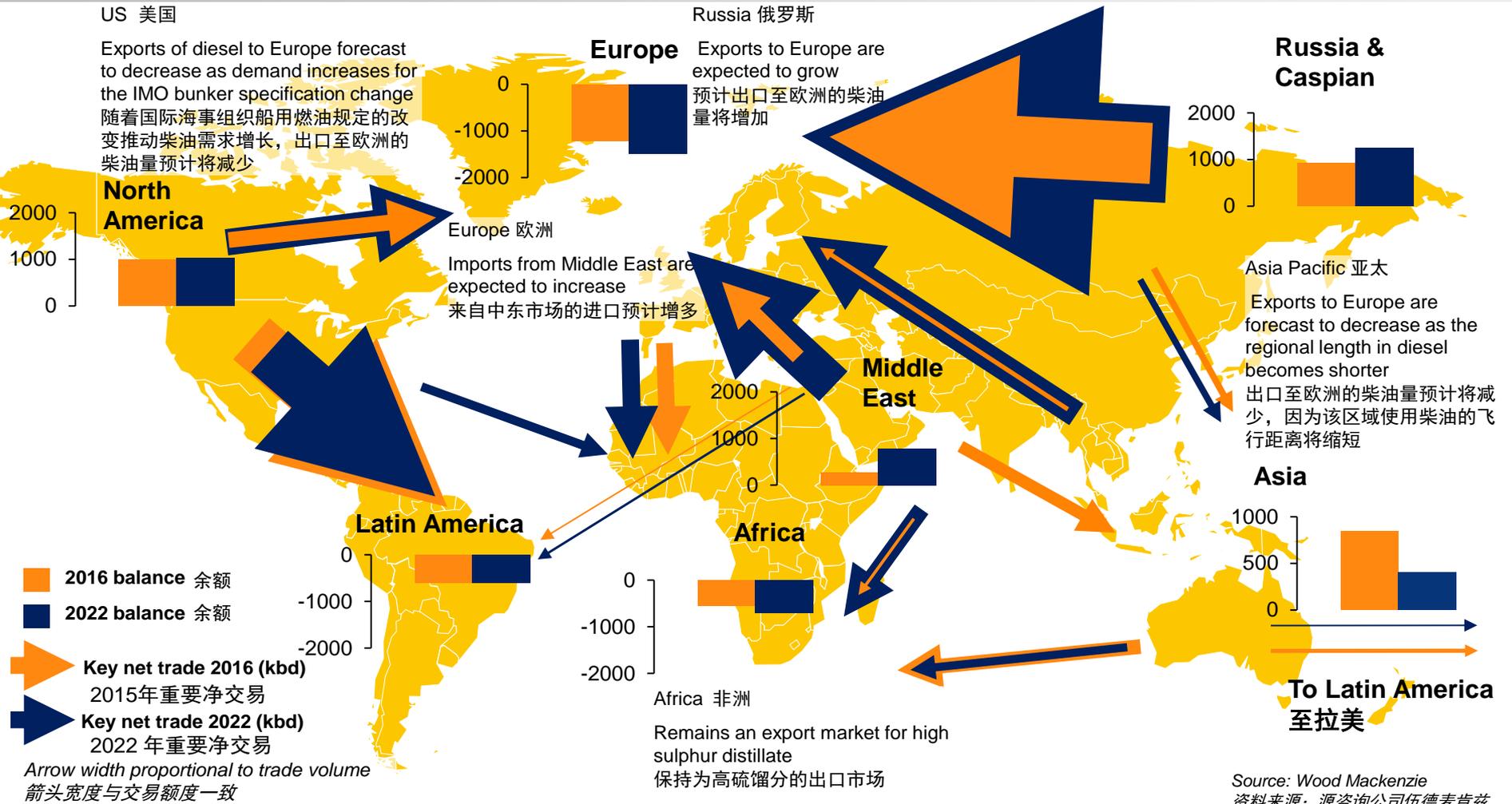
Source: Wood Mackenzie – Global Product Markets Long-term Outlook H2 2016  
资料来源：源咨询公司伍德麦肯兹-全球产品市场长期展望 2016 下半年

# Gasoil Global Trade Flows 全球柴油贸易流



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## Gasoil/Diesel Net Trade: 2016 vs 2022 柴油净贸易量：2016与2022年的对比



Source: Wood Mackenzie  
资料来源：源咨询公司伍德麦肯兹



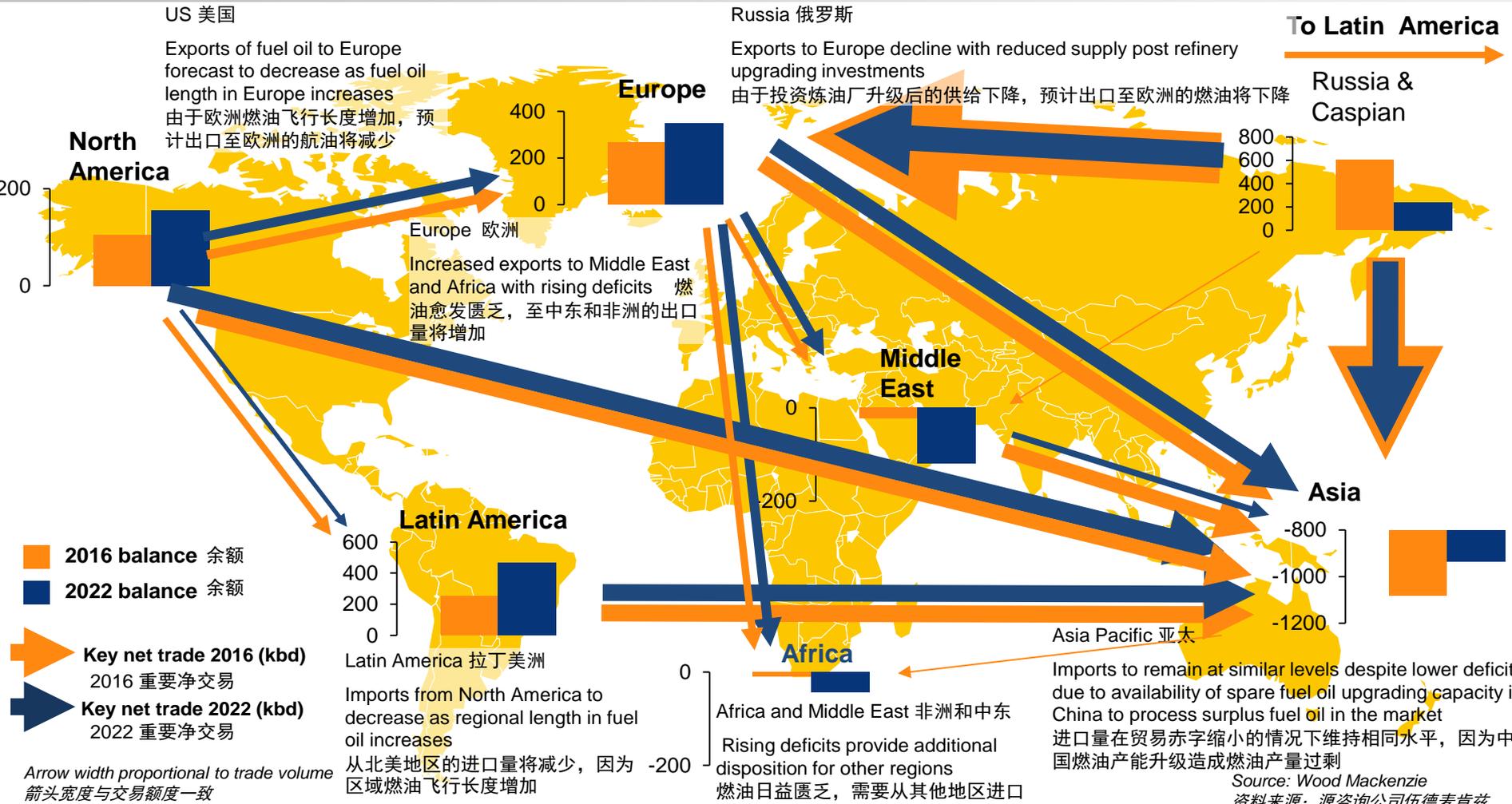
A Singapore-listed company and a member of the Global Trader Programme  
新加坡上市公司、“全球贸易商计划”成员

# Fuel Oil Global Trade Flows 燃油全球贸易流



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## Fuel Oil Net Trade Changes: 2016 vs 2022 燃油净贸易量变化: 2016与2022年对比



Source: Wood Mackenzie  
资料来源: 源咨询公司伍德麦肯兹



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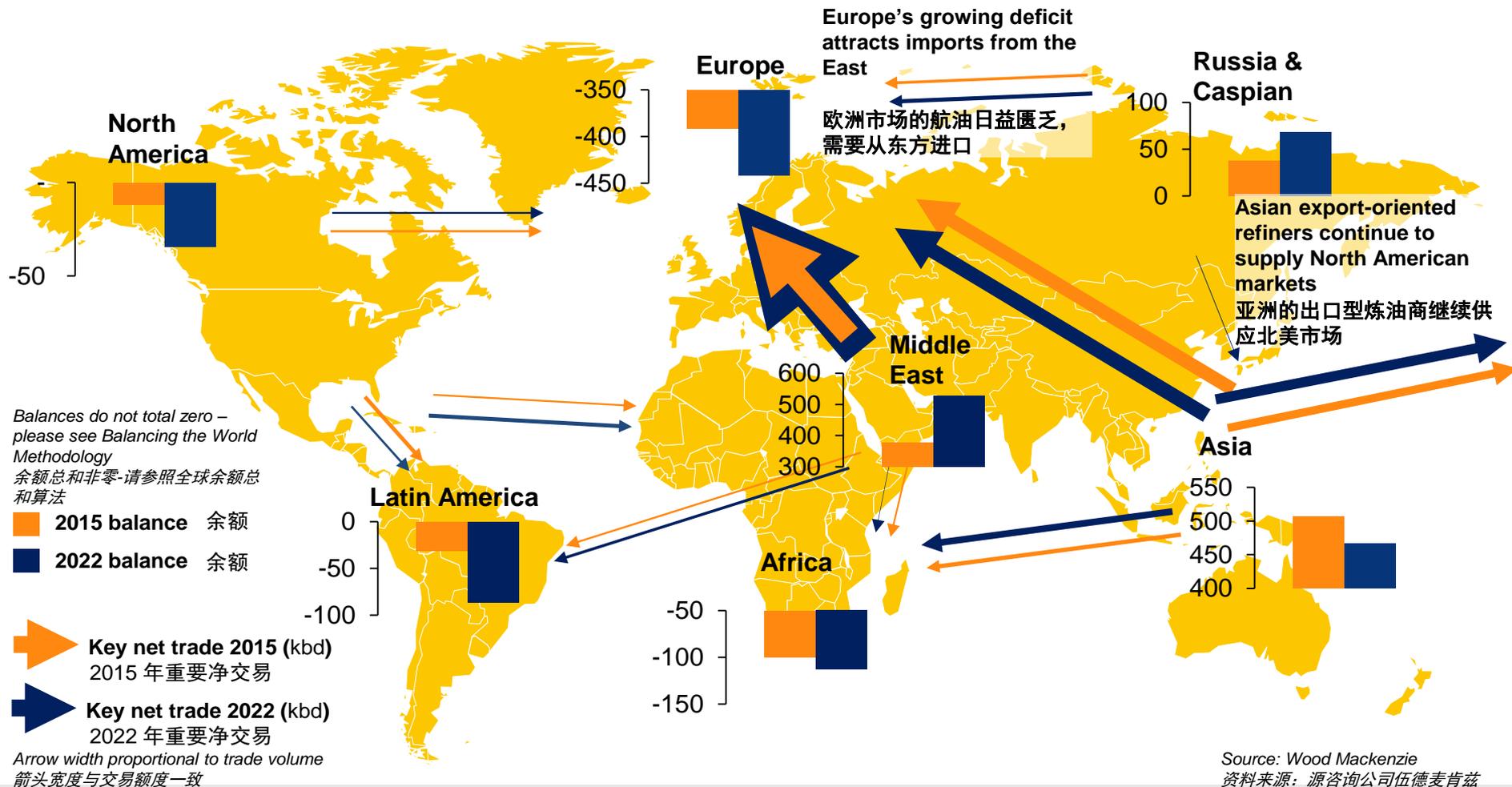
# Jet Fuel Global Trade Flows

## 全球航油贸易流



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### Jet/Kero Net Trade: 2016 vs 2022 航油净贸易量：2016年与2022年的对比



# Aviation: One of the Fastest-Growing Transport Sectors

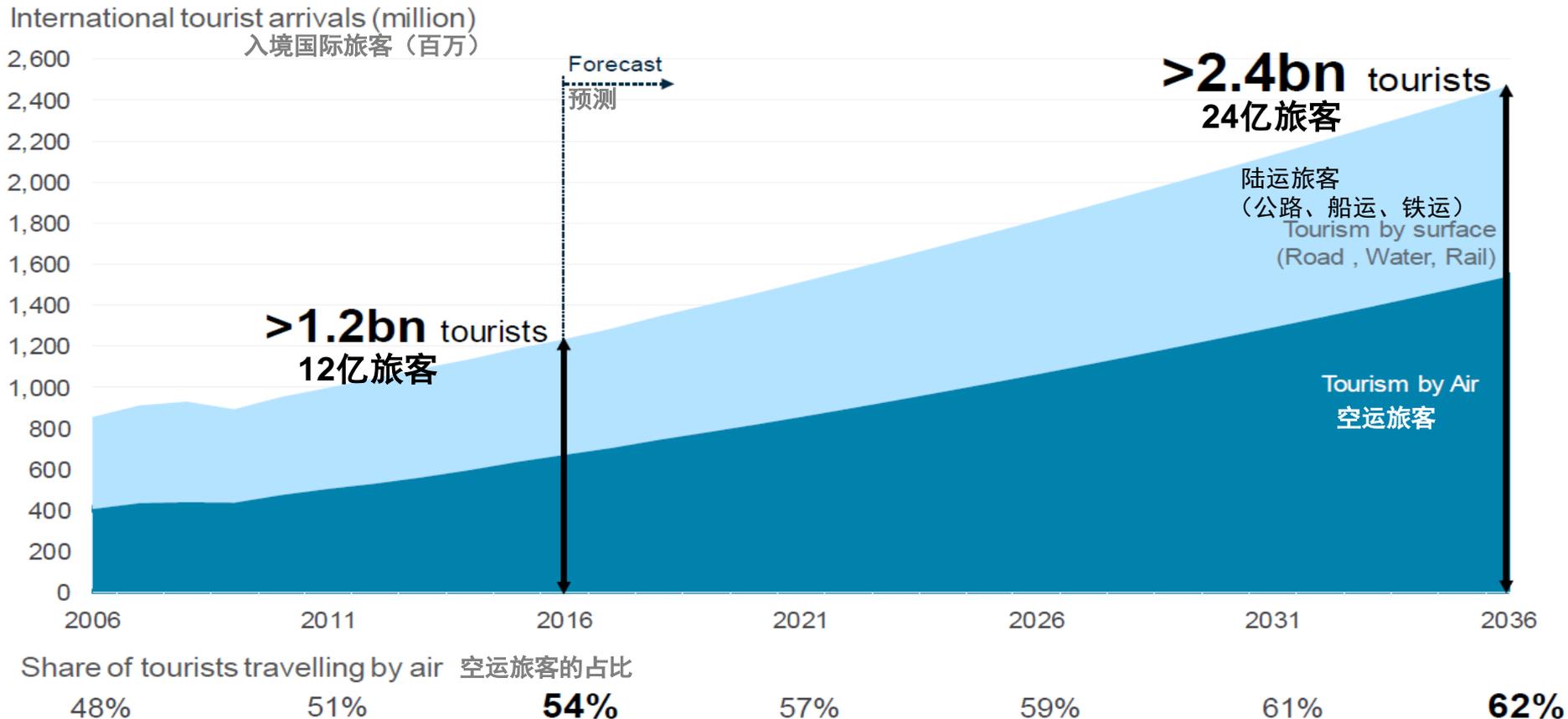
## 航空：增长最快的运输领域之一



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

~至2036年，60%的国际旅客将选择乘搭飞机



Source: UNWTO, Sabre GDD, Airbus GMF 2017

资料来源：联合国世贸组织、Sabre GDD、2017年空客全球市场预测

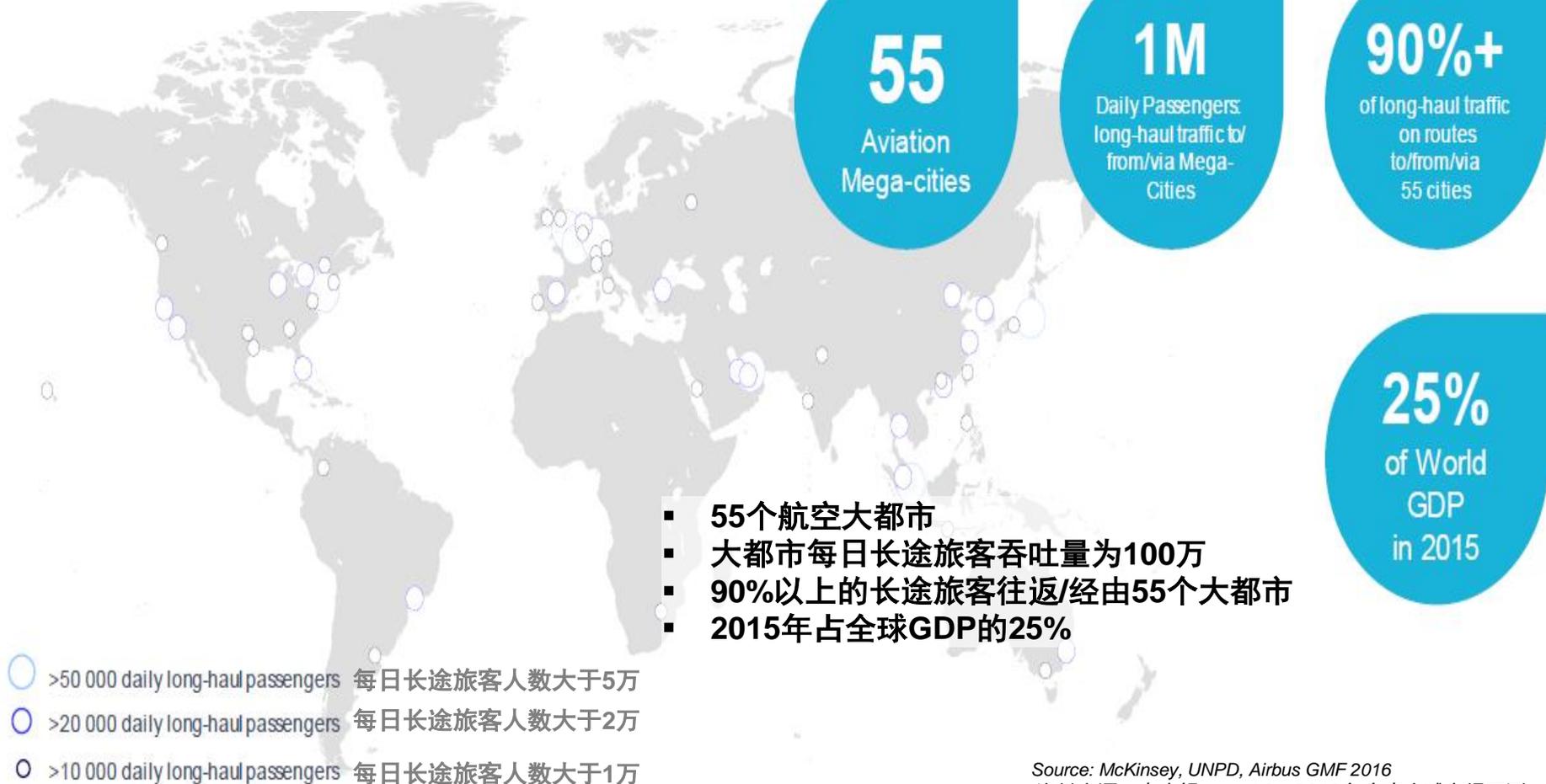
# Today's 55 Aviation Mega-Cities

## 全球目前有55个航空大都市



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### 2015 Aviation Mega-Cities 2015年航空大都市



Source: McKinsey, UNPD, Airbus GMF 2016

资料来源: 麦肯锡, UNPD, 2016年空客全球市场预测

# 93 Aviation Mega-Cities by 2035

## 到2035年，将会有93个航空大都市



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### 2035 Aviation Mega-Cities 93个航空大都市



**93**  
Aviation  
Mega-cities

**2.5M**  
Daily Passengers:  
Long-Haul traffic  
to/ from/via Mega-  
Cities

**95%+**  
of long-haul traffic  
on routes  
to/from/via  
93 cities

**35%**  
of World  
GDP  
in 2035

- 93个航空大都市
- 大都市每日长途旅客吞吐量为250万
- 95%以上的长途旅客往返/经由55个大都市
- 2035年占全球GDP的35%

Source: McKinsey, UNPD, Airbus GMF 2016  
资料来源: 麦肯锡, UNPD, 2016年空客全球市场预测

# North America Leads Today

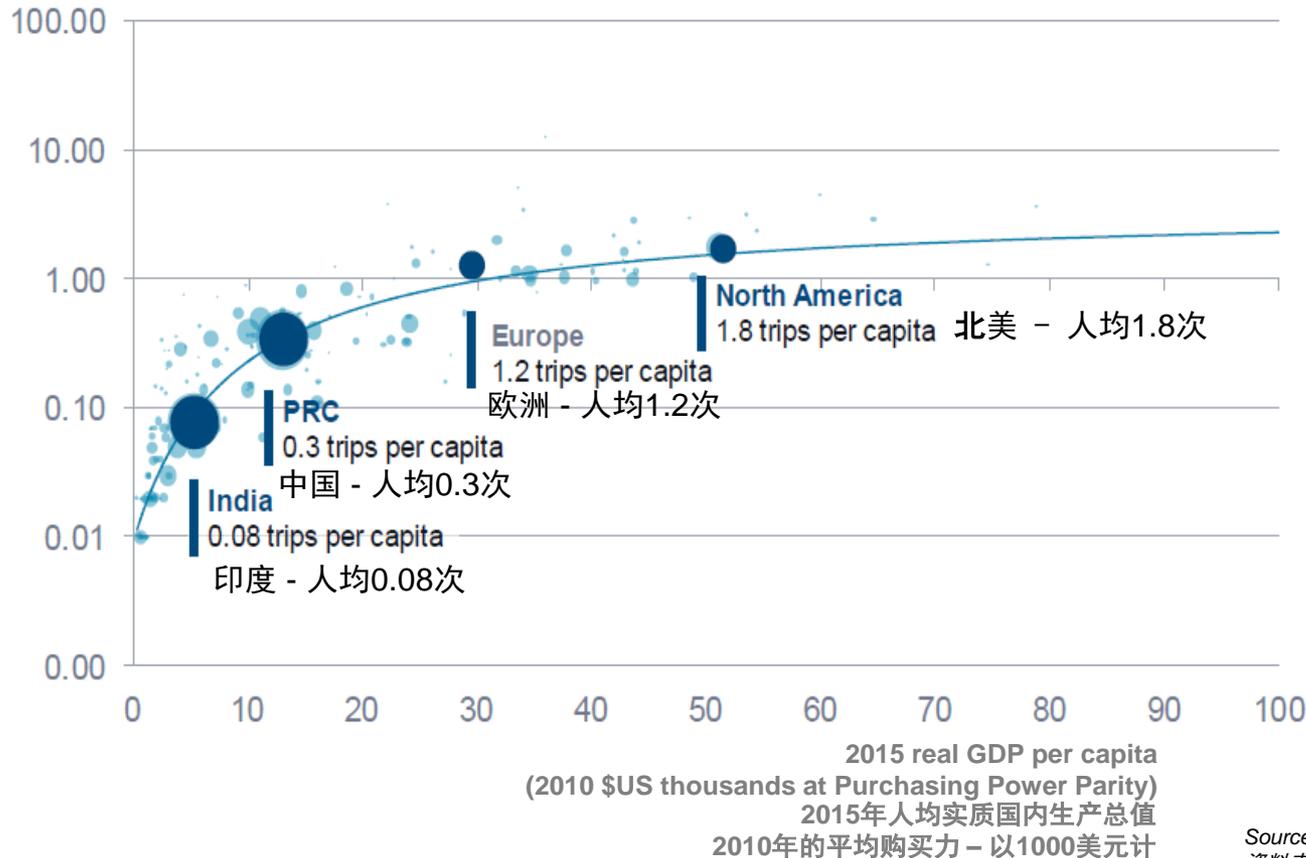
## 北美目前引领市场



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## Europeans and North Americans are the most willing to fly... 欧洲人和北美人最愿意飞行。。。

2015 trips per capita 2015年的人均旅行次数



Propensity to travel

25%

of the population of the emerging countries took a trip a year in 2015

旅游倾向：  
2015年，  
25%的新兴国家人口将每年  
出国一次

Source: Sabre, IHS Economics, Airbus GMF 2016  
资料来源: Sabre, IHS Economics, 2016年空客全球市场预测

# China Leads Tomorrow 中国是未来的领导者

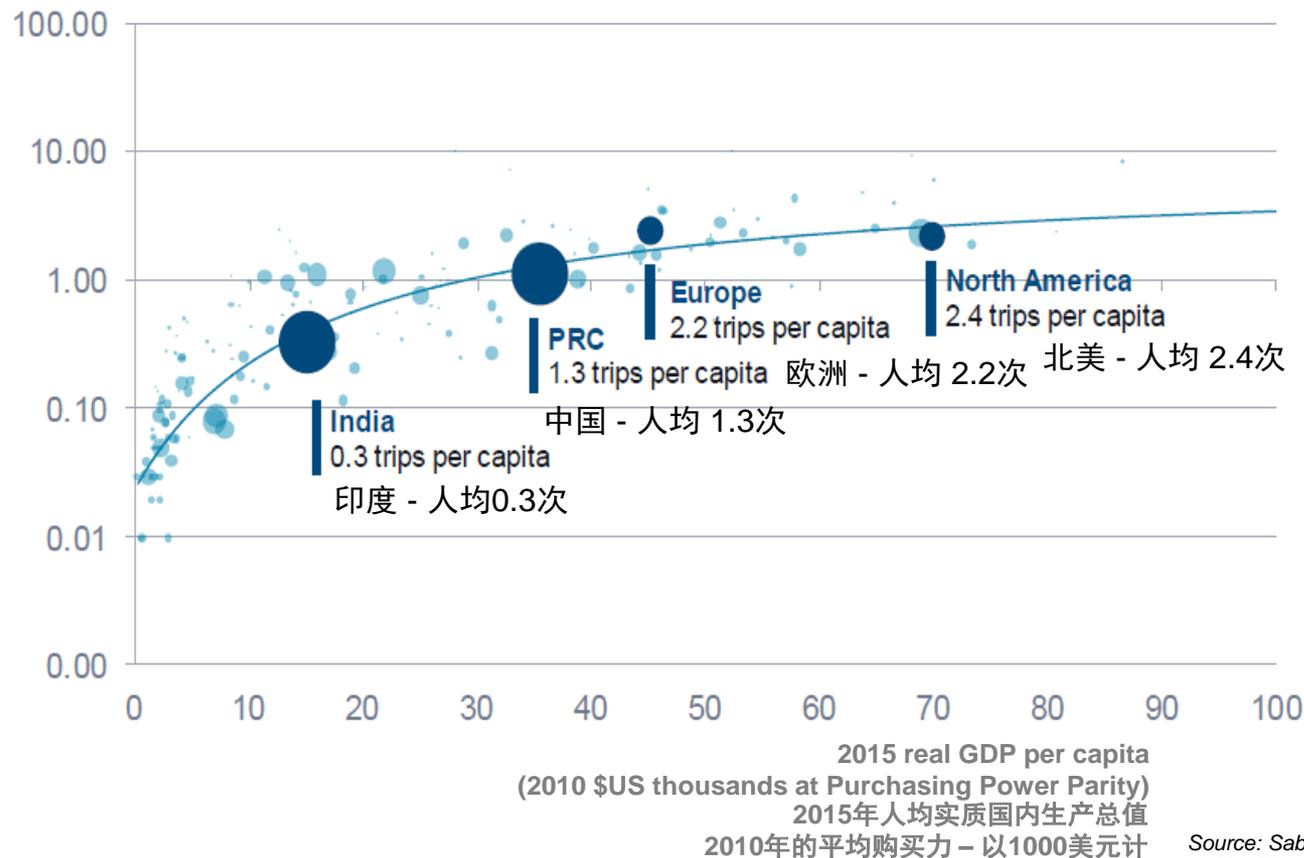


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...but by 2035, PRC will reach current European levels

...但是到2035, 中国将达到欧洲目前的水平

2035 trips per capita 2035年的人均旅行次数



Source: Sabre, IHS Economics, Airbus GMF 2016  
资料来源: Sabre, IHS Economics, 2016年空客全球市场预测

Propensity to travel

-

75%

of the population of the emerging countries will take a trip a year in 2035

旅游倾向:  
到 2035 年,  
75% 的新兴国家人口将每年出国一次

# China Leads in Air Transport Growth

## 中国引领航空运输增长



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### Air transport growth is highest in expanding regions

### 航空运输在新兴市场增长最高

#### Emerging/Developing 新兴/发展中区域

China	中国
India	印度
Middle East	中东
Rest of Asia	亚洲其他地区
Africa	非洲
CIS	独联体
Latin America	拉美
Central Europe	中欧



# 6.4

billion people  
in 2016

2016年人口为64亿

Yearly RPK Growth  
2016 - 2036

年客运周转量增长

# +5.8 %



#### Advanced 发达区域

Western Europe	西欧
Israel	以色列
North America	北美
Japan	日本
Singapore	新加坡
South Korea	韩国
Australia/New Zealand	澳大利亚/新西兰



# 1

billion people  
in 2016

2016年人口为10亿

# +3.2 %



Source: IHS Economics, Airbus GMF 2017

资料来源: IHS Economics, 2017年空客全球市场预测

# Robust Growth of Chinese Civil Aviation Industry



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- 77 Chinese airports had over one million air passengers each in 2016, and together, they handled 95.8% of total air passengers at Chinese airports:  
2016年, 77个中国机场中, 每个机场接纳旅客多达一百万人次, 在全中国机场旅客人次中占比95.8%:
  - ✓ Air passenger throughput was 1.02 billion in 2016, up 11.1% year-on-year with an increase of 22.7% increase in international passengers to 51.6 million;  
2016年, 航空旅客吞吐量为10.2亿人次, 同比增长11.1%; 国际旅客增加22.7%, 达到5160万人次;
  - ✓ Air traffic turnover was 96.3 billion billion tonne-kilometres, up 13% from 2015.  
航空运输总周转量为963亿吨公里, 比2015年增加13%。

**PRC Civil Aviation Industry**  
**Total Air Traffic Turnover**  
民航运输总周转量  
(2012 – 2016)



**PRC Civil Aviation Industry**  
**Total Passenger Throughput**  
民航运输机场旅客吞吐量  
(2012 – 2016)



Source: CAAC  
资料来源: 中国民用航空总局

# Global Aviation Traffic Boom will underpin

## CAO's Long-term Growth

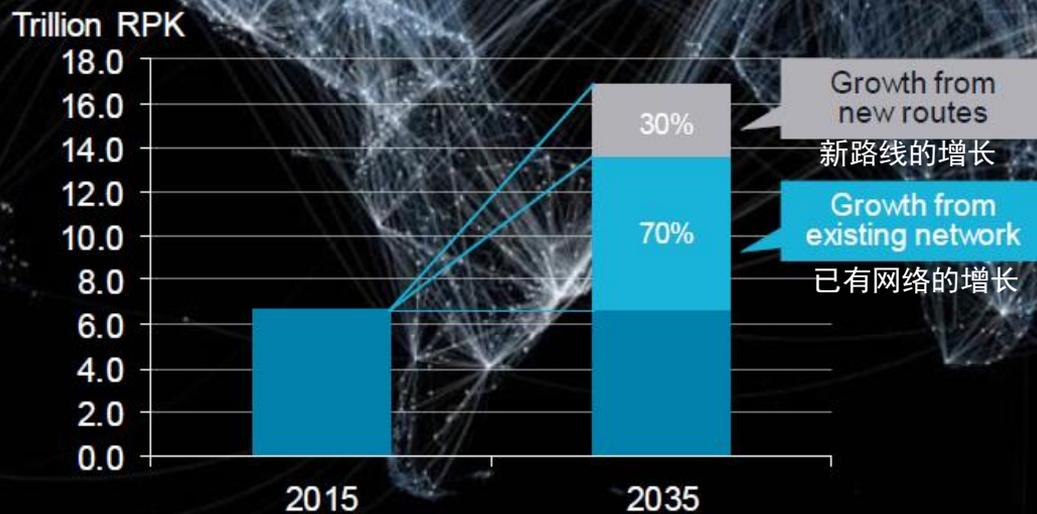
### 全球航空运输蓬勃发展的态势将支持CAO的长期发展



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70% of traffic growth until 2035 will come from existing network

至2035, 70% 的交通增长将来自现有的网络



资料来源: 2016年空客全球市场预测

Source: Airbus GMF 2016



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**CAO: Largest Jet Fuel Supplier and Trader  
in Asia Pacific**

**CAO: 亚太地区最大的航油供应商和贸易商**

# CAO is the Proxy for China's Burgeoning Aviation Industry

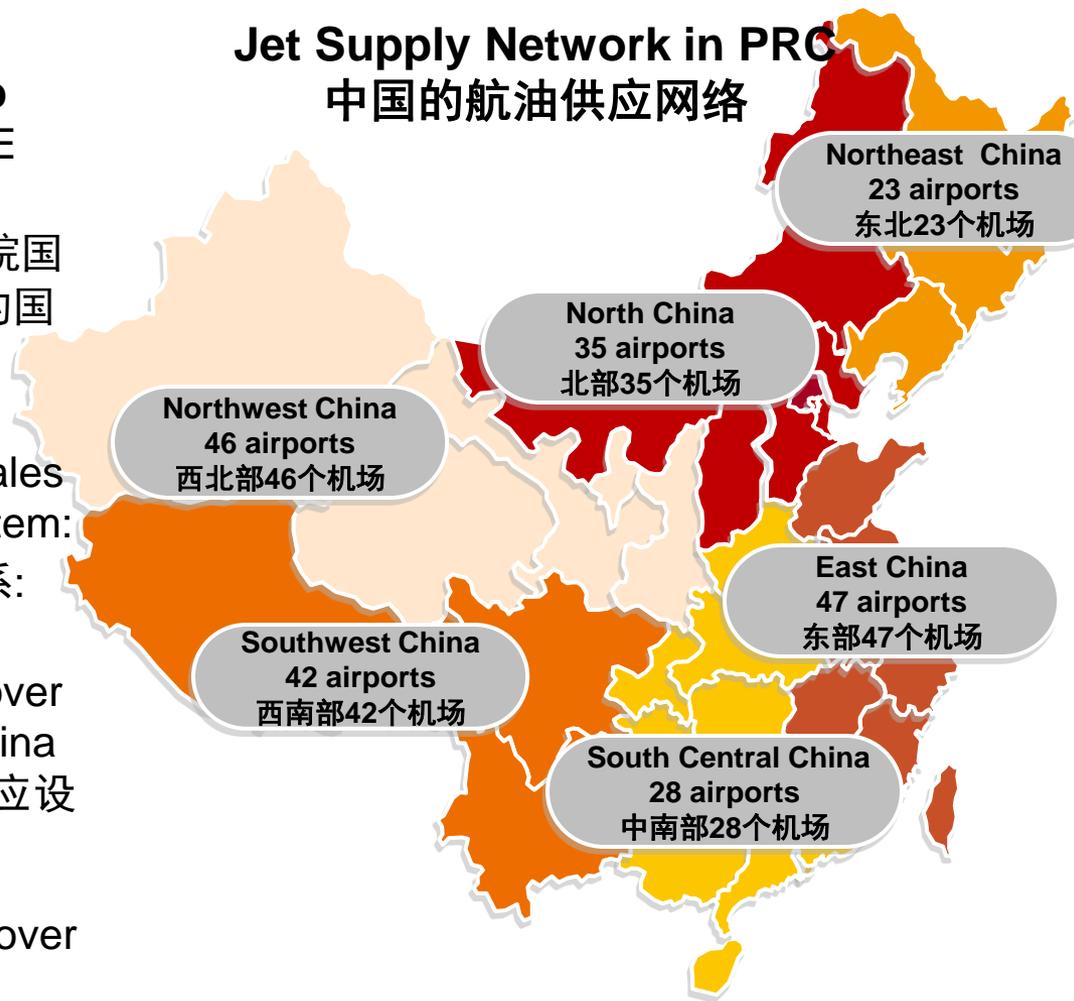
## CAO是中国蓬勃发展航空业的代表



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中国航油(新加坡)股份公司

- CAO is the **international platform of China National Aviation Fuel Group Corporation (CNAF)** - a Central SOE directly under SASAC  
 CAO是中国航空油料集团公司（国务院国有资产监督管理委员会的国有企业）的国际平台
- CNAF has an extensive nationwide sales network, logistics and distribution system: 密集的全国销售网络和物流、分销体系:
  - ✓ owns jet fuel supply facilities at over **210** airports across mainland China 在中国**210**多个机场拥有航油供应设施
  - ✓ provides refuelling services to over **200** airline companies 向超过**200**家航空公司提供加注服务

### Jet Supply Network in PRC 中国的航油供应网络



# CAO: Poised for Growth

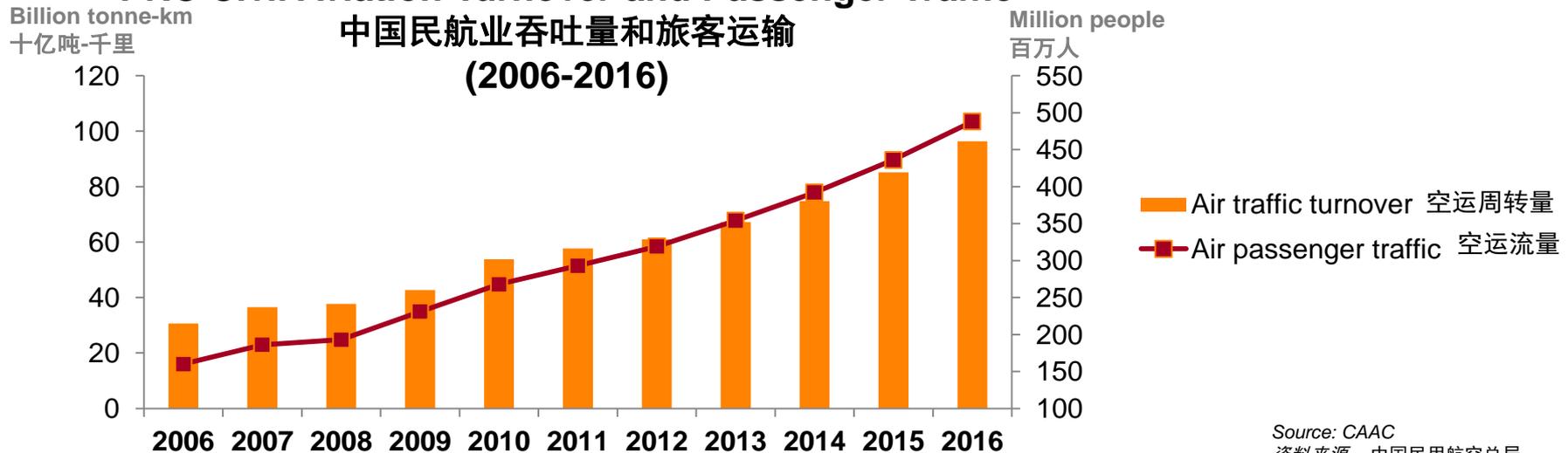
## CAO: 蓄势待发



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- CAO will sustain growth momentum as **demand for jet fuel continues** to be supported by:  
CAO增长势头持续，航油需求得益于以下因素：
  - ✓ growth in China's civil aviation industry;  
中国民航业的增长；
  - ✓ growth in CAO's aviation marketing business as CAO continues to expand its supply network at overseas airports and leverage on its competitive advantage as the key supplier of imported jet fuel to China's burgeoning civil aviation industry.  
CAO利用中国航油进口商的重要竞争优势，拓展海外机场供应网络，CAO航空营销业务将持续发展。

### PRC Civil Aviation Turnover and Passenger Traffic



Source: CAAC  
资料来源：中国民用航空总局

# CAO's Key Strategic Role in PRC Jet Fuel Import Market

## CAO 在中国航油进口市场的重要战略地位



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中国航油(新加坡)股份公司

- **Key licensed importer** of jet fuel into China  
中国主要航油进口商
- Supply up to **40%** of total jet fuel demand in the Chinese civil aviation industry  
供应中国民航业 **40%** 的航油总需求
- Supply to **3 key international airport hubs**, namely Beijing Capital International Airport, Shanghai Pudong International Airport (SPIA) and Guangzhou Baiyun International Airport  
供应给 **3个主要国际机场**, 即北京首都国际机场、上海浦东国际机场和广州白云国际机场
  - ✓ Airports in Beijing, Guangzhou and Shanghai handled 26.2% of total air passenger throughput at Chinese airports  
北京、广州和上海的机场旅客量占中国机场旅客总量的26.2%
  - ✓ Total aggregate **air passenger traffic for the PRC** civil aviation industry increased 11.9% year-on-year to 488 million in 2016  
2016年, 全国**航空客运总量**同比增加**11.9%** 至**4.88亿**



Supply locations in mainland China  
中国大陆供应地点

# Aviation Gas: A Growing Niche Product

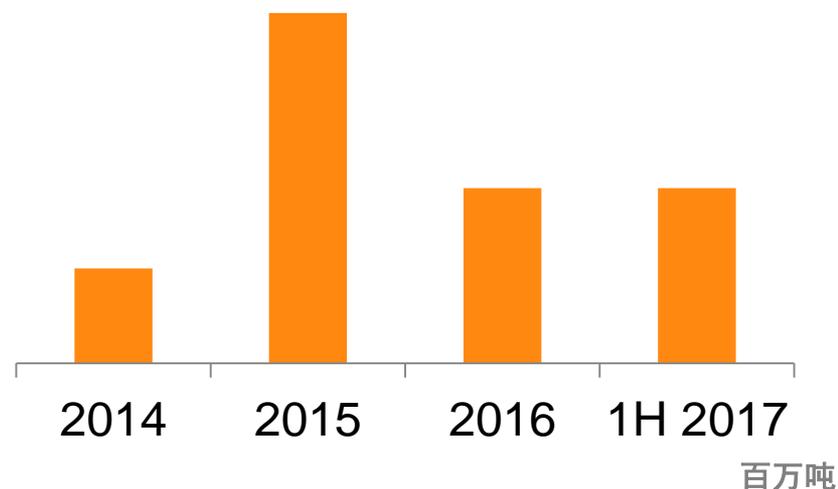
## 航气：增长中的精专产品



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- Importer of avgas to the PRC  
中国重要的航汽进口商
- China continues to be one of the fastest growing aviation markets, buoyed by increasingly affluent Chinese population's demand for international travel and private aircrafts  
中国依然是增长最快的航空市场，主要由于中国人愈加富裕，对出国和私人飞机需求的增加
- China's general aircraft fleet is expected to surpass 5,000 by 2020 at an estimated annual growth rate of 19%  
中国的通用飞机数量预计在2020年超过5000架，年增长率为19%

## Avgas Supply Volume 航汽供应量



**CAO currently supplies avgas internationally with exclusive distribution rights in 14 Asia Pacific countries**

**CAO在全球供应航汽，并在14个亚太国家拥有独家经销权**

Source: CAAC  
资料来源：中国民用航空总局

# CAO's Diversified and Resilient Product Portfolio of Transportation Fuels

## 中国航油的多元化强劲运输燃料产品



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### Jet Fuel 航油

- Key supplier of imported jet fuel to the PRC Civil Aviation industry  
中国民用航空市场的主要航油进口商
- Largest purchaser & trader of physical jet fuel in Asia Pacific  
亚太地区最大的航油现货买家与贸易商



### Gasoil 柴油

- Established in 2012  
于2012年成立
- Supplied to Southeast Asia and North Asia regions  
为东南亚和北亚地区提供柴油



### Fuel Oil 燃油

- Established in 2010  
于2010年成立
- Supplied bunker fuel in Singapore and Middle East  
为新加坡和中东市场提供船用燃油



### Aviation Gas 航汽

- Established in 2014  
于2014年成立
- Key importer to China and also supplied to APAC and Middle East markets  
中国重要的进口商，同时为亚太地区和中东市场提供航汽

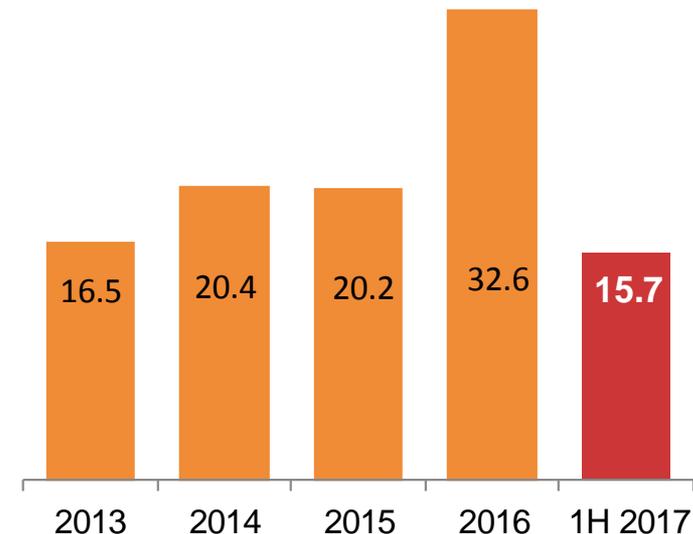


### Crude Oil 原油

- Established in 2016  
于2016年成立
- Well positioned to capture supply and trading activities with regional counterparties teapot refineries  
精准定位，把握与区域交易方炼油厂的供应和贸易机会

## Total Supply & Trading Volume

### 总业务量



Million tonnes  
(单位: 百万吨)

# Value of An Integrated Global Supply Chain - Opportunities, Profitability, Growth

## 一体化全球供应链的价值：机会、盈利和成长



China Aviation Oil  
中国航油(新加坡)股份公司



Achieved record high **total supply and trading volume & net profit** for FY2016

2016年全年总供应与贸易量和净利润创历史新高

Commenced crude oil business

开展原油贸易业务

Commenced aviation gas business

开展航汽业务

Established CAO Europe in UK

在英国成立中国航油欧洲分部

Acquired 39% stake in CNAF HKR

收购香港供油公司39%股权

Expanded footprint with acquisitions of CAO HK and NAFCO

收购中国航油(香港)有限公司和北美航油有限公司, 进一步扩张

Established aviation marketing arm

建立航空市场营销部

Set up gasoil and fuel oil trading teams

建立柴油和燃油贸易团队

Acquired 49% stake in TSN-PEKCL

收购管输公司49%的股权

Commenced jet fuel procurement business

启动航油采购业务

Completion of restructuring

公司完成重组

Acquired 33% stake in SPIA

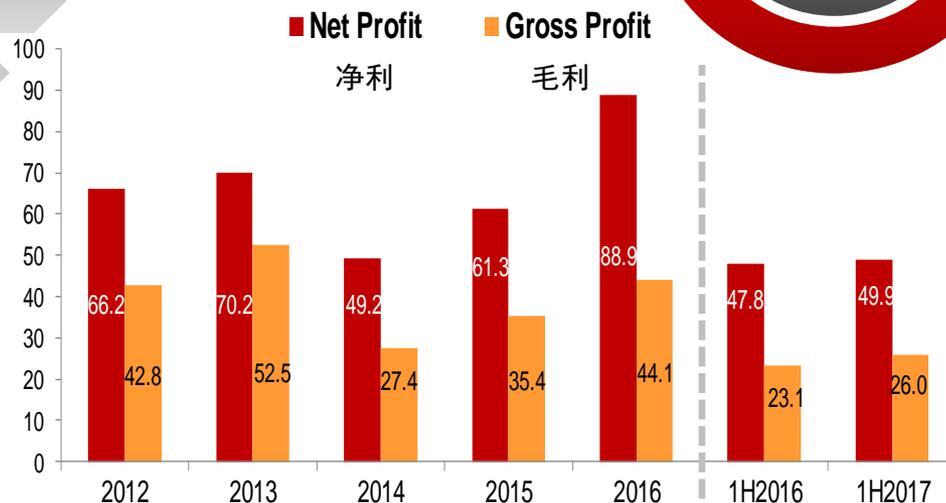
收购浦东航油33%的股权

Acquired 39% stake in Xinyuan

收购新源公司39%的股权

1H 2017  
US\$49.9  
million

2017上半年  
4990万美元

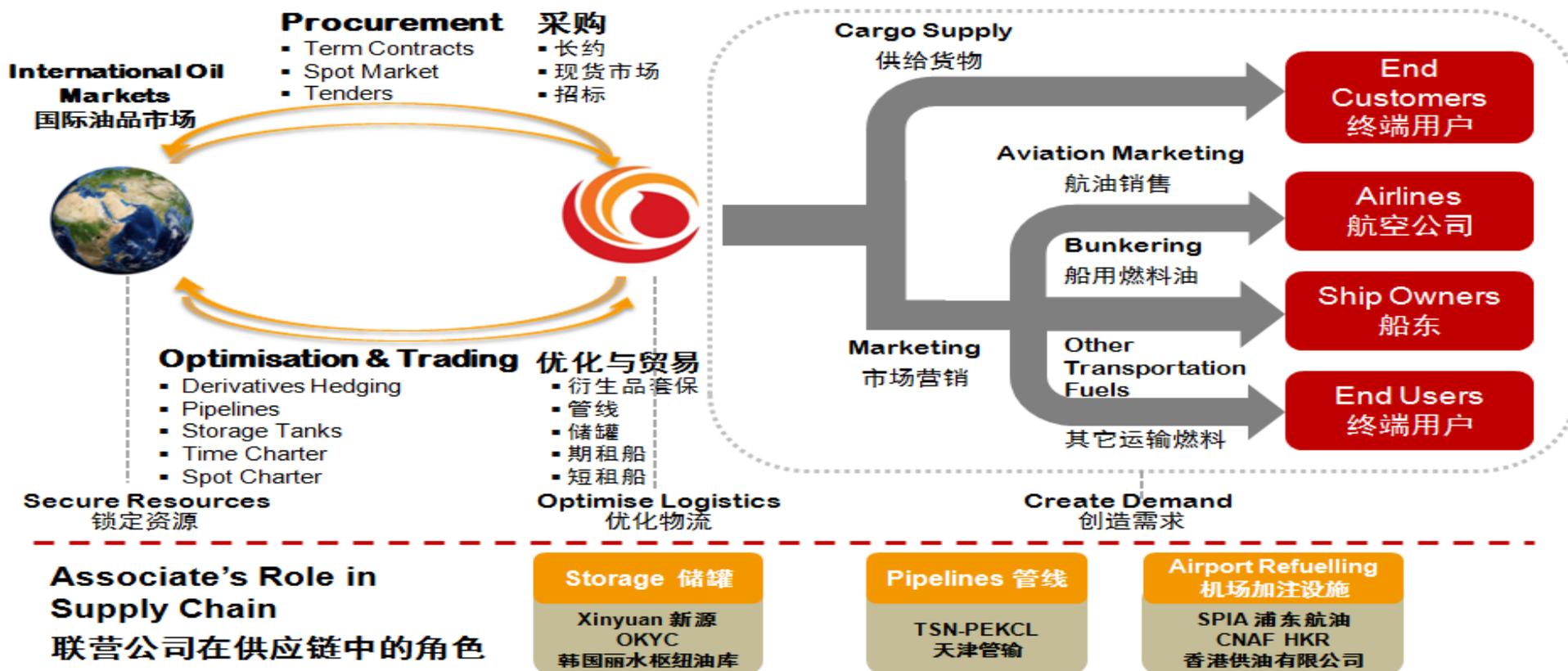


# Global Integrated Value Chain Augments Optimisation Opportunities 全球一体化价值链壮大优化机会



China Aviation Oil  
中国航油(新加坡)股份公司

- Global supply and trading network spans Asia Pacific, North America and Europe  
在全球的供应和贸易网横跨亚太、北美和欧洲
- Integrated value chain supports a diversified product portfolio and creates an international revenue base  
一体化价值链支撑多样化的产品组合，创造国际收入基础

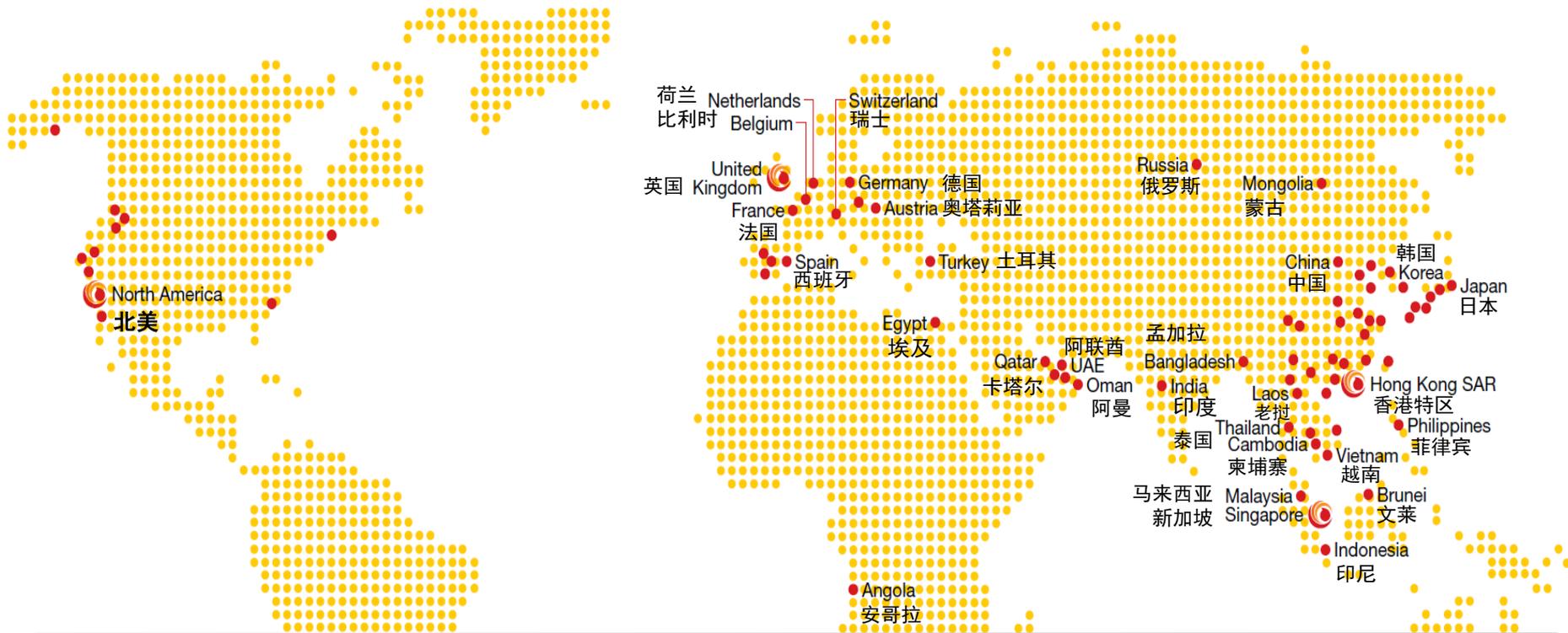


# Growing Global Presence with Accelerated Access in Key Aviation Markets

## 国际触角日益扩大，加速进入重要航空市场



China Aviation Oil  
中国航油(新加坡)股份公司



**CAO currently operates at 47 international airports outside mainland China across 21 countries and regions, supplying and trading over 12 million tonnes of jet fuel annually.**

**CAO 在中国大陆以外的21个国家和地区共47家国际机场运营，年度供应及交易量超过1,200万吨。**

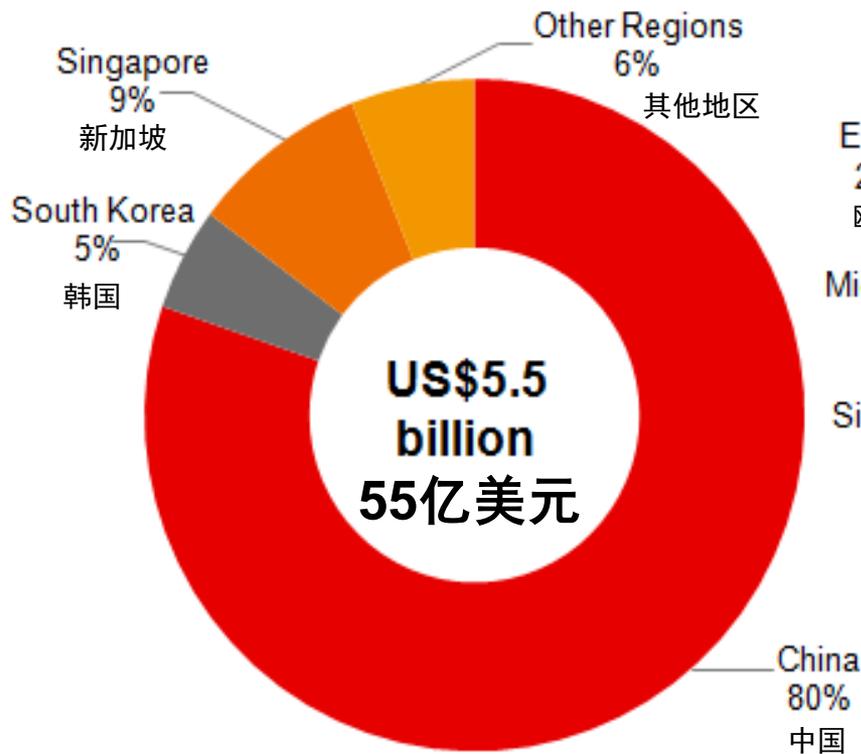
# CAO's International Revenue Base

## CAO的全球收入分布

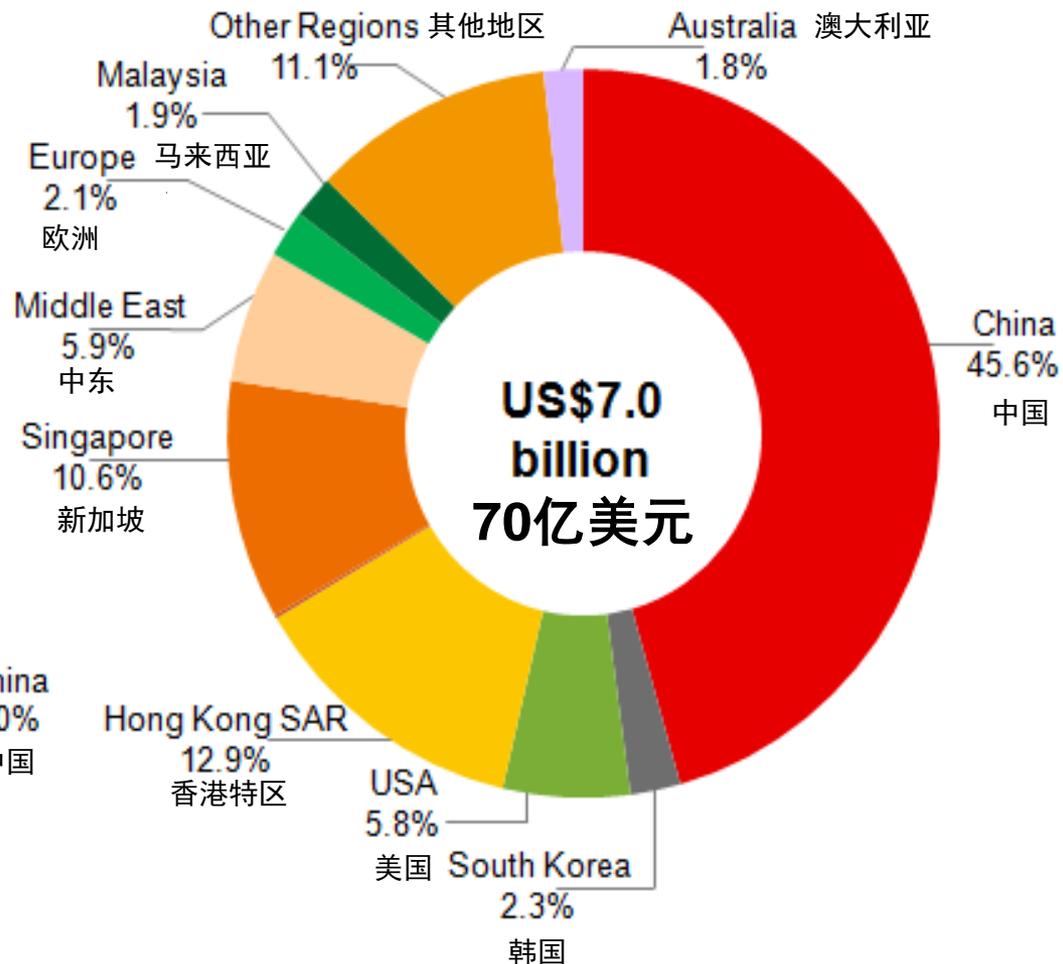


China Aviation Oil  
中国航油(新加坡)股份公司

### FY2010



### 1H 2017





China Aviation Oil  
中国航油(新加坡)股份公司

# Looking Ahead – Strategy to 2020

## 展望未来——2020年战略

# Positioned for Growth in a Dynamic Global Market 在瞬息万变的全球市场把握增长机遇



China Aviation Oil  
中国航油(新加坡)股份公司

## 2020 STRATEGIC TARGETS 2020年战略目标

**Maintain  
Leadership**  
保持领先地位

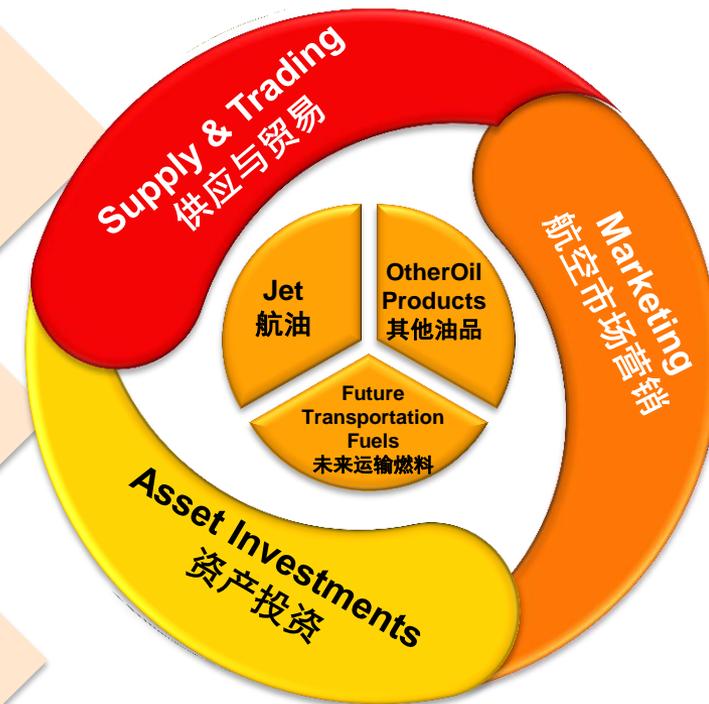
Global leader in **Jet Fuel Supply & Trading** and a reputable global supplier and trader of **Other Oil Products**, with a focus on **Transportation Fuels**  
全球领先的航油供应商与贸易商，全球知名的其他运输燃料供应商与贸易商

**Grow International  
Presence**  
发展全球业务

Important **aviation fuel service provider at international airports**  
重要的国际机场供油服务商

**Leverage Global  
Trends**  
利用全球趋势

Niche player in the supply and trading of future **Clean Transport Fuels**  
成为未来可持续运输燃料的精专市场的供应商与贸易商



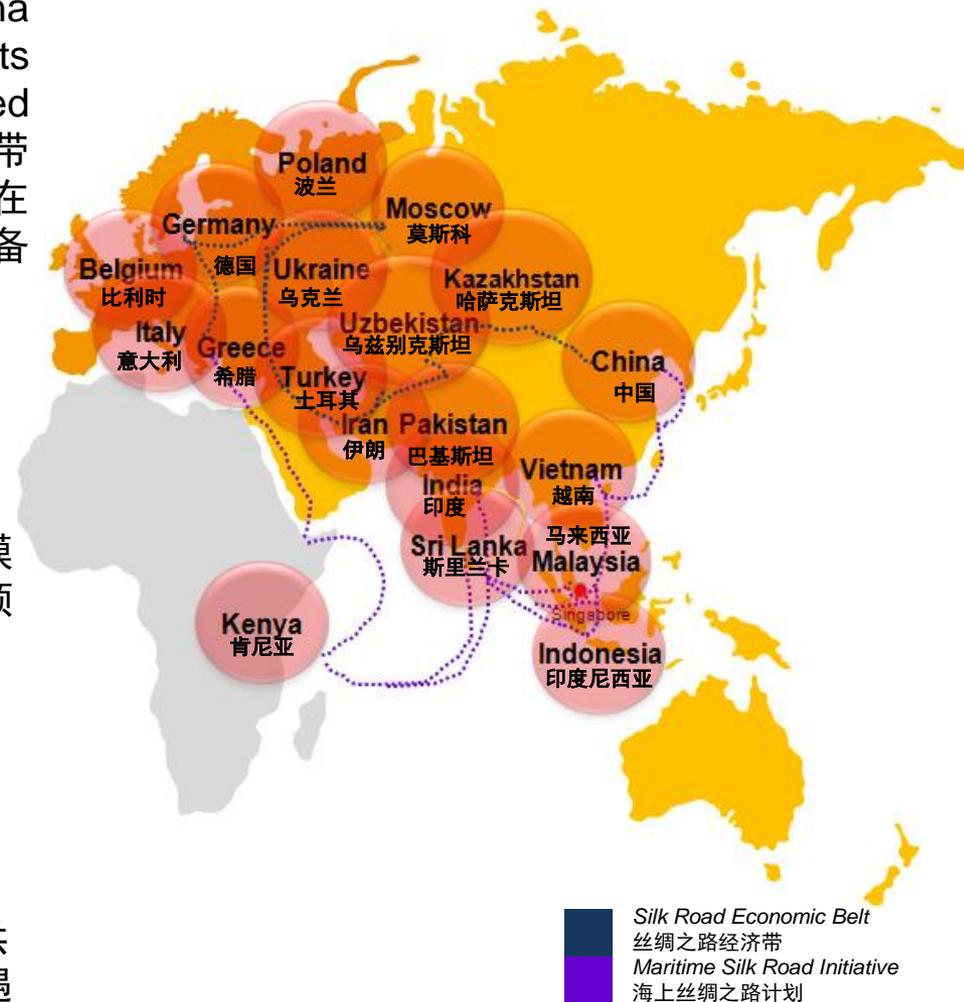
# CAO: Growth Opportunities from One Belt, One Road

## 把握“一带一路”的发展契机



China Aviation Oil  
中国航油(新加坡)股份公司

- Under China's Silk Road Economic Belt and the 21<sup>st</sup> Century Maritime Silk Road Initiative, China aims to build roads, railways, ports and airports across 3 continents, and CAO is well positioned to capture the opportunities: 在丝绸之路经济带和21世纪海上丝绸之路发展计划下，中国计划在3大洲建造道路、铁路、港口和机场，CAO准备就绪把握机遇：
  - ✓ Maintain leading position in Asia Pacific region for new markets by leveraging consolidated scale and supply channels of existing supply and trading network  
通过利用现有供应与贸易网络的综合规模和供应渠道，在亚太地区的新市场保持领导地位
  - ✓ Increase supply locations and volumes through partnership with airlines which will be supported by burgeoning growth of aviation industry in emerging markets  
通过与航空公司合作，增加供应地点和供应量，把握新兴市场航空业务增长的机遇



# Expansion of CAO's Global Integrated Value Chain

## 扩大CAO的全球一体化价值链



China Aviation Oil  
中国航油(新加坡)股份公司

- As CAO targets to be an important **jet fuel service provider at international airports**, we will be adopting a polycentric approach : CAO的目标是成为**重要的国际机场供油服务商**，我们将采取“多中心”发展策略：
  - ✓ Establish/Set up supply channels through B2B/reseller model  
通过B2B/中间商业务模式打造供应链
  - ✓ Leverage on the strategic alliance with Chinese airlines to access international airports  
利用与中国航空客户的战略关系，拓展国际机场业务
  - ✓ Explore and develop niche growth segments  
探索开发精专业务板块
  - ✓ Build global footprint through strategic acquisitions  
通过战略收购发展全球业务



# Compelling Competitive Strengths

## 强有力的竞争优势



China Aviation Oil  
中国航油(新加坡)股份公司

### Our Key Competitive Advantages: 关键竞争优势:

- Jet fuel  
航油
- China market  
中国市场
- China relationships  
中国关系
- Strong support from major shareholders  
大股东的支持



### Our Competitive positioning: 竞争性定位:

- Global player  
全球性企业
- Transportation fuels  
运输燃料
- Integrated supply chain  
一体化供应链
- Soft skills – trading and risk management  
软实力——贸易和风险管理

# Vision 愿景



China Aviation Oil  
中国航油(新加坡)股份公司



***To be a constantly innovating global top-tier integrated transportation fuels provider***  
**成为富有创新精神的全球一流运输燃料一体化方案提供商**



China Aviation Oil (Singapore) Corporation Ltd  
中国航油（新加坡）股份有限公司

Thank You  
谢谢

*Fuel for Future* 为明天加油