

# OIL

## Medium-Term Market Report 2012



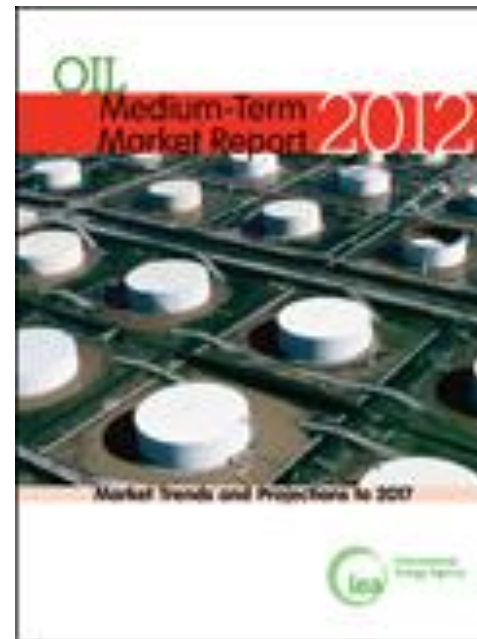
### Market Trends and Projections to 2017

Presentation to CSIS, Washington, DC  
19 November 2012

Antoine Halff

# Benchmark oil market analysis from IEA

[www.oilmarketreport.org](http://www.oilmarketreport.org)



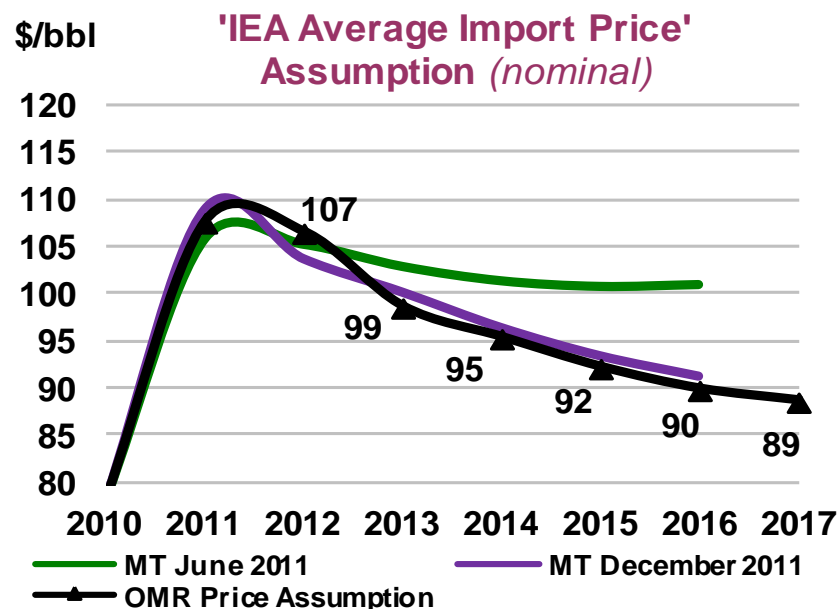
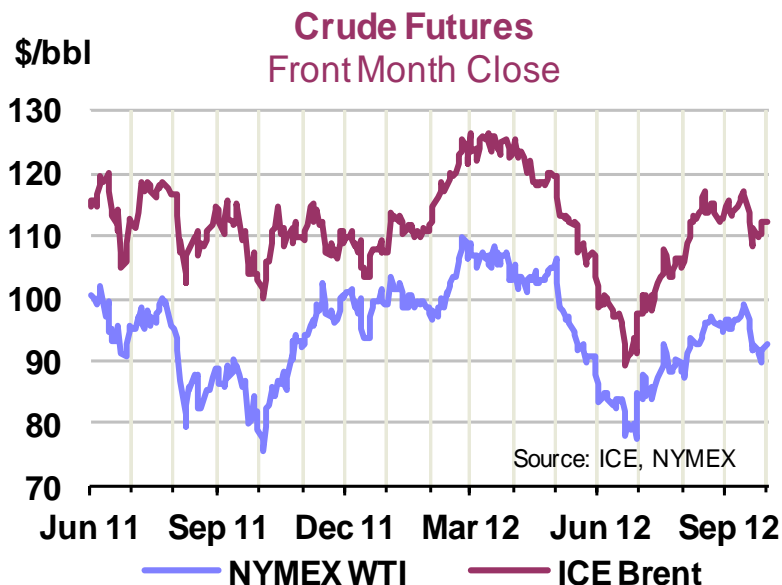
- The benchmark oil market report since 1983, with extensive, up-to-date, statistical data plus 12-18 month global fundamentals outlook
- Detailed, up to the minute market analysis underpins the IEA's emergency response mandate
- Seventh edition in October 2012 of this annual outlook looking five years ahead
- Closes previous gap between short-term OMR and long-term World Energy Outlook ('WEO')



# A new chapter in oil markets

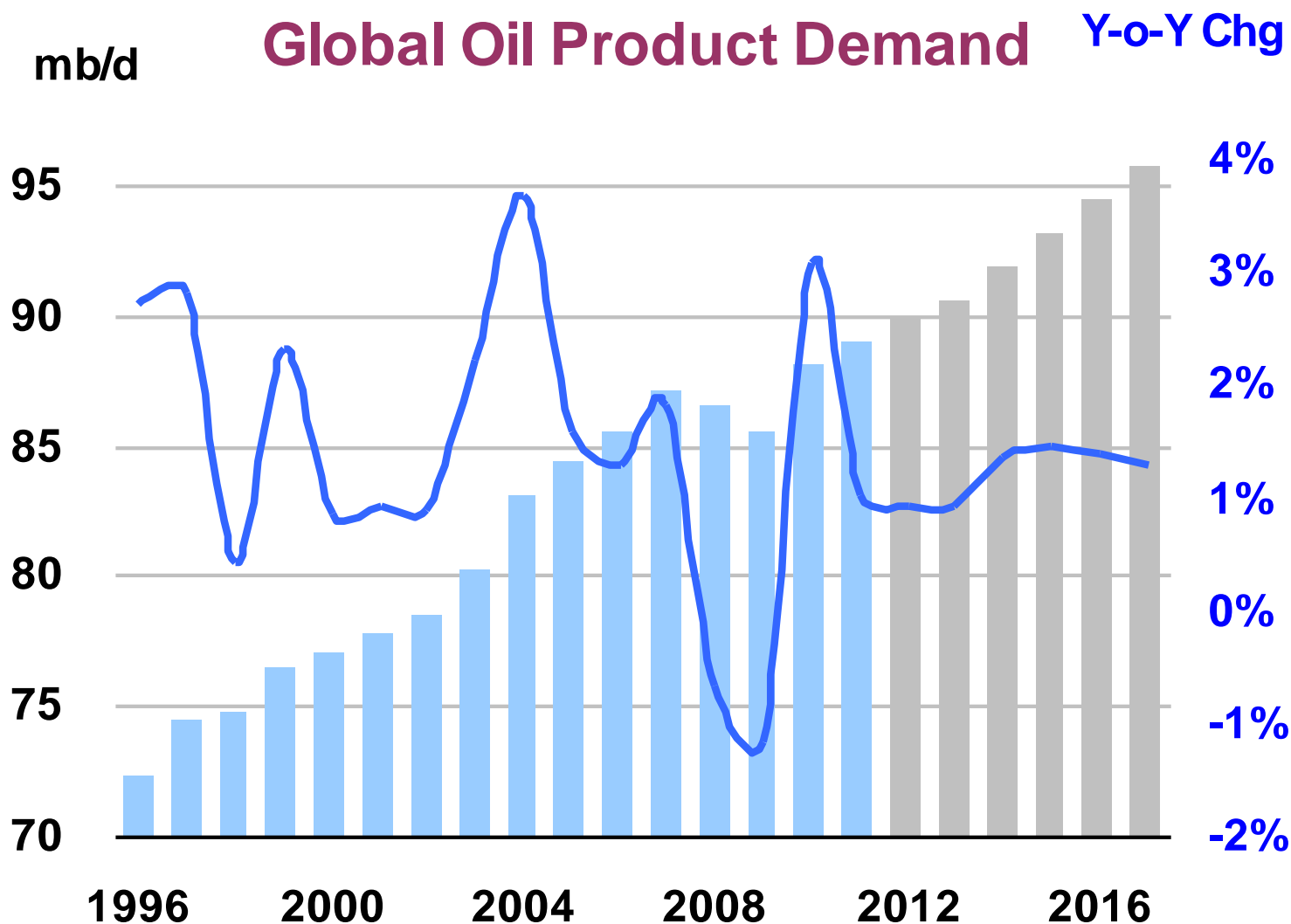
- Oil rally takes a breather?
- Demand growth switches gears
- Revolution in supply technology
- A new oil map:
  - Supply growth: American century
  - Demand growth: East of Suez
- Merchant refining comes of age
- Crude trade falls, product trade gains
- OPEC spare capacity: are the good old times back?
- A new reality of risk

# A tug of war: supply concerns vs weak demand trends



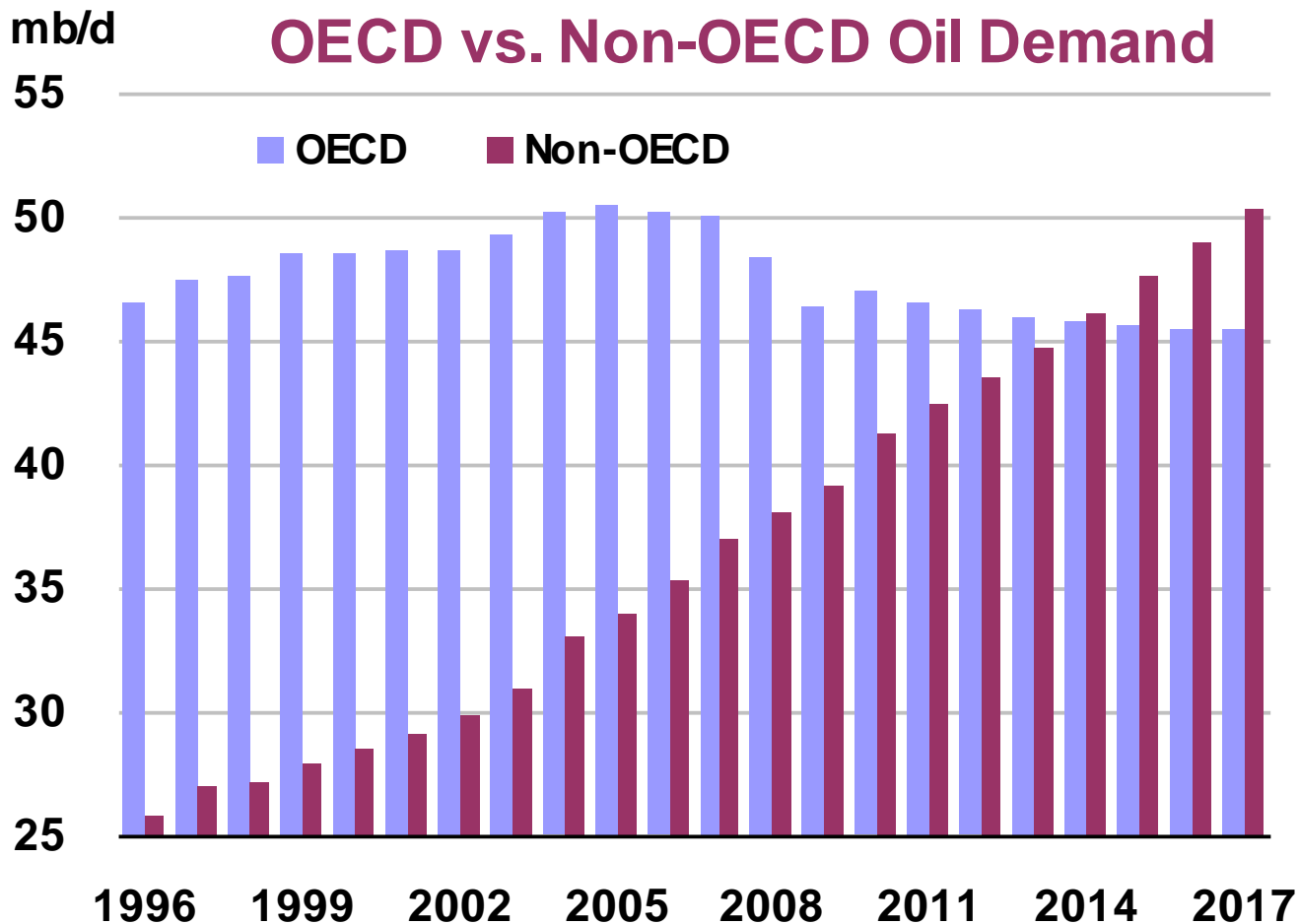
- **Supply: North Sea outages, geopolitical disruptions**
- **Demand: weaker**
- **Political risk and supply disruptions mostly won**

# Weak macroeconomic backdrop restrains demand outlook



- Demand increases by 1.2% (1.1 mb/d)/year to from 89 to 96 mb/d.

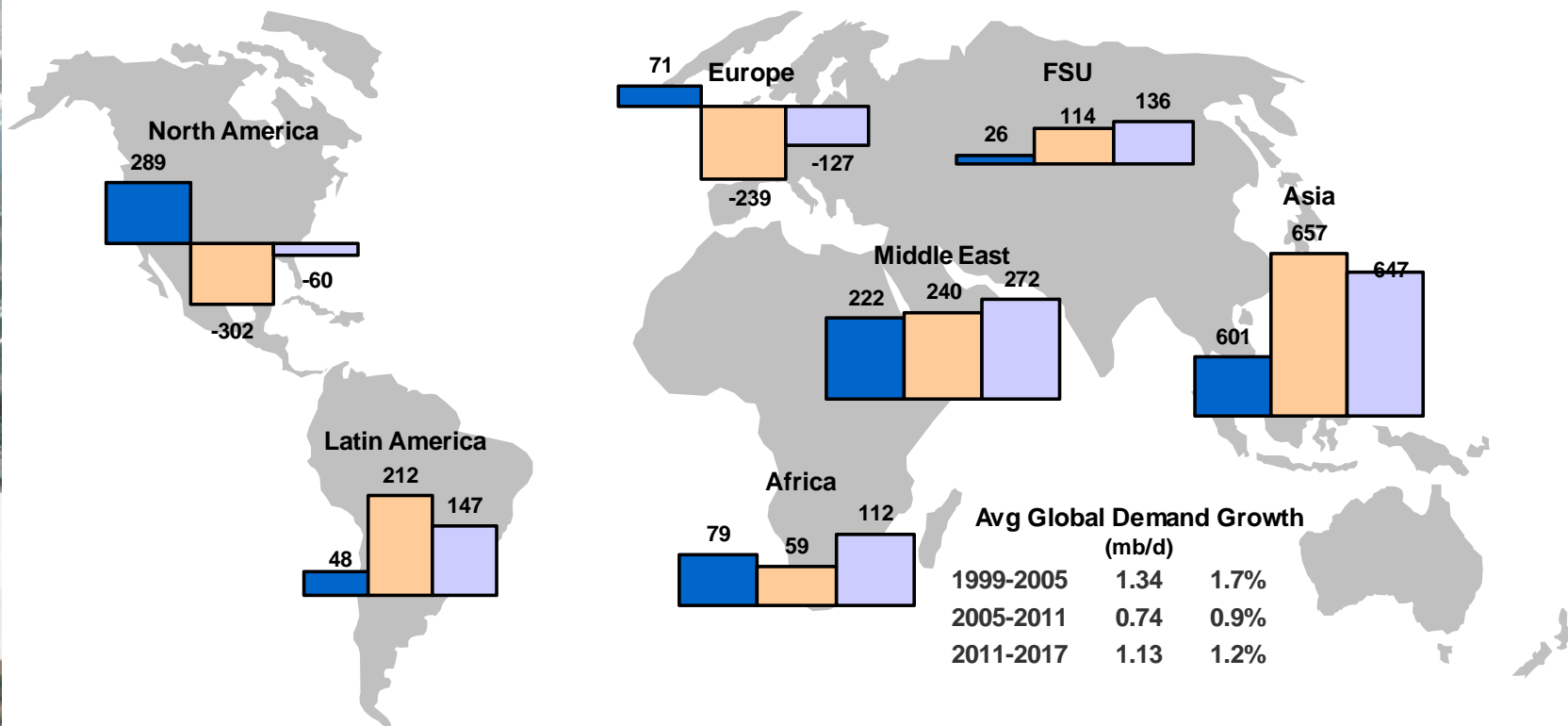
# Non-OECD overtakes OECD in 2014



- OECD contracts by 200 kb/d per year while non-OECD grows 1.3 mb/d

# Asian demand grows strongest

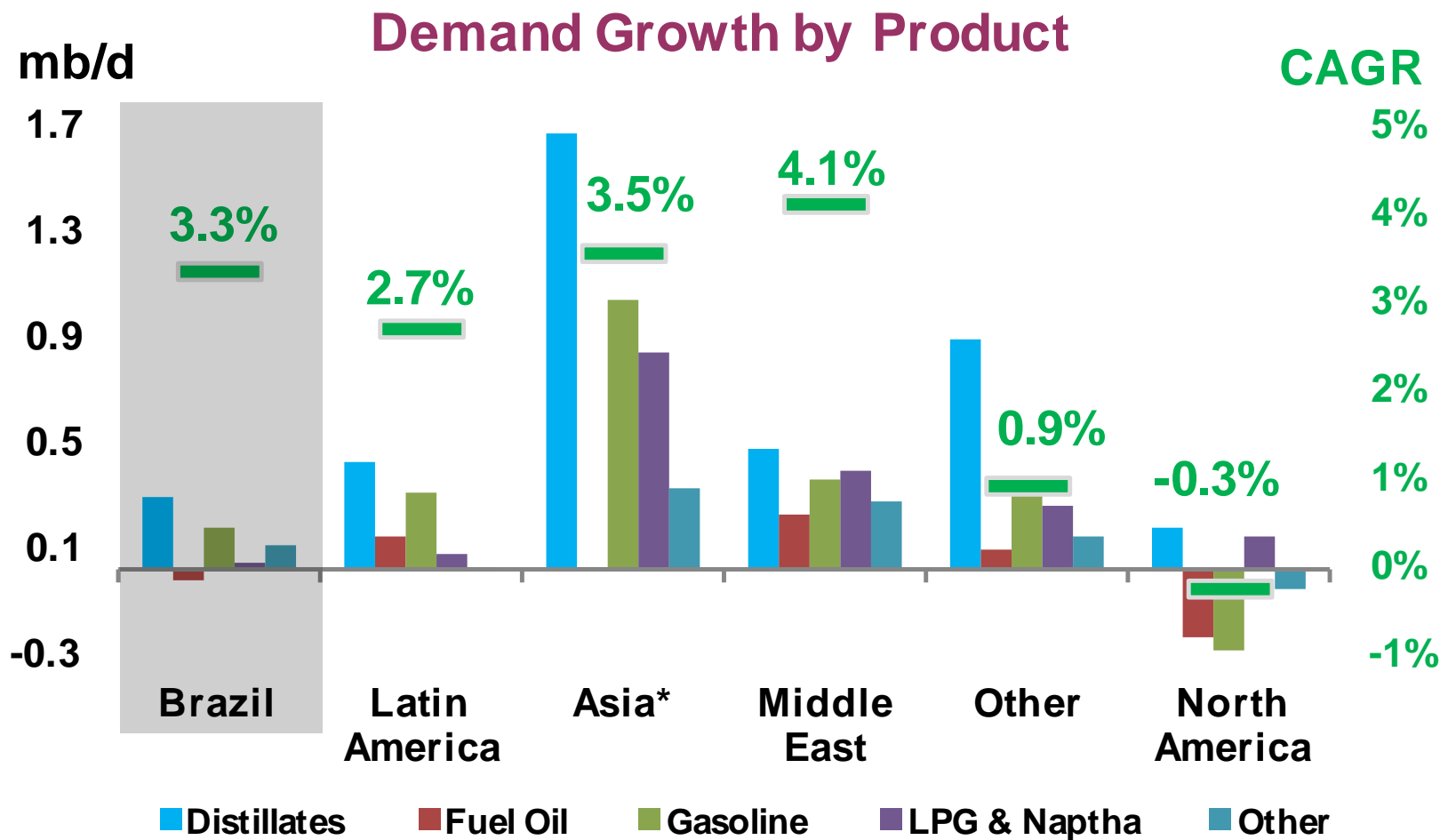
Average Global Oil Demand Growth **1999-2005**/**2005-2011**/**2011-2017**  
thousand barrels per day



- **Strong demographics, economic growth and subsidies support increase in non-OECD demand**

# Distillates drive global demand growth

*Brazilian demand grows by 3.3%*

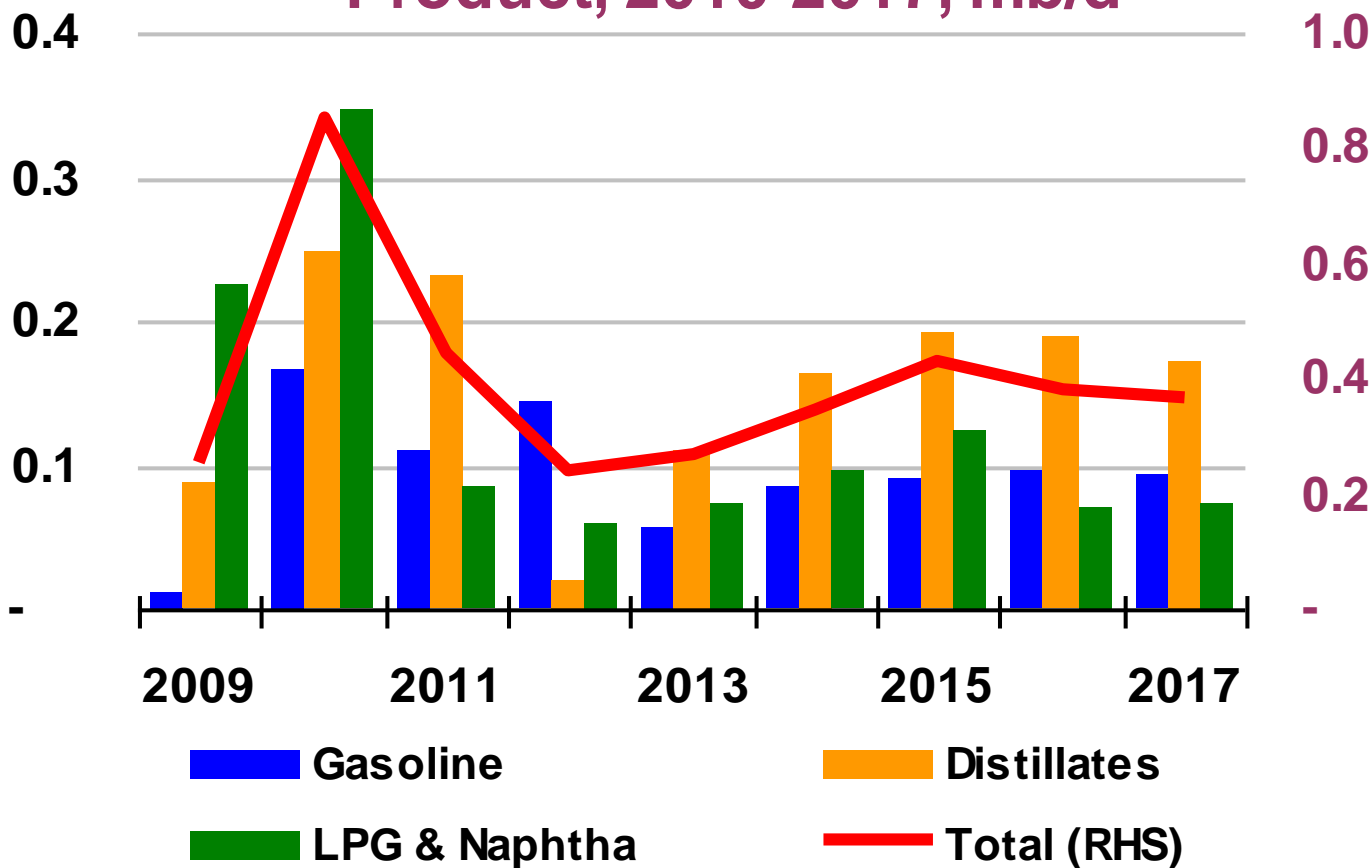


\*non-OECD



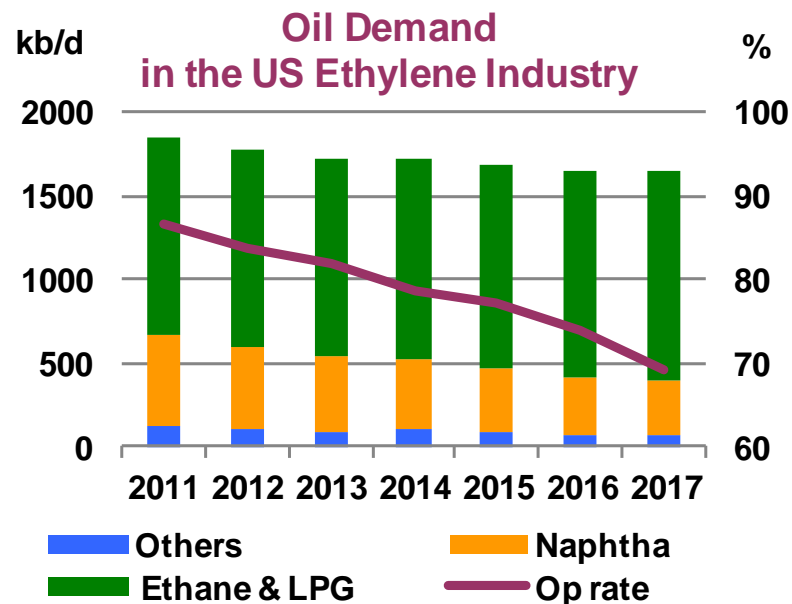
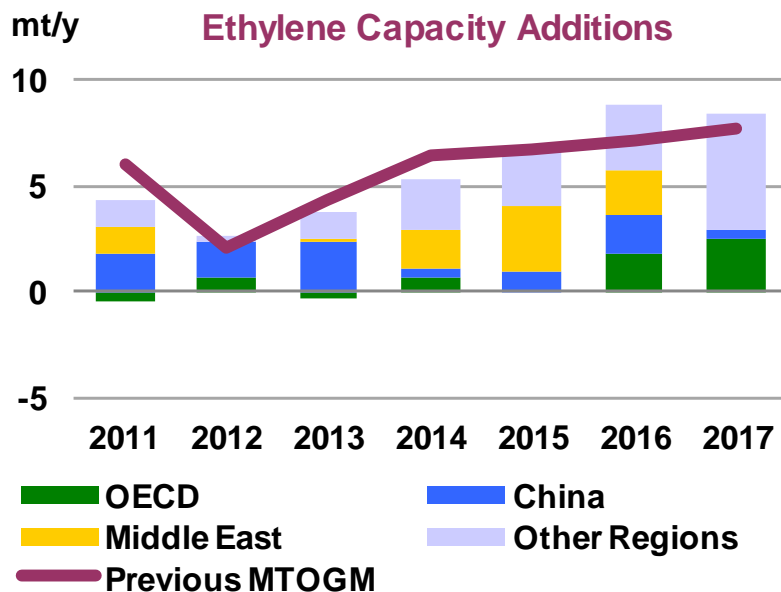
# Chinese demand forecast weaker

## China: Oil Demand Growth by Product, 2010-2017, mb/d



- Gasoline & naphtha remain dominant growth sources, robust growth in transport and petchem

# Petrochemicals supportive of demand



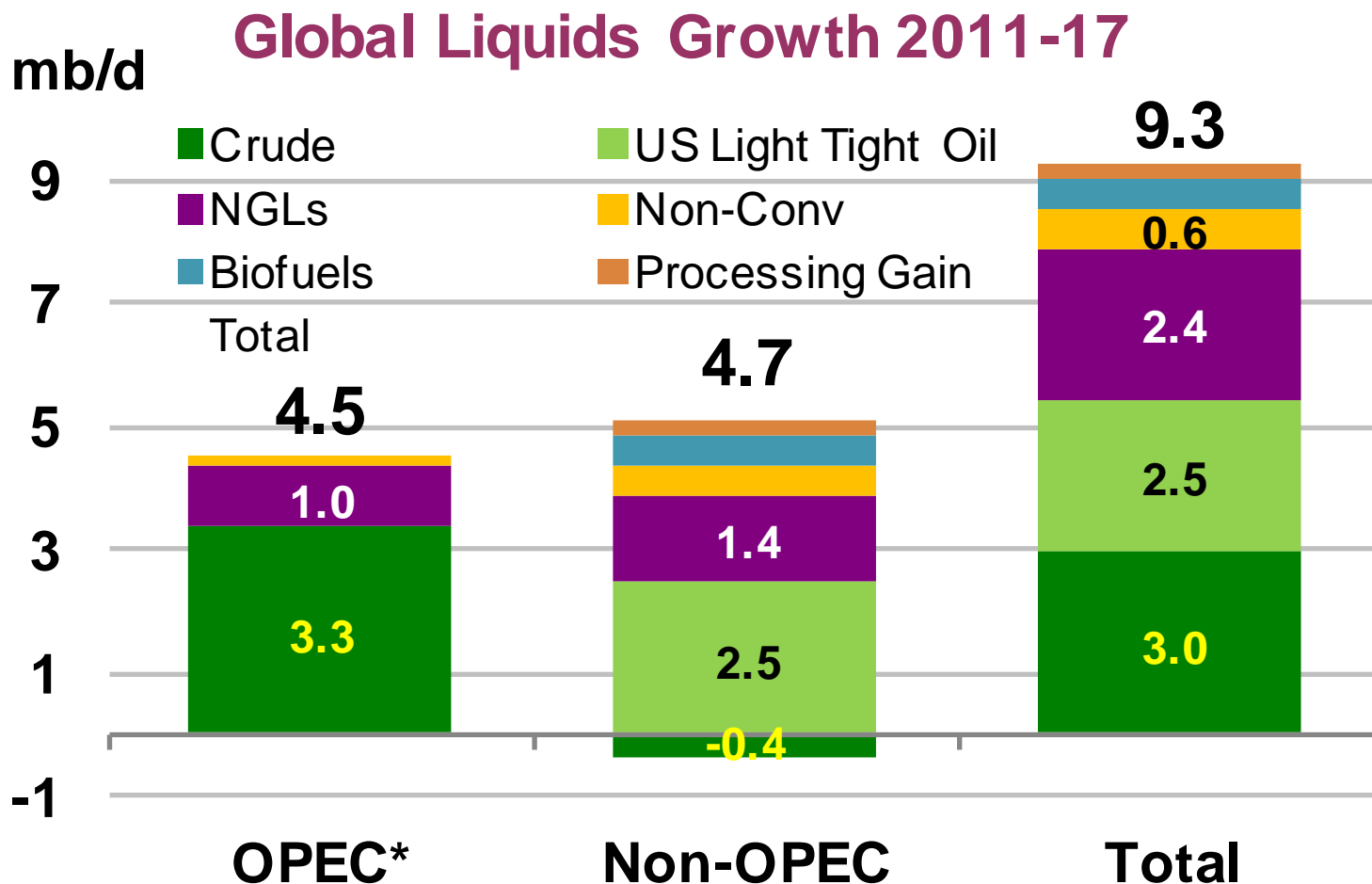
- **Naphtha and LPG demand growth supported by the global petrochemical industry.**
- **LPG (1.9%) outstrips naphtha (1.1%) on ethane from US shale developments. associated fuel efficiency gains.**

# Global Supply



# Global supplies increase by 9.3 mb/d

*Iraq and US support growth in production*



\* OPEC crude is capacity additions

Global Refinery processing gains included in Non-OPEC

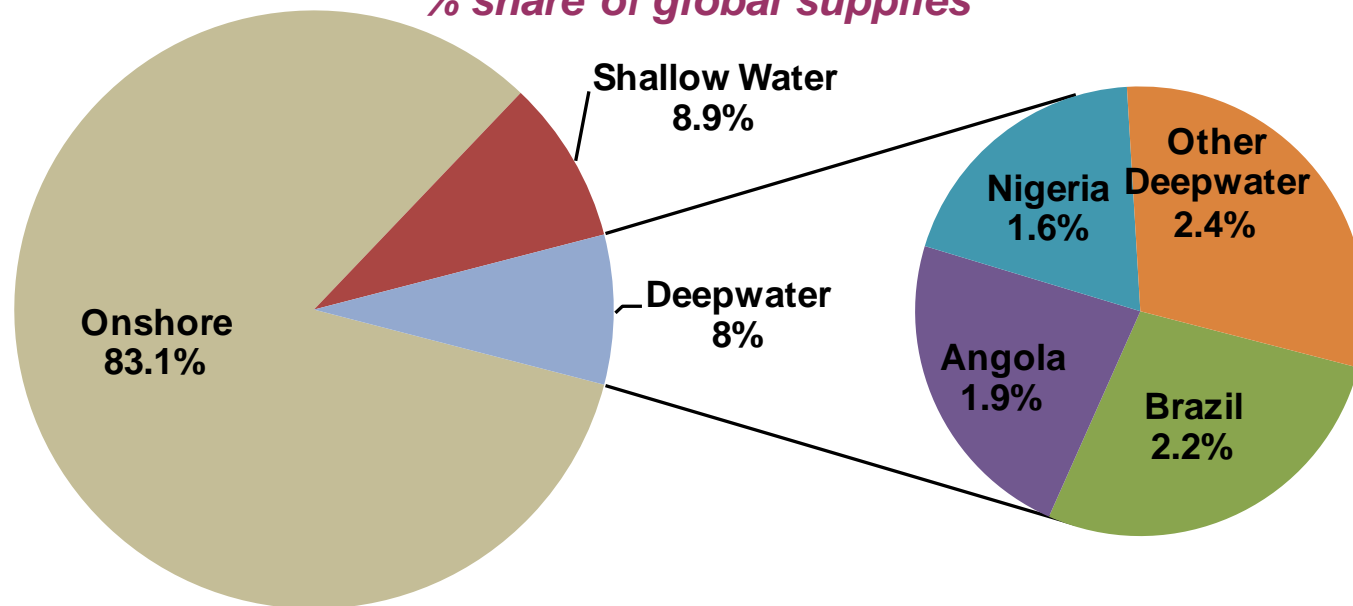


# Brazil accounts for 28% of global deepwater production in 2017

*...which is 2.2% of Global Supply*

## Composition of Production (2017)

*% share of global supplies*

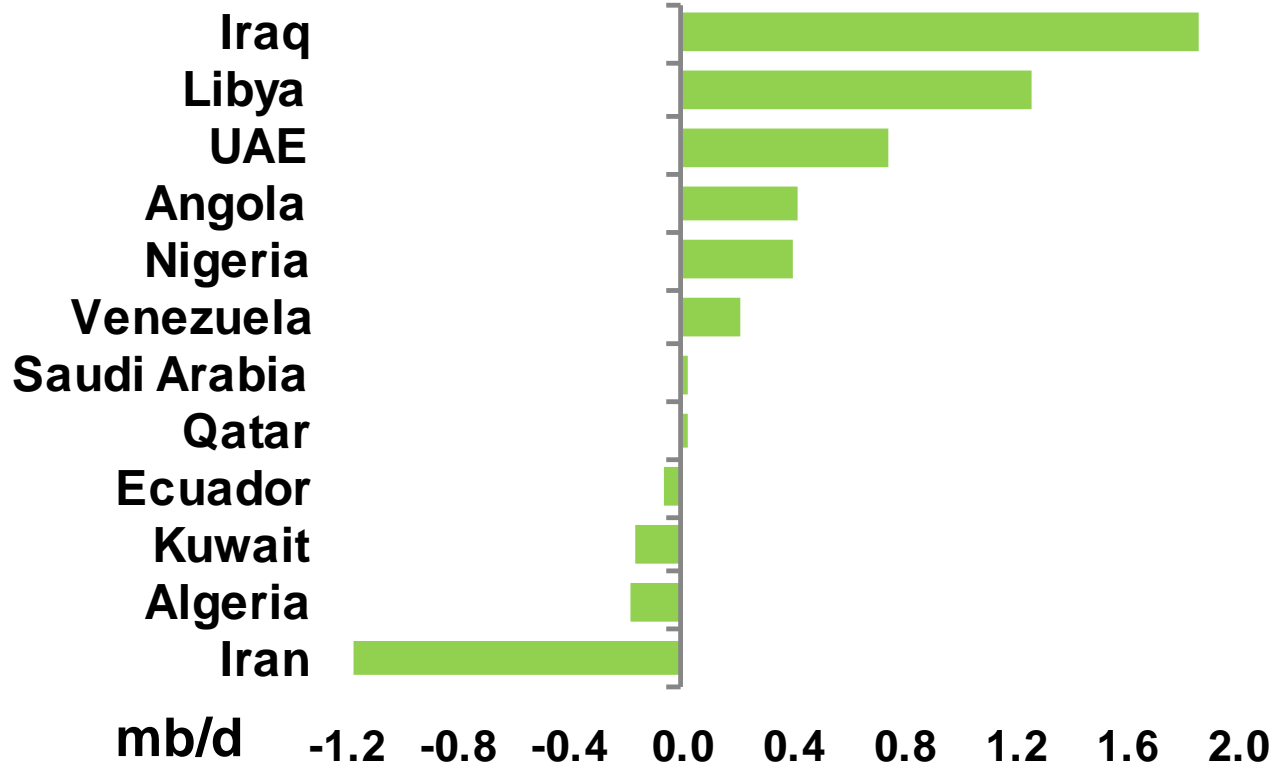


- Deepwater production grows from 5.2 mb/d to 8.2 mb/d by 2017.

# Iraq leads OPEC crude capacity growth

*Libyan recovery contributes to 3.34 mb/d total increase*

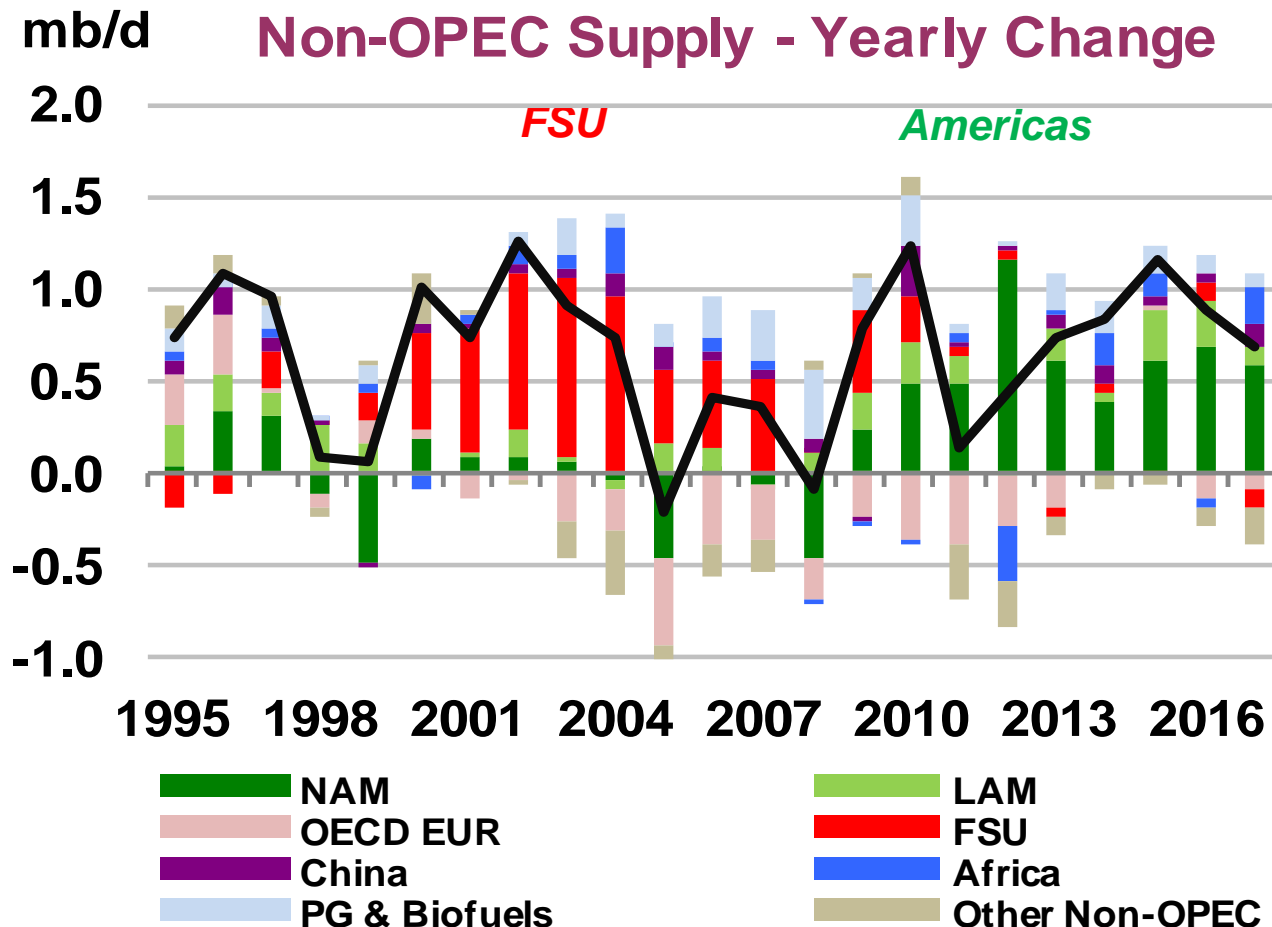
## Incremental OPEC Crude Production Capacity 2011-17



- **OPEC effective spare capacity seen recovering to 5.3 mb/d in 2017**

# Americas dominates supply growth

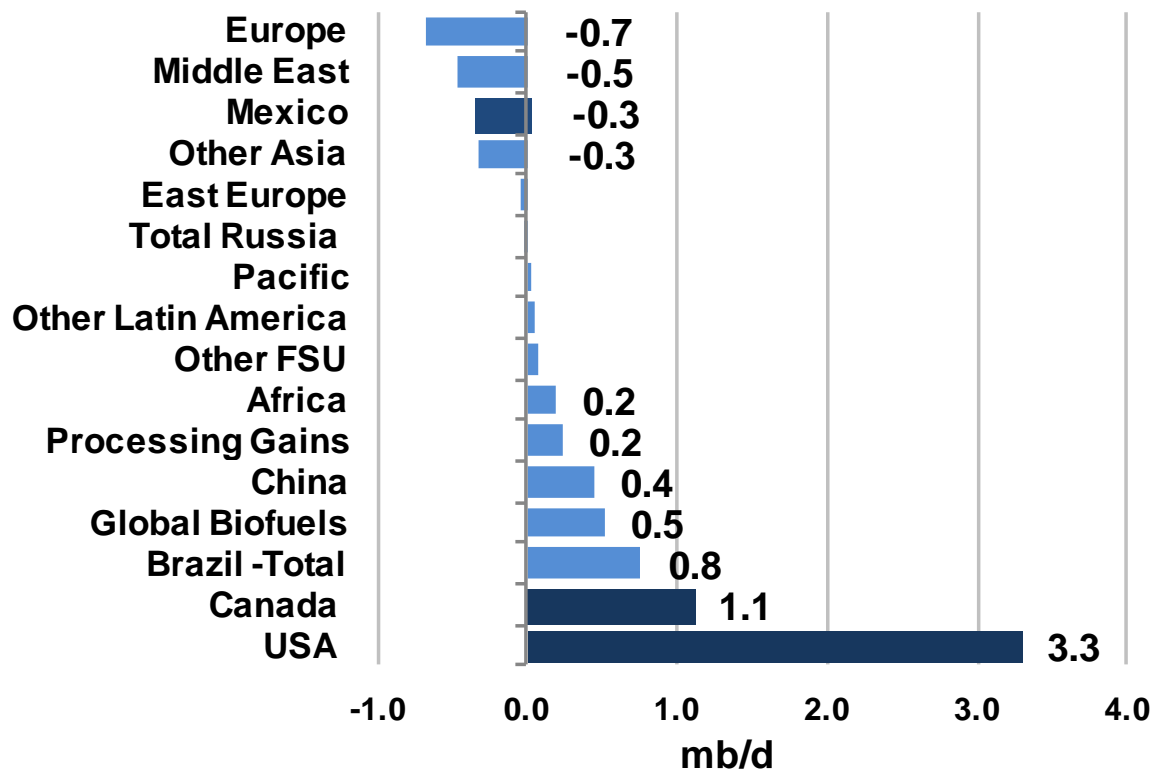
*North America increases by 4.0 mb/d from 2011-17*



- From 2013-2017, growth expected to average 860 kb/d

# North America accounts for 85% of non-OPEC supply growth

## Top Contributors to Non-OPEC Supply (2011-2017)

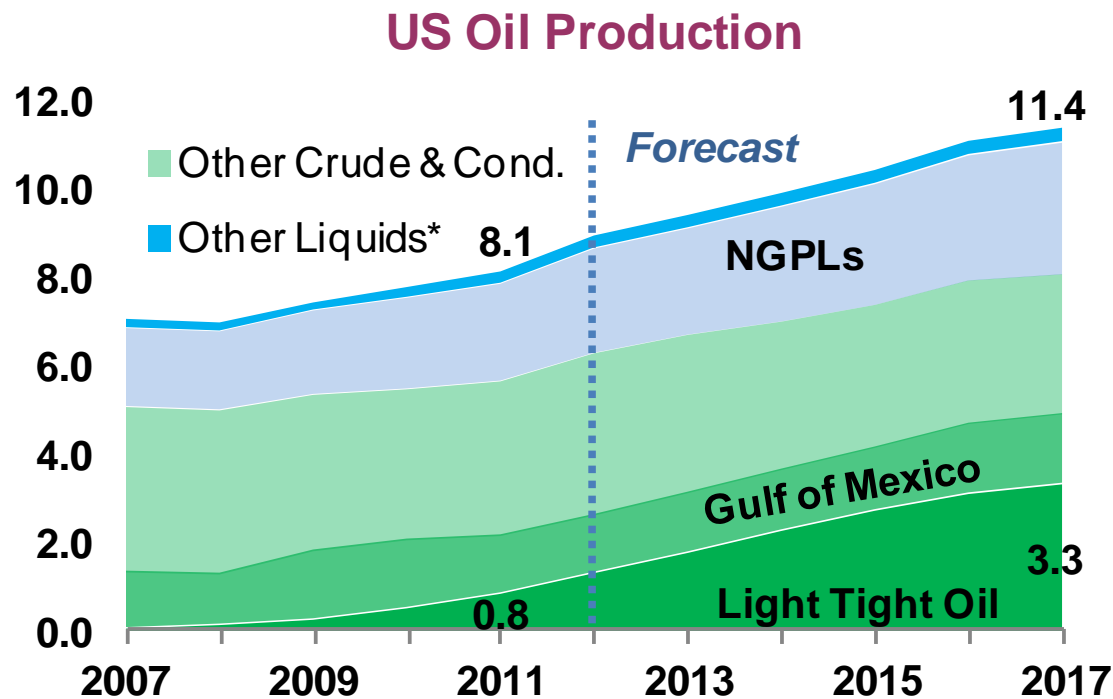


- North America adds 4.0 mb/d
- North Sea declines by over 600 kb/d
- Brazil adds 840 kb/d despite 12% decline



# New technology unlocks new supply

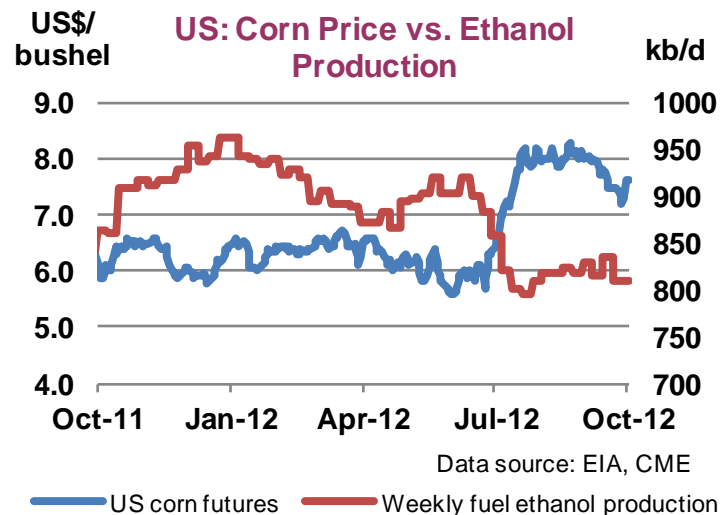
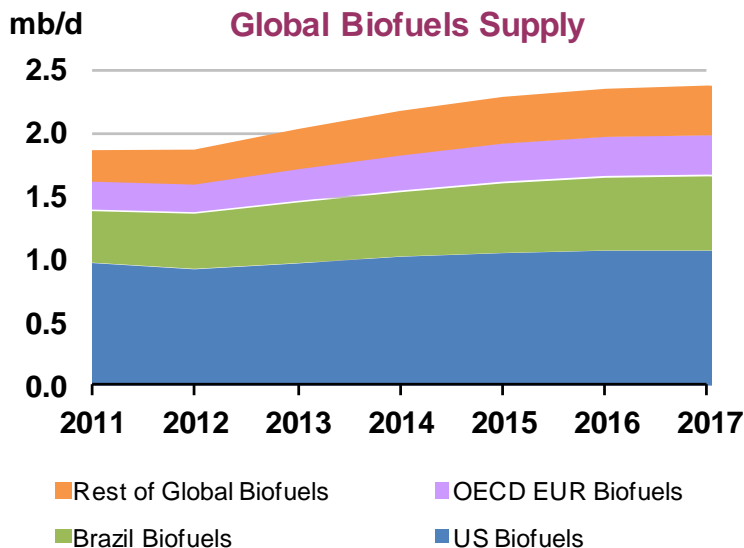
*US light, tight oil (LTO) increases by 2.5 mb/d by 2017*



*\*Includes additives and oxygenates. Does not include biofuels*

- **Light tight oil and NGLs drive increase of 3.3 mb/d from 2011-2017 in the US**
- **Oil sands growth contributes to 1.1 mb/d of Canadian supply growth despite infrastructure constraints**

# Biofuels supplies grow to 2.4 mb/d



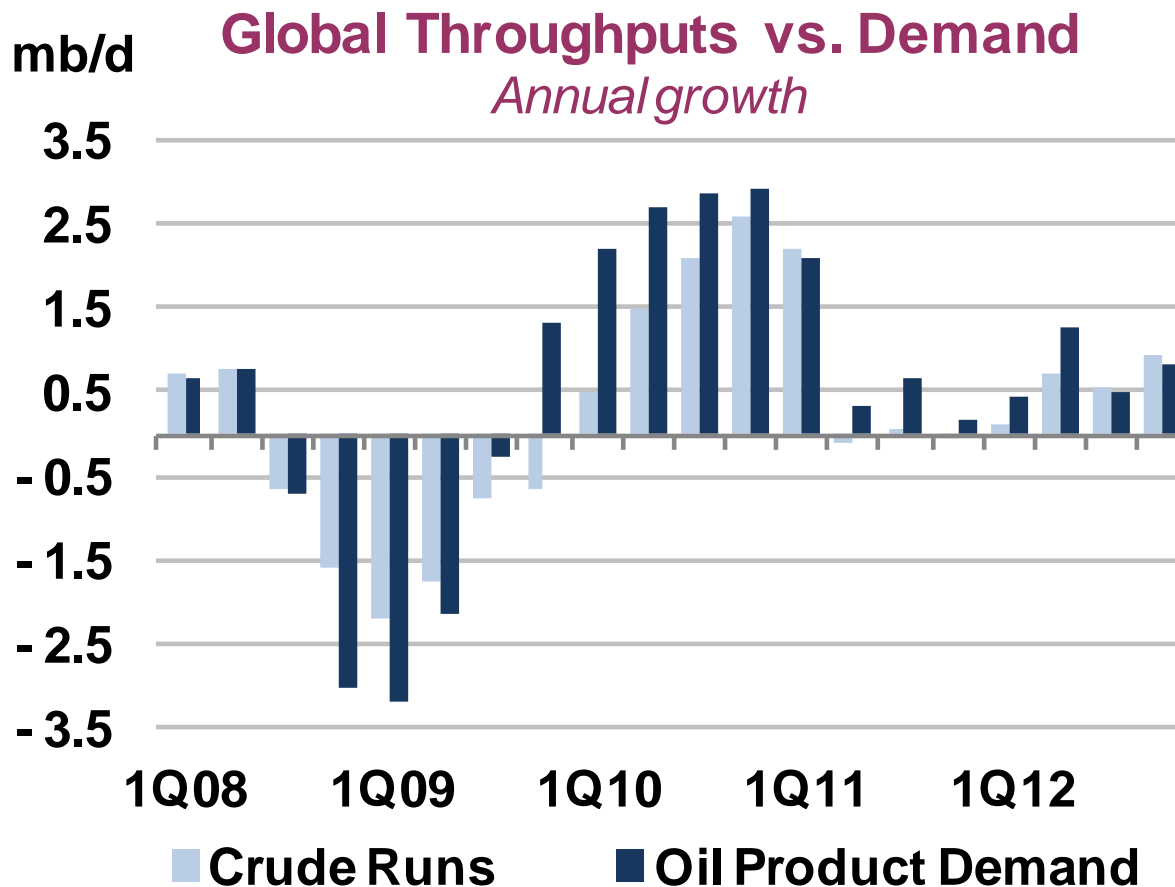
- **Global biofuels output to grow from 1.9 mb/d in 2011 to 2.4 mb/d in 2017**
- **The US remains the largest producer, followed by Brazil and OECD Europe**
- **US drought reduces 2012 ethanol output, keeping global output at 1.9 mb/d**
- **High corn prices squeeze ethanol margins and reduce production**

# Refining and Product Supply



# After rebound of 2010, growth slows

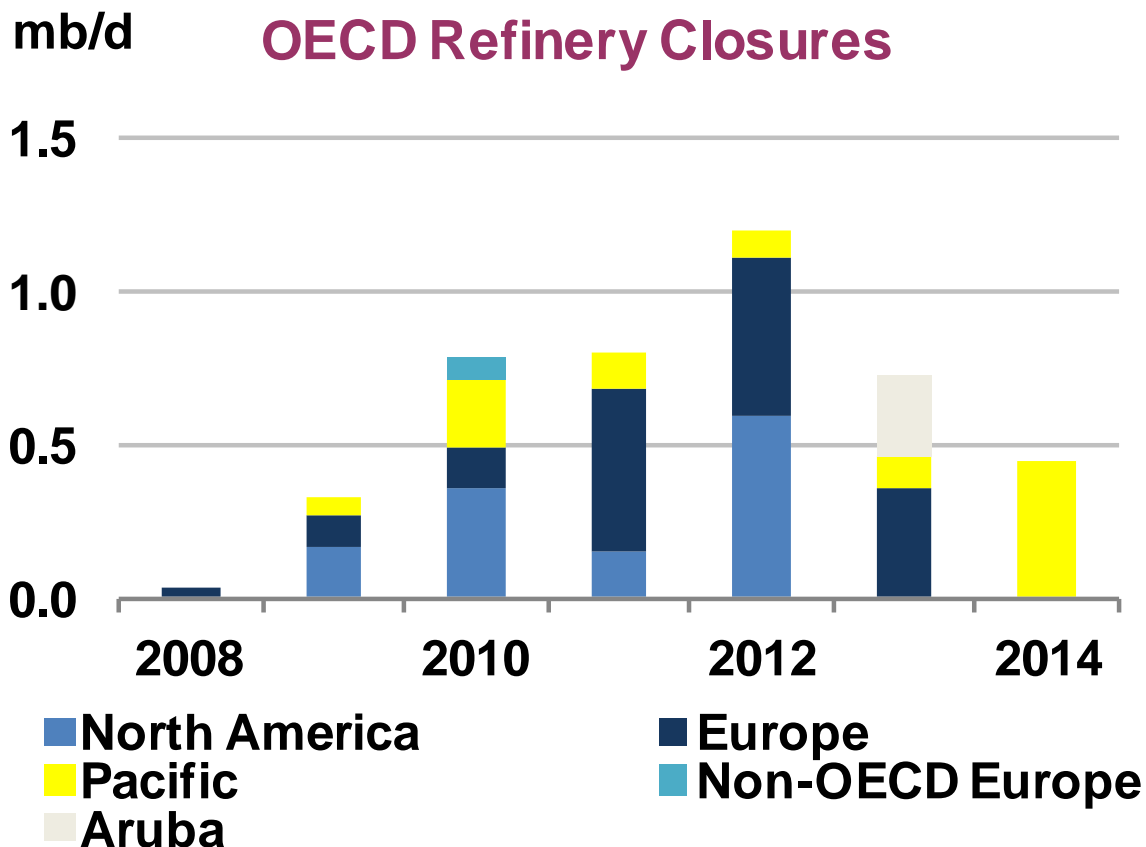
*Diverging trends, as non-OECD share continue to rise*



- **Runs stop growing in 2Q2011, after strong rebound over previous four quarters**

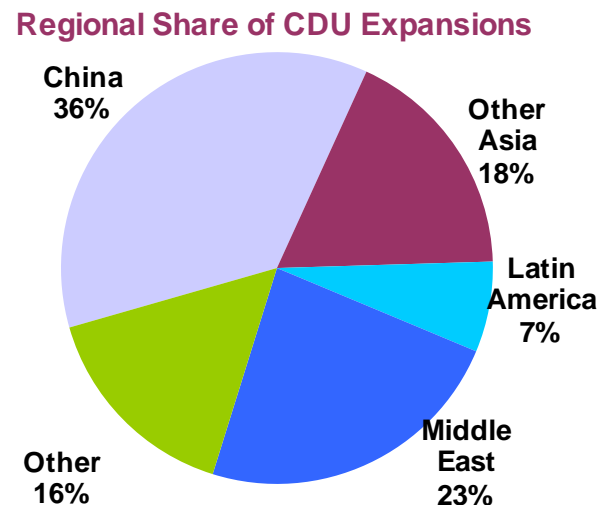
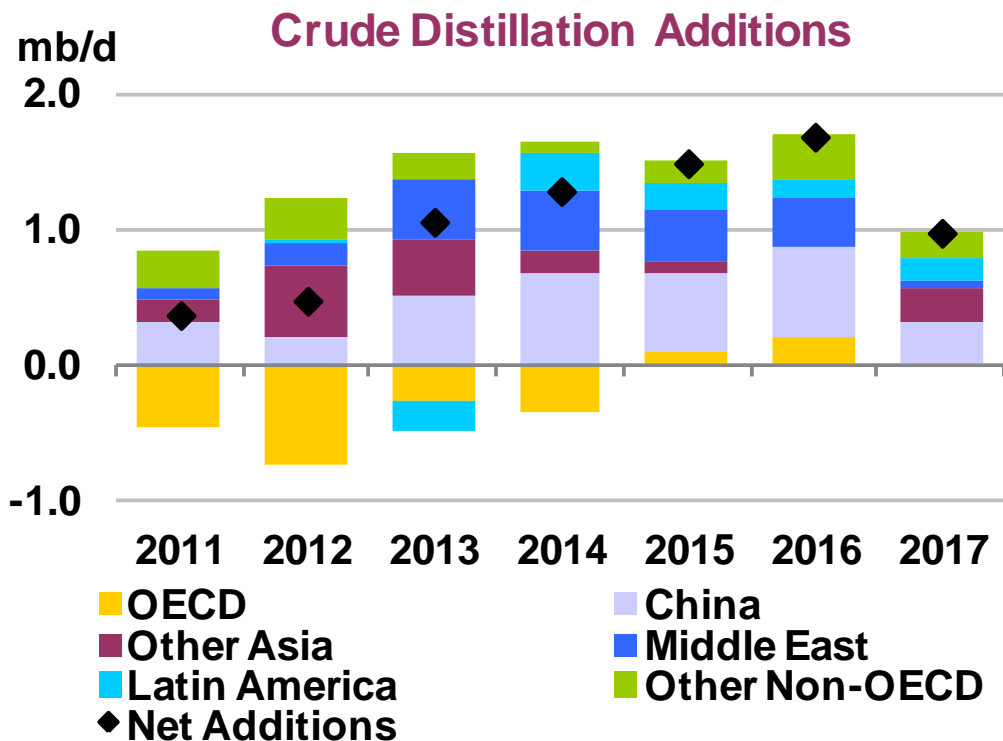


# OECD consolidation picks up speed



- **1.7 mb/d in Europe, with 500 kb/d in 2011 and 500 kb/d in 2012.**
- **North American restructuring focused on East Coast and Virgin Islands**

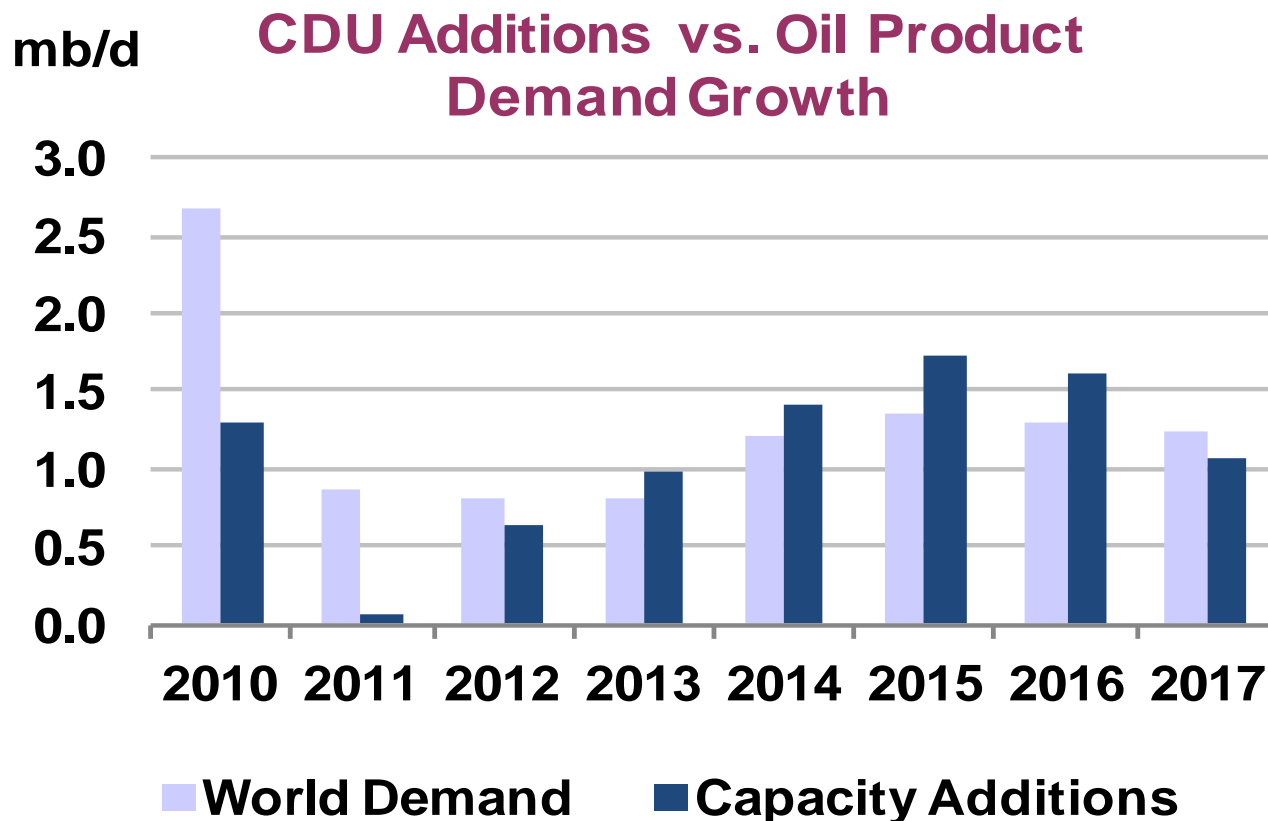
# All refining capacity growth from non-OECD countries



- 7 mb/d of net capacity additions by 2017
- OECD industry consolidation continues
- Upgrading and desulphurisation capacity adds 5.9 mb/d and 5.4 mb/d respectively

# Expansions outpace demand again

*4.4 mb/d capacity needs to shut to return to pre-crisis utilization rates*



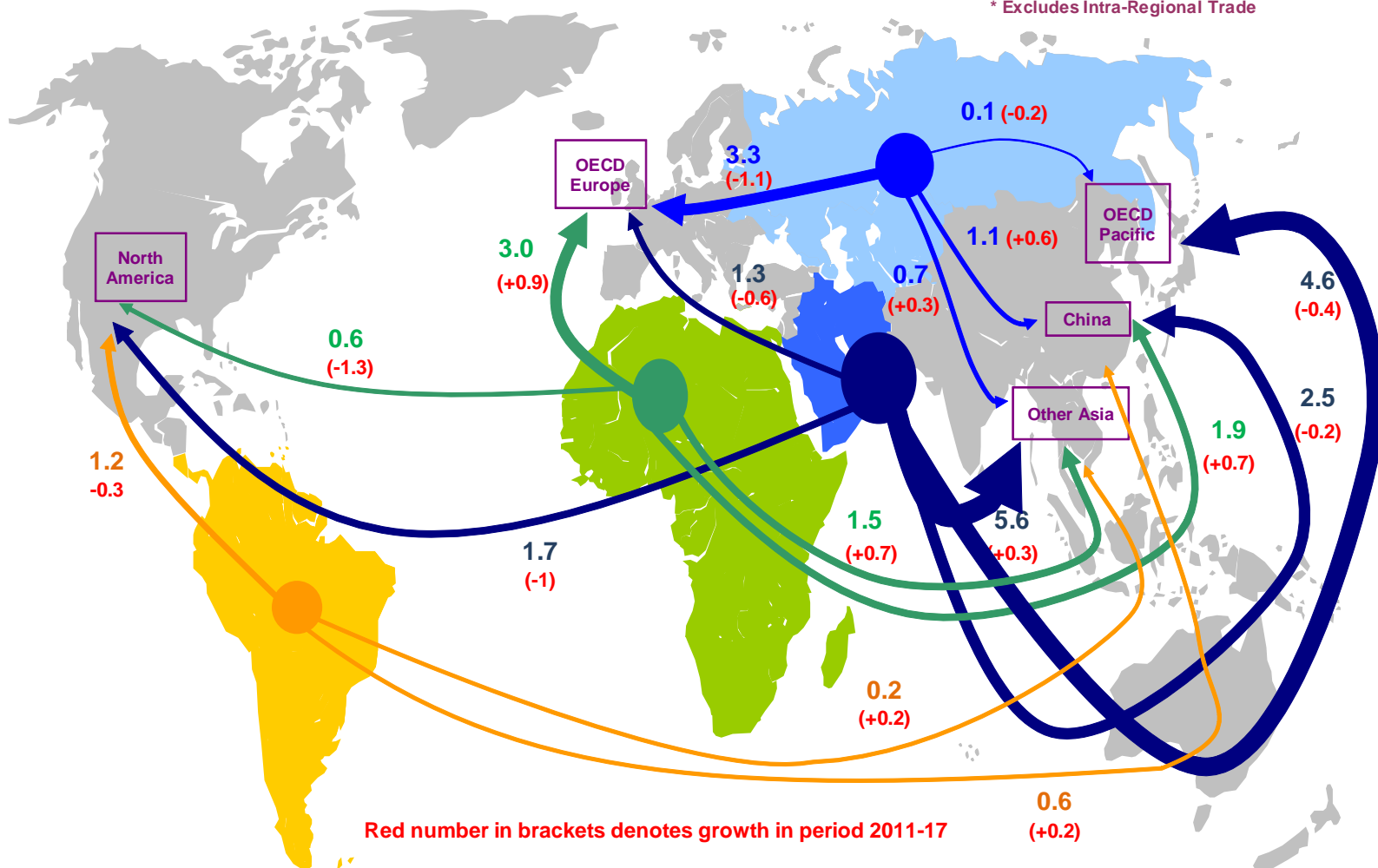
- **Refinery profitability to be pressured unless closures, delays, cancellations are announced.**

# The crude trade map is being redrawn

## Crude Exports in 2017 and Growth in 2011-17 for Key Trade Routes\*

(million barrels per day)

\* Excludes Intra-Regional Trade



Red number in brackets denotes growth in period 2011-17

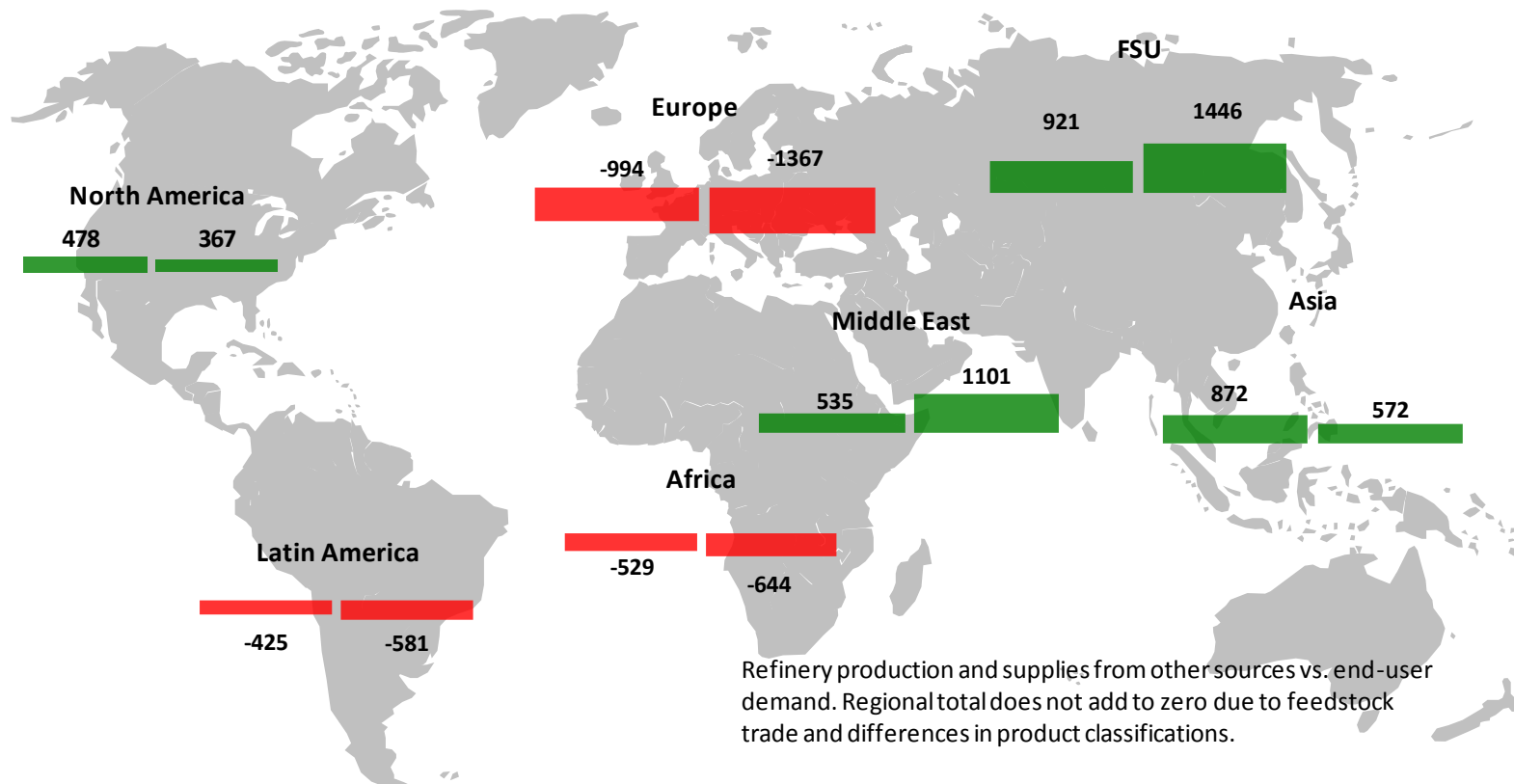
# Middle distillate markets remain tight

*Middle distillates account for >50% of demand growth*

## Product Supply Balances - Gasoil/Kerosene

Regional Balances in 2011 and 2017<sup>1</sup>

Thousand barrels per day



1. Positive number indicates net-export potential, negative number net-import requirement

- Yet, refinery yields are only expected to rise from 39.4% currently to 40.3% in 2017.

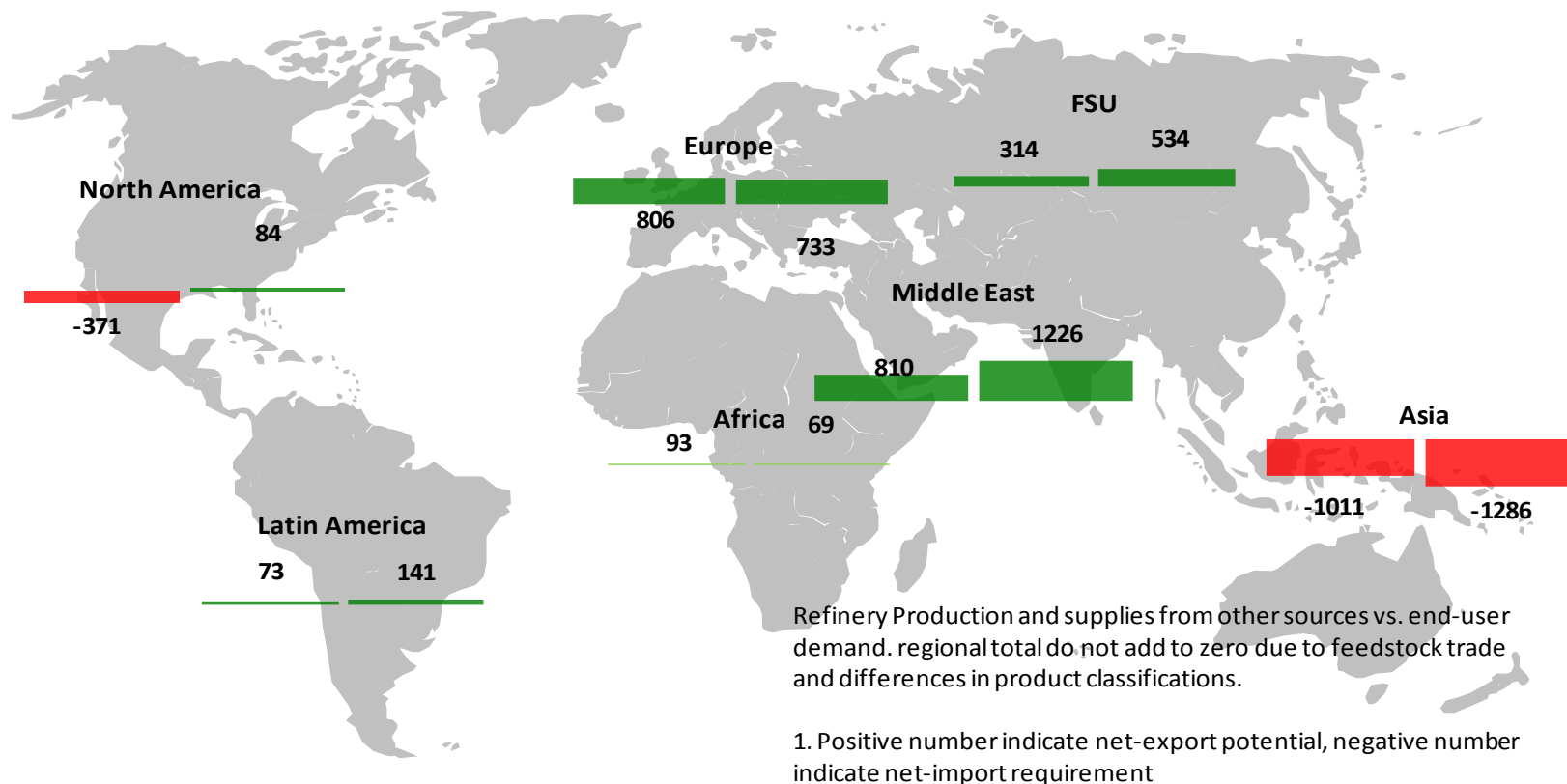


# Gasoline markets increasingly oversupplied

## Product Supply Balances - Gasoline/Naphtha

Regional Balances in 2011 and 2017<sup>1</sup>

Thousand barrels per day



- Gasoline & Naphtha remain under pressure, as demand contracts in US and Europe and new supplies from biofuels, NGLs etc
- While European surpluses persist, N. American imports vanish

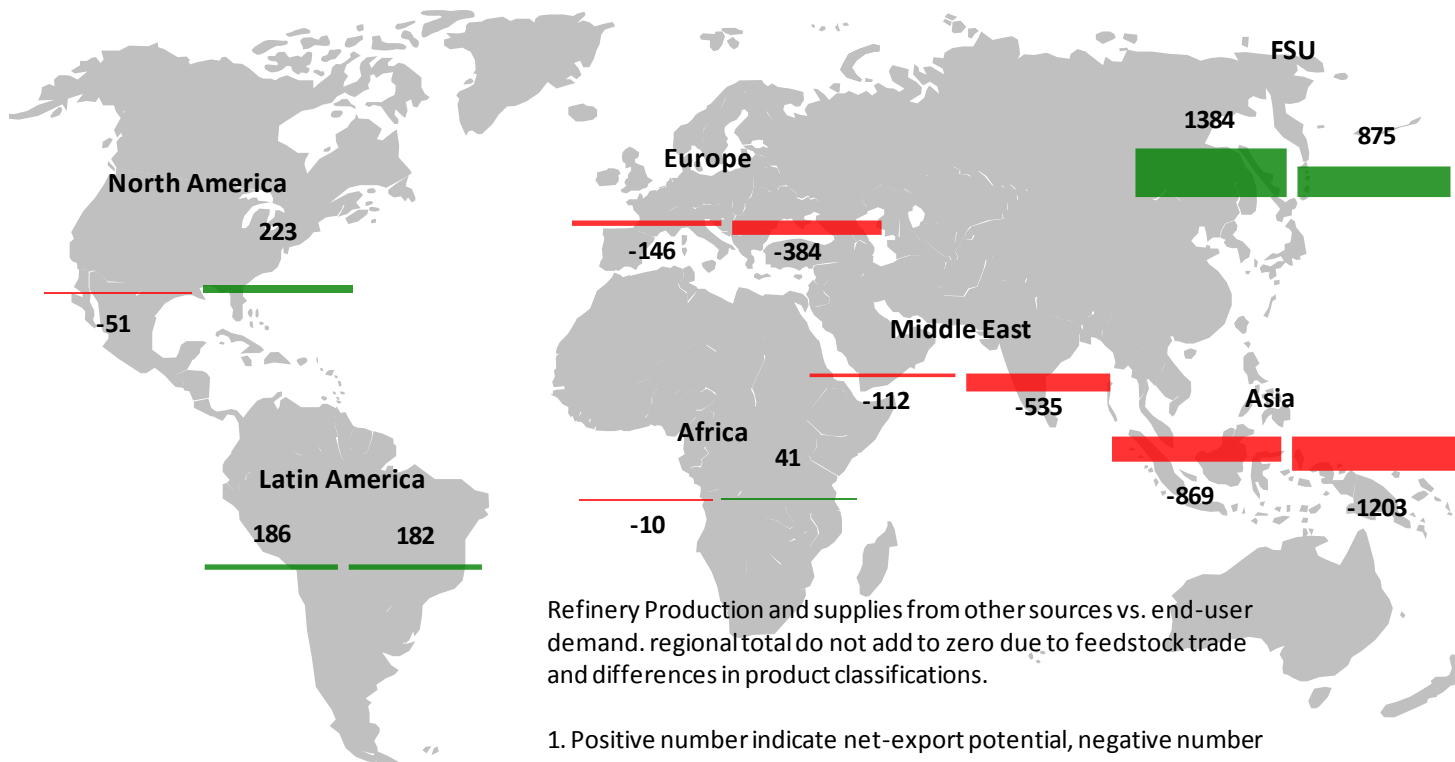
# Fuel oil markets tighten significantly

*Refinery output slumps while demand holds up – for now*

## Product Supply Balances - Fuel Oil

Regional Balances in 2011 and 2017<sup>1</sup>

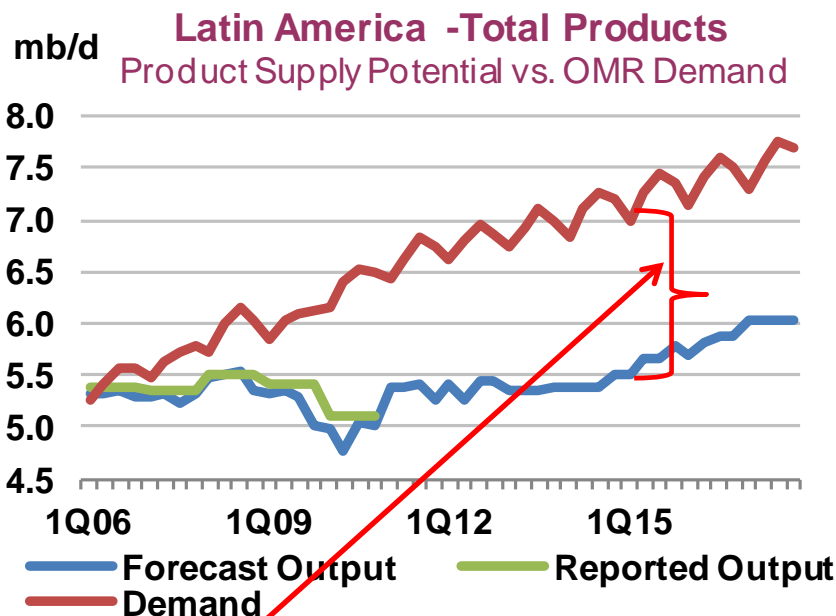
Thousand barrels per day



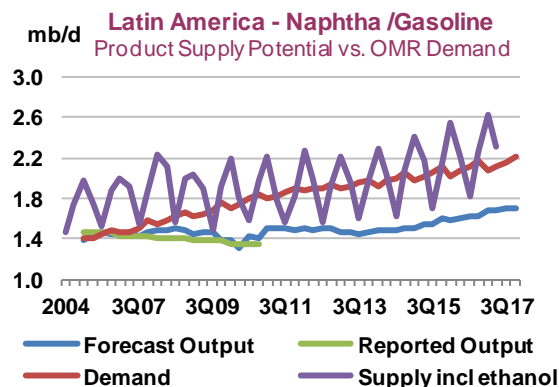
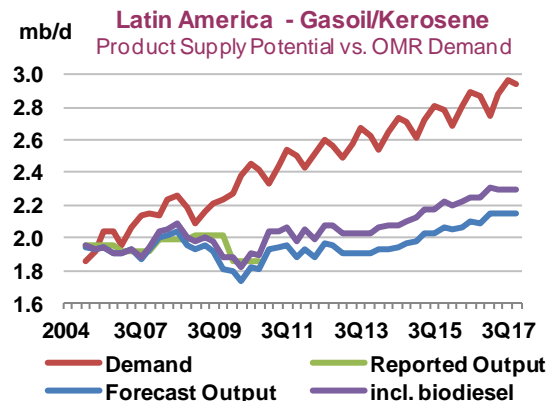
- Fuel oil markets could see renewed support, unless bunker demand switches to marine gasoil
- Middle Eastern deficit seen as unsustainable

# Latin American product balances

*Product imports set to grow as refinery projects delayed*

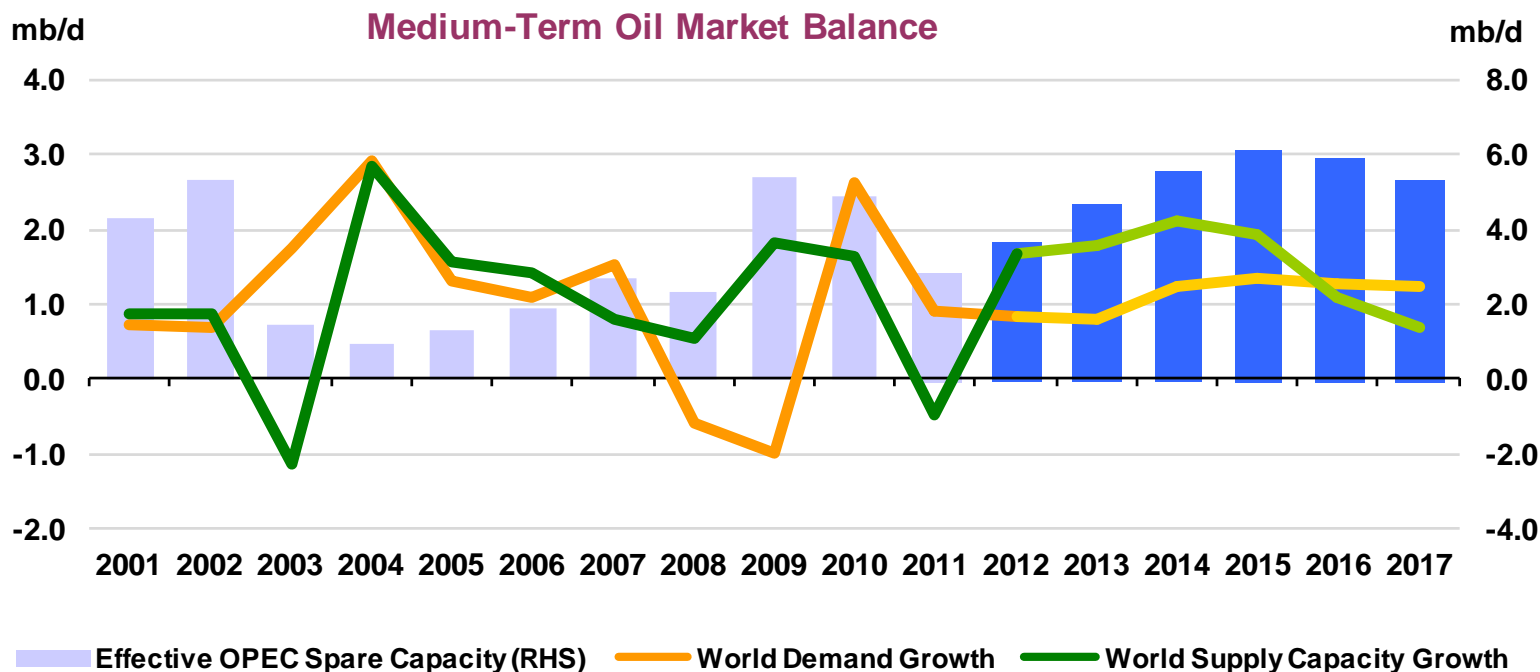


Gap to be filled with imports or non-refinery supplies



- Demand set to grow almost 1 mb/d from 2011 to 2017, almost half of growth from middle distillates.
- While regional refinery capacity grows only 0.5 mb/d

# A more comfortable balance ahead?



- **Lower demand growth and more robust supply picture make for more comfortable balance**
- **Economic outlook remains uncertain**
- **OPEC spare capacity rebuilds after years of low levels**
- **Increased above-ground risks**
- **Technological advances are far reaching**

An aerial photograph of an industrial facility, likely a refinery or petrochemical plant. Several large, white, cylindrical storage tanks are visible, surrounded by various pipes, walkways, and smaller structures. The ground is a mix of green grass and brown earth.

# Thank you

**[antoine.halff@iea.org](mailto:antoine.halff@iea.org)**