Selected IEF Observations on the IEA and OPEC Energy Outlooks

Analysing Future Oil Prospects
Energy Institute
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Aldo Flores-Quiroga
Secretary General, IEF

Overview

1. What We Learned from the Second IEA-IEF-OPEC Symposium on Energy Outlooks

2. Observations Drawn from Recent IEA and OPEC Outlooks

   a. Short-term Demand | Short-term Supply
   b. Medium-term Demand | Medium-term Supply
   c. Long-term Demand | Long-term Supply

3. Mapping Out a Path Towards Shared Progress

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Lessons from the Second IEA-IEF-OPEC Symposium on Energy Outlooks

1. Comparability of the outlooks could be improved by **promoting action in four areas**:

   - More **convergence** in definitions.
   - Greater **disaggregation** of datasets.
   - More effective **exchange of data and information** through a strengthened and improved JODI.
   - Encourage and support **more frequent exchanges** for market actors to discuss energy outlooks.

Lessons from the Second IEA-IEF-OPEC Symposium on Energy Outlooks

2. **Energy and environmental policies are key drivers** of future energy demand and supply and are the **most uncertain** determinants of the outlooks.

3. The IEA-IEF-OPEC Symposium is an opportunity to **develop a better understanding of the potential effects of various policy assumptions** on the outlooks.

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The IEA and OPEC Outlooks We Will Discuss Today

	IEA	OPEC
Short-term	Oil Market Report (OMR), published December 2012	Monthly Oil Market Report (MOMR), published December 2012
Medium-term	Medium-Term Oil Market Report (MTOMR), published October 2012	World Oil Outlook (WOO 2012), published November 2012
Long-term	World Energy Outlook (WEO), published November 2012	World Oil Outlook (WOO 2012), published November 2012

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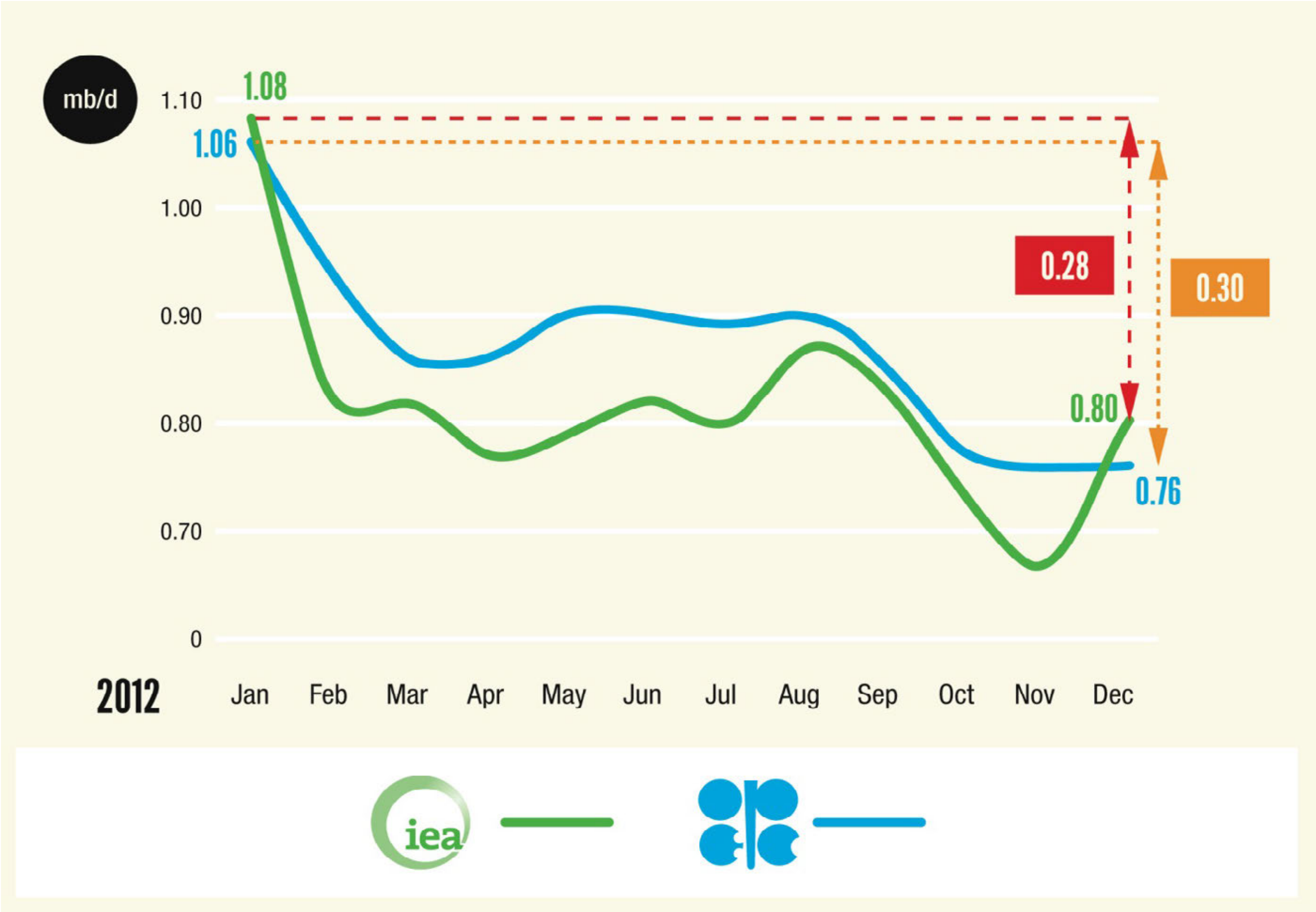
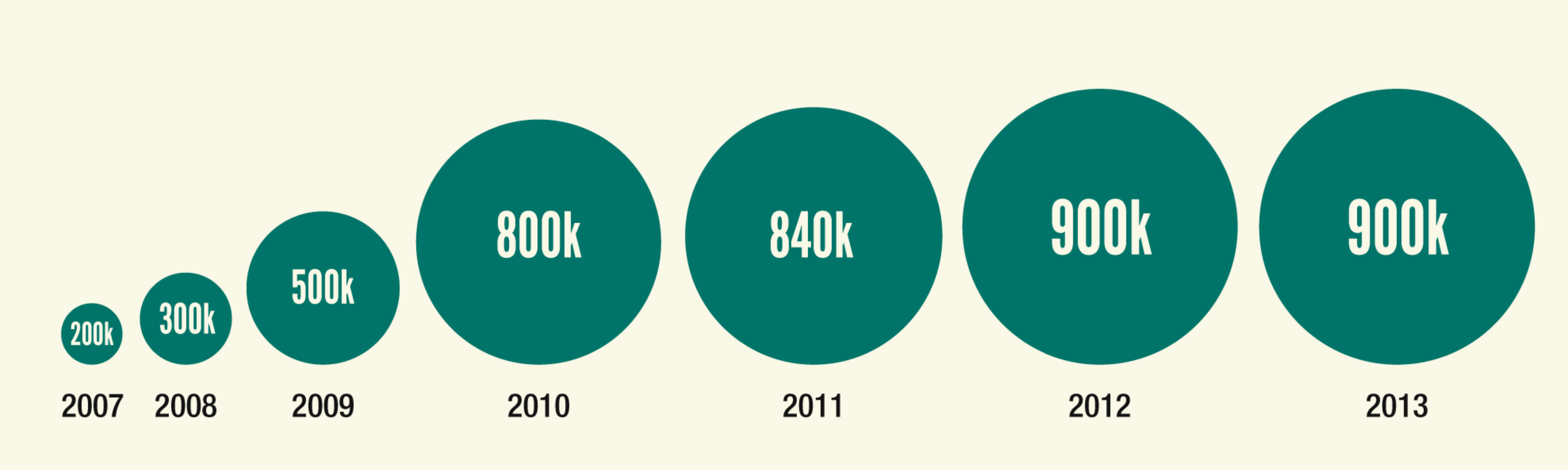
Ongoing downward adjustments to **short-term demand** during 2012, in light of concerns about the global economic recovery

IEA and OPEC Monthly Revisions of 2012 World Oil Demand Growth Projections



The gap between the IEA's and OPEC's **global demand** figures (b/d) has risen since 2007



Part of this trend can be explained by the following factors:

- Different definitions of how demand is measured in some regions
- How stocks in apparent consumption are treated

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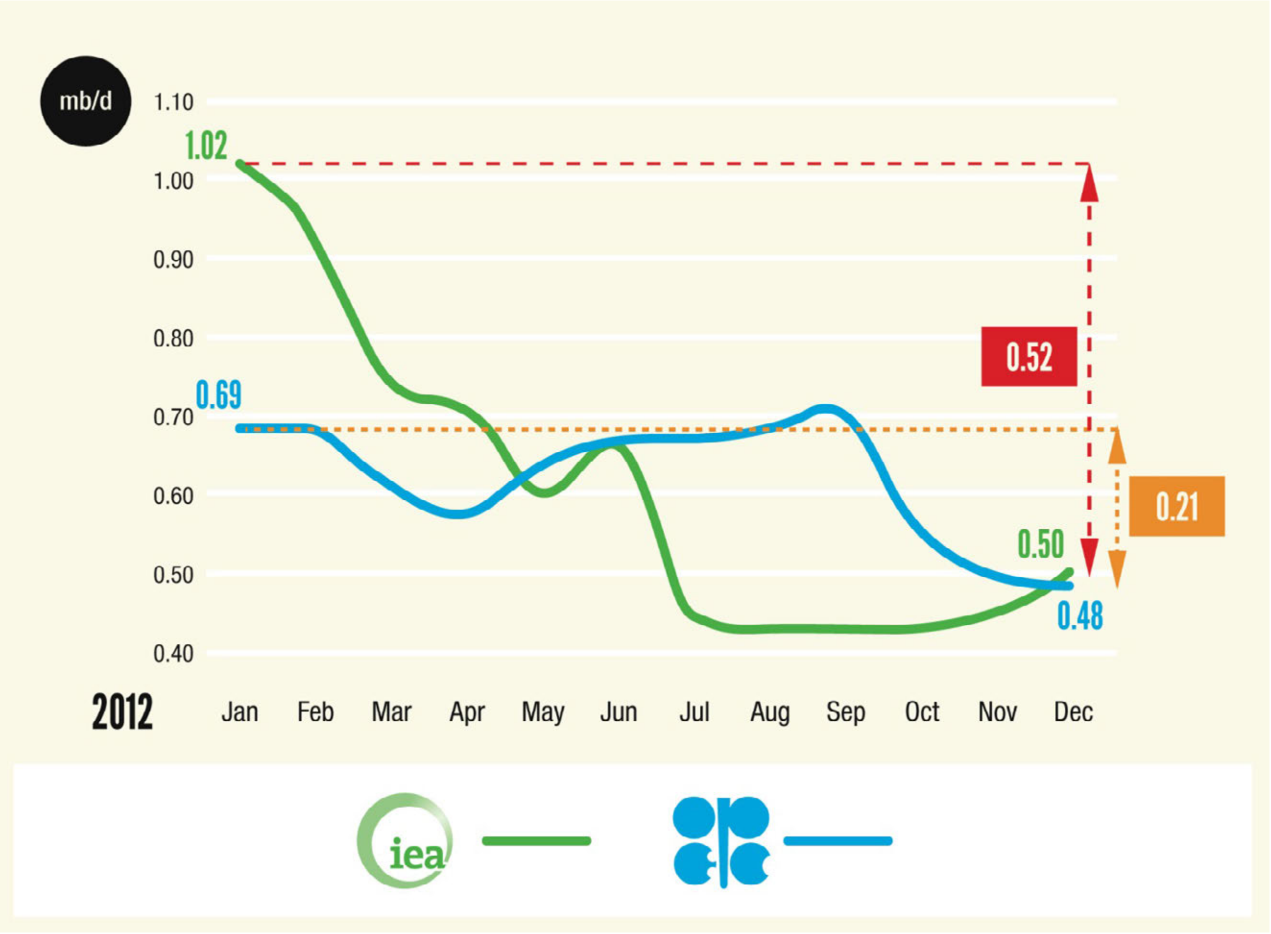
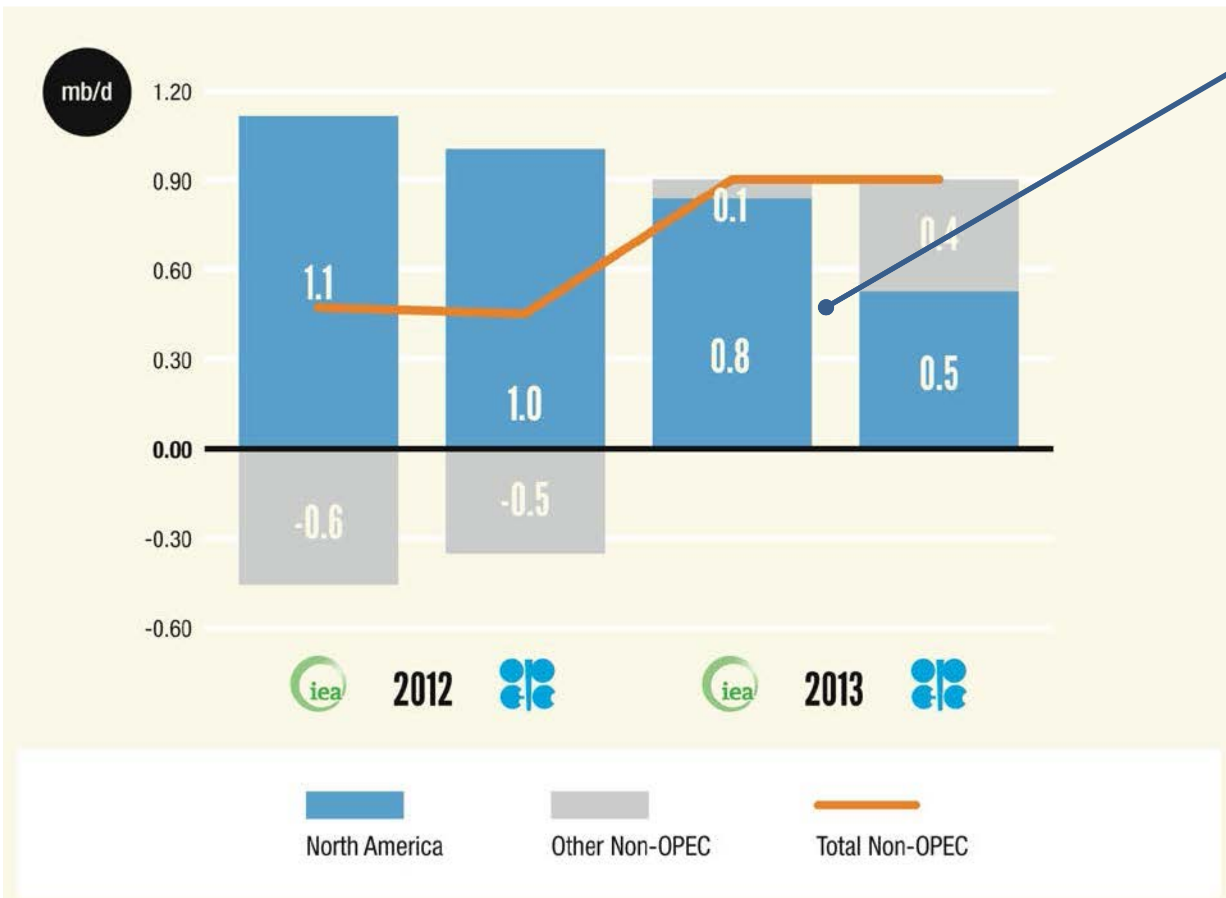
Ongoing downward **short-term supply** adjustments during 2012, due to unexpectedly high levels of production stoppages

IEA and OPEC Monthly Revisions of 2012 non-OPEC Supply Growth Projections



North America leads expected **non-OPEC supply growth**, though the IEA and OPEC differ on the size of that growth

Non-OPEC Short-term Supply Growth by Region



Focus: differing views on expected supply growth from North America

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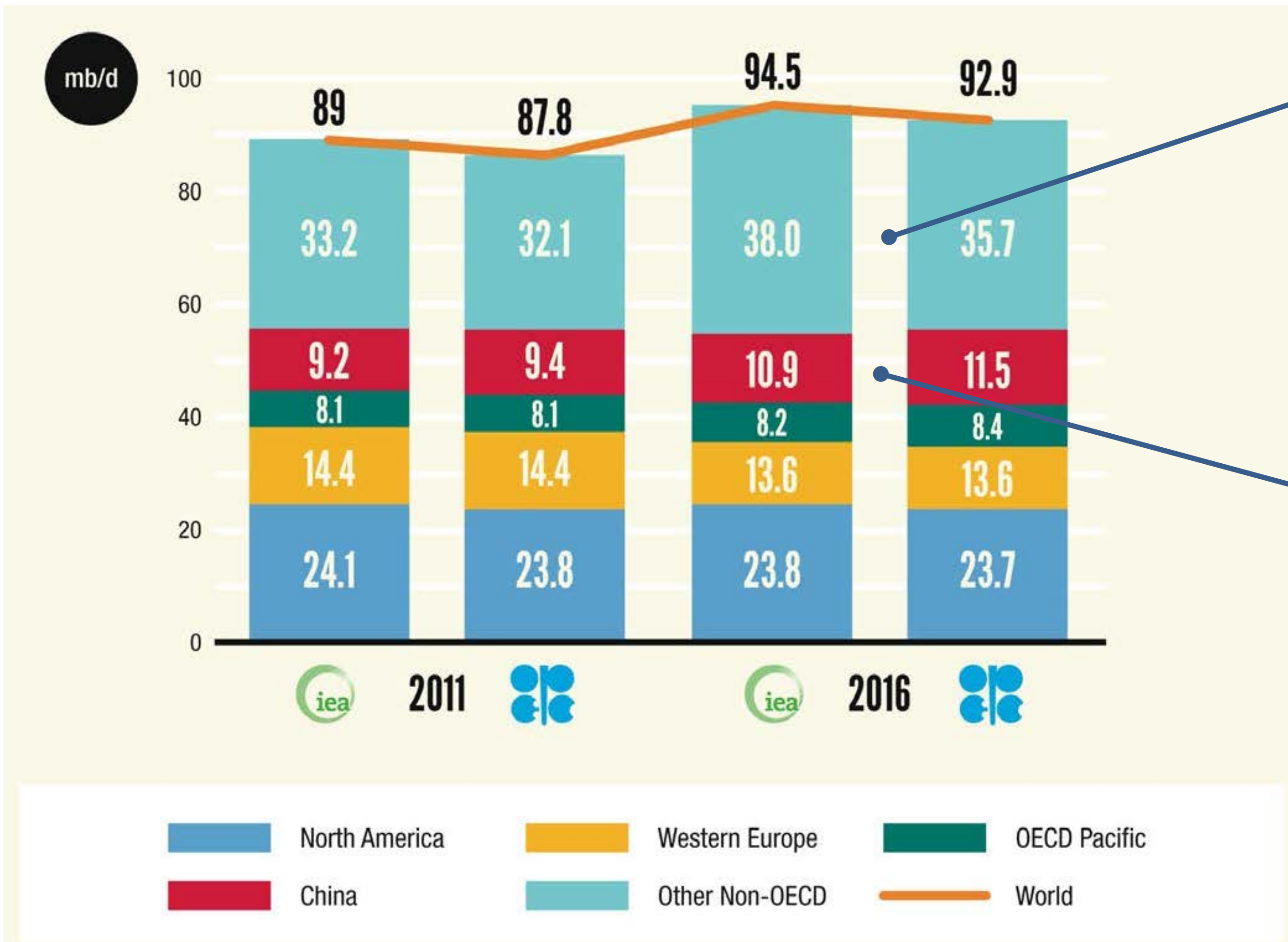
Though the top line outlook figures are similar, there are differences in **medium-term demand** at the regional and country levels that merit closer analysis

IEA and OPEC Medium-term Global Demand Outlooks



Focus: expected non-OECD demand

Focus: expected demand from China

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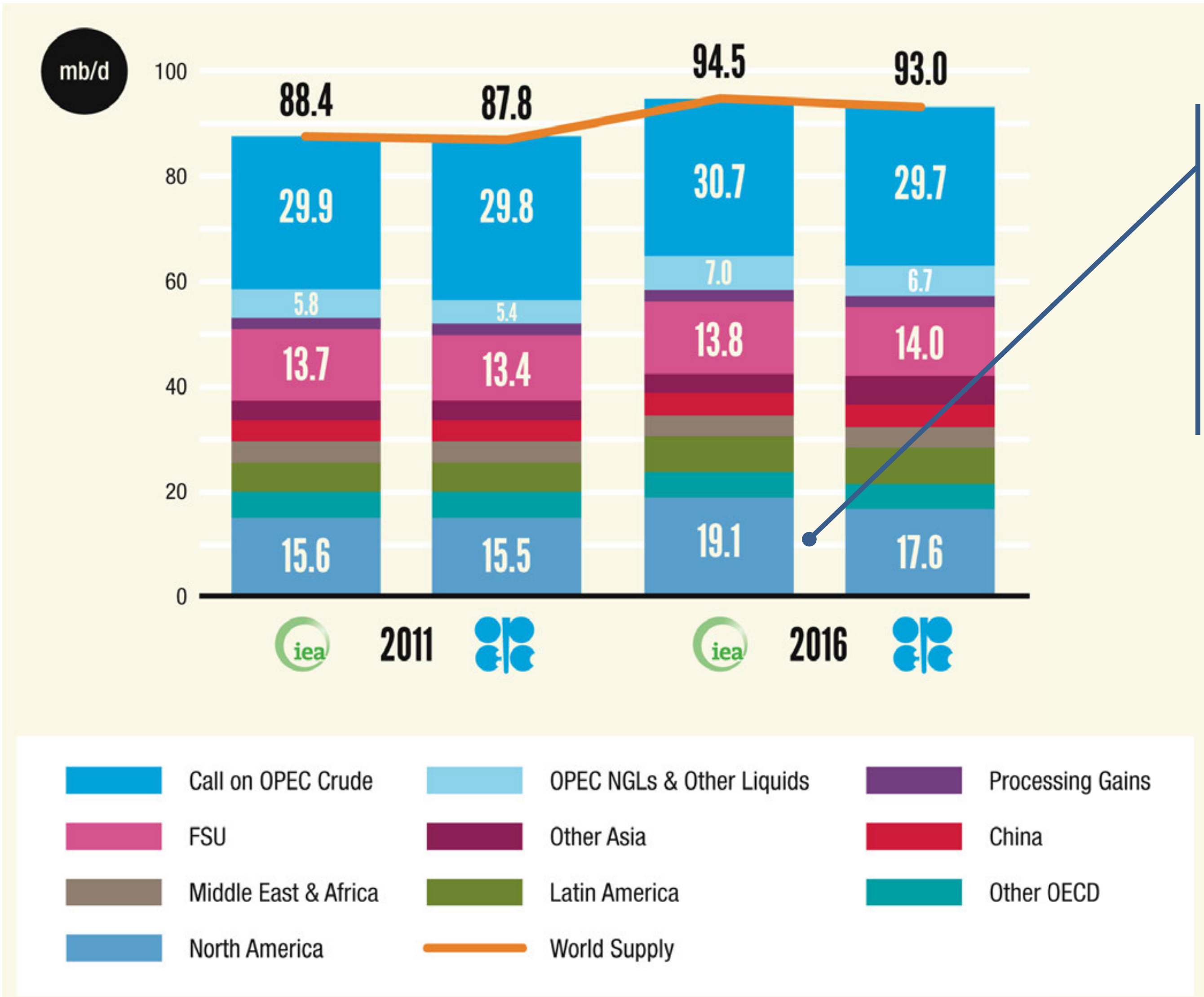
The IEA and OPEC **medium-term global supply** outlooks present different views on North America

IEA and OPEC Medium-term Global Supply Outlooks



Focus: views on expected supply from North America

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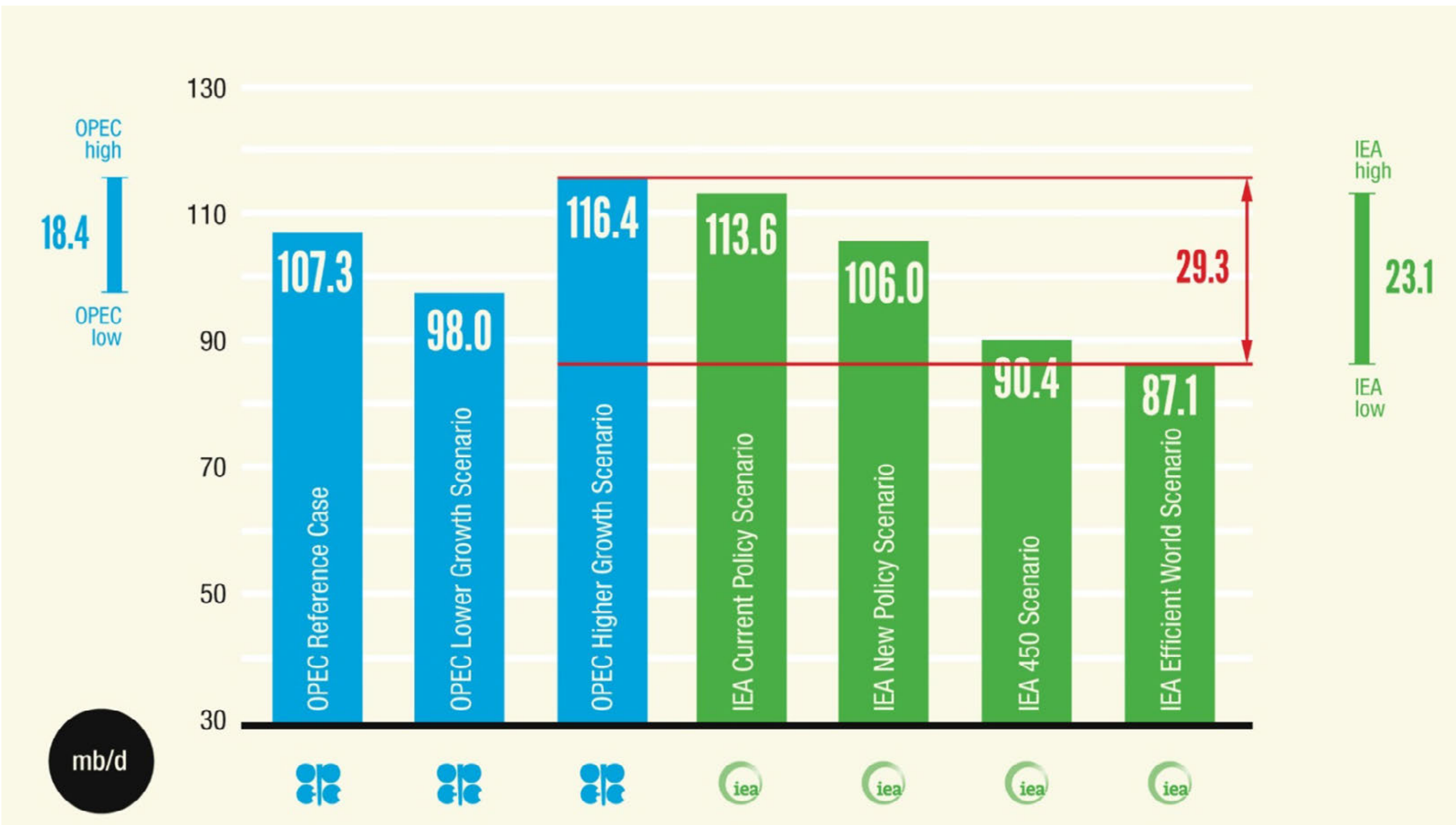
Assumptions

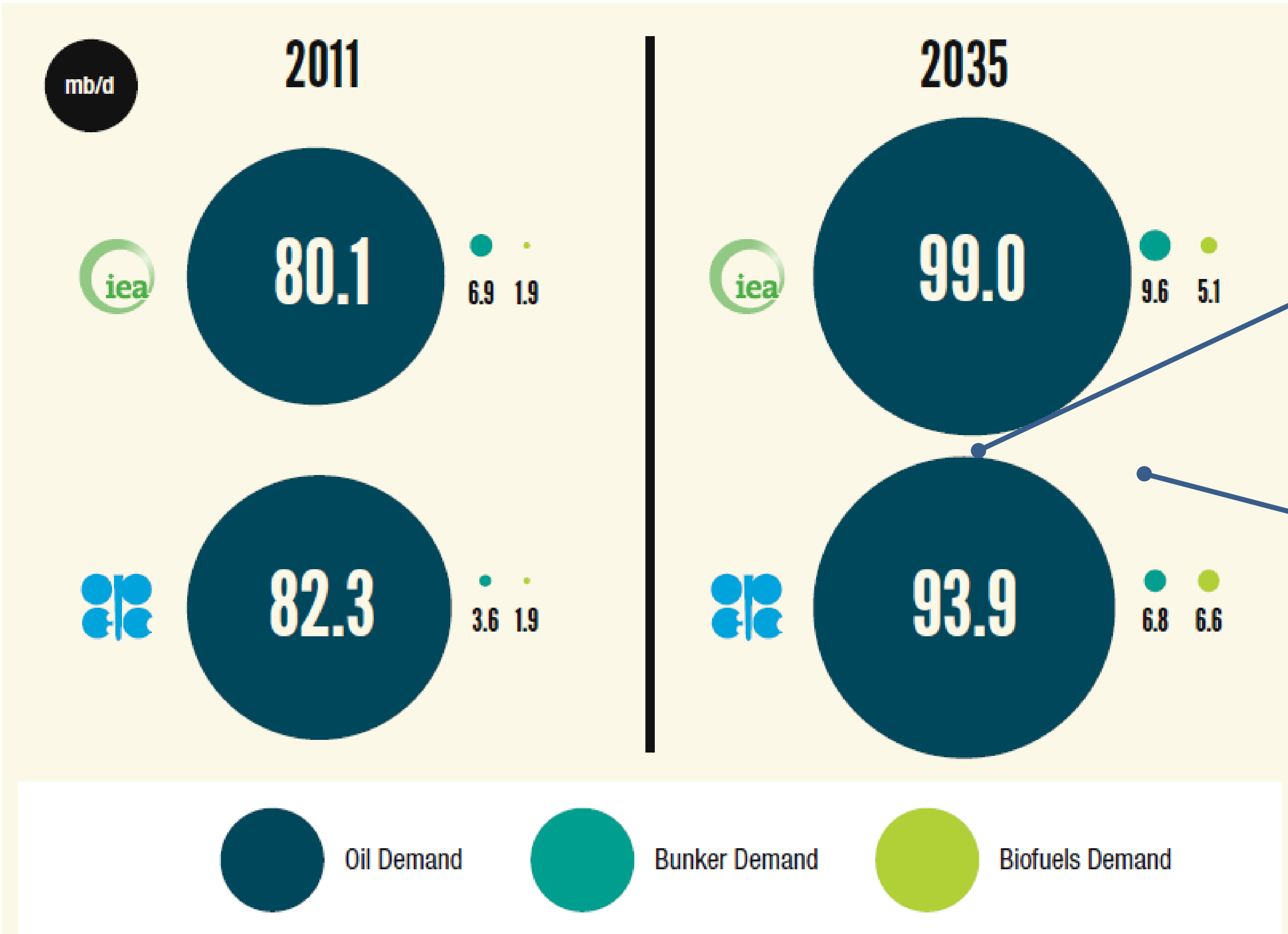
	OPEC Reference Case	IEA Current Policies Scenario
Oil prices (nominal)	\$100/bbl over the medium-term, reaching \$155/bbl by 2035	\$157/bbl in 2020, reaching \$250/bbl by 2035
World Economic Growth	3.4% (2012-2035)	3.5% (2010-2035)
Population Growth	0.9%	0.9%
Energy and Environmental Policies	Only policies currently in place or widely expected to be implemented influence supply and demand	No policies are added to those in place as of mid-2012

Mind the gaps: a 29 mb/d gap between IEA's **low long-term demand** and OPEC's high; and a 6 mb/d gap between the two central scenarios

Long-term Global Demand Scenarios



The IEA and OPEC **long-term global demand** outlooks present different regional and bunker fuels categorisation.



Focus: Regional categorisation

Focus: Treatment of marine bunker fuels

IEA bunker figures include international marine and aviation fuels.

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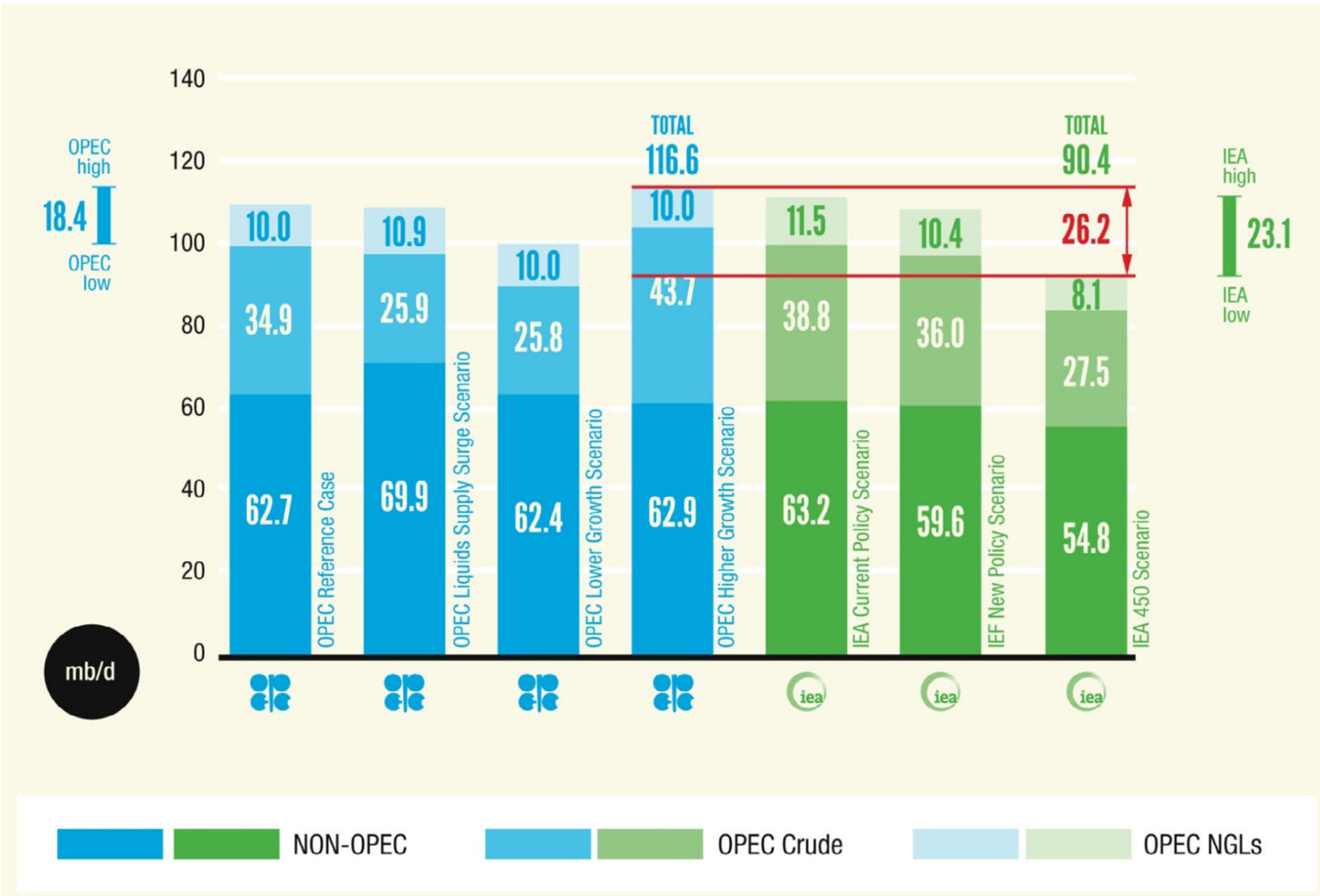
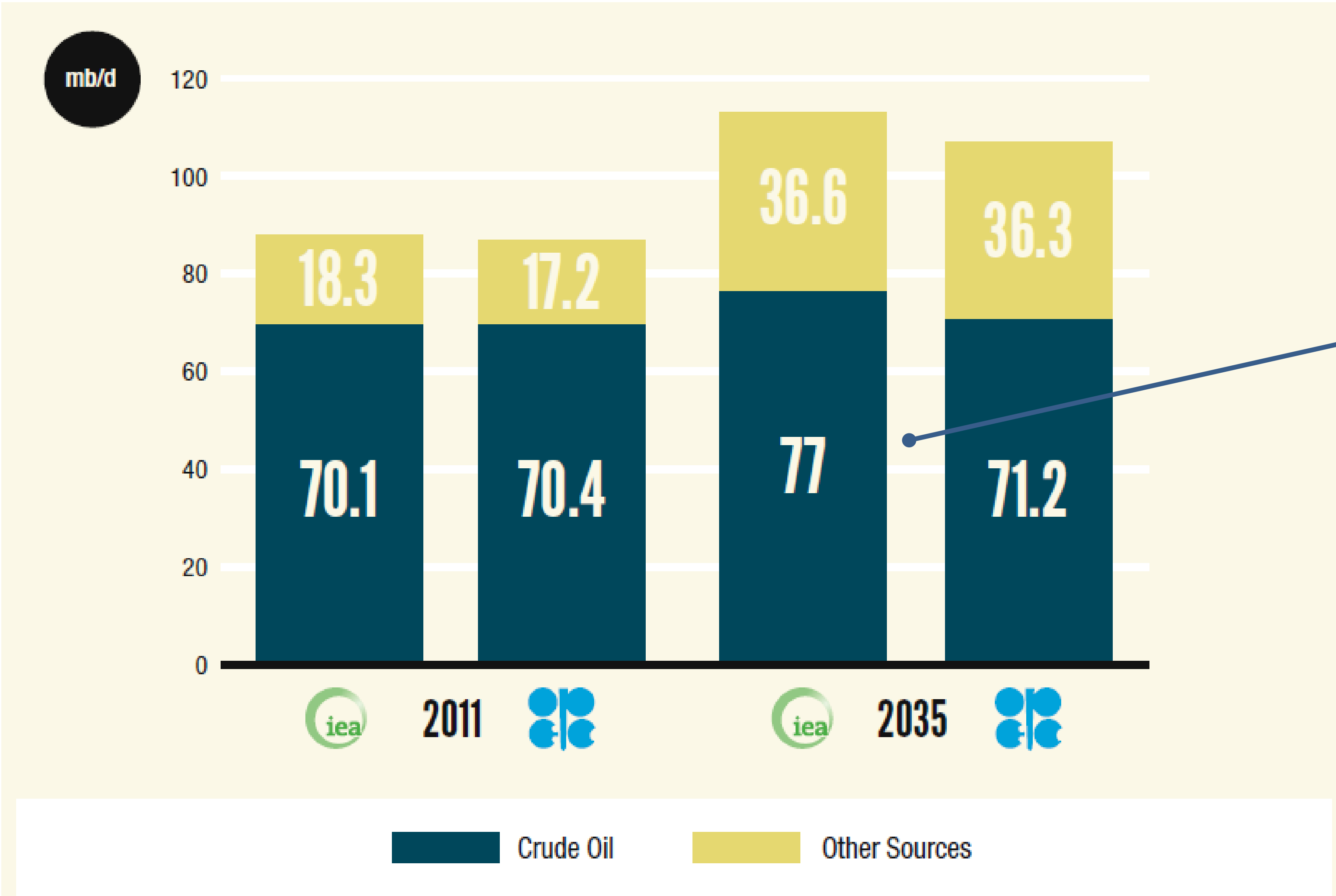
Different outlooks, methodologies, expected regional crude demand and regional cost assumptions yield different views on projected investment needed to meet demand in 2035

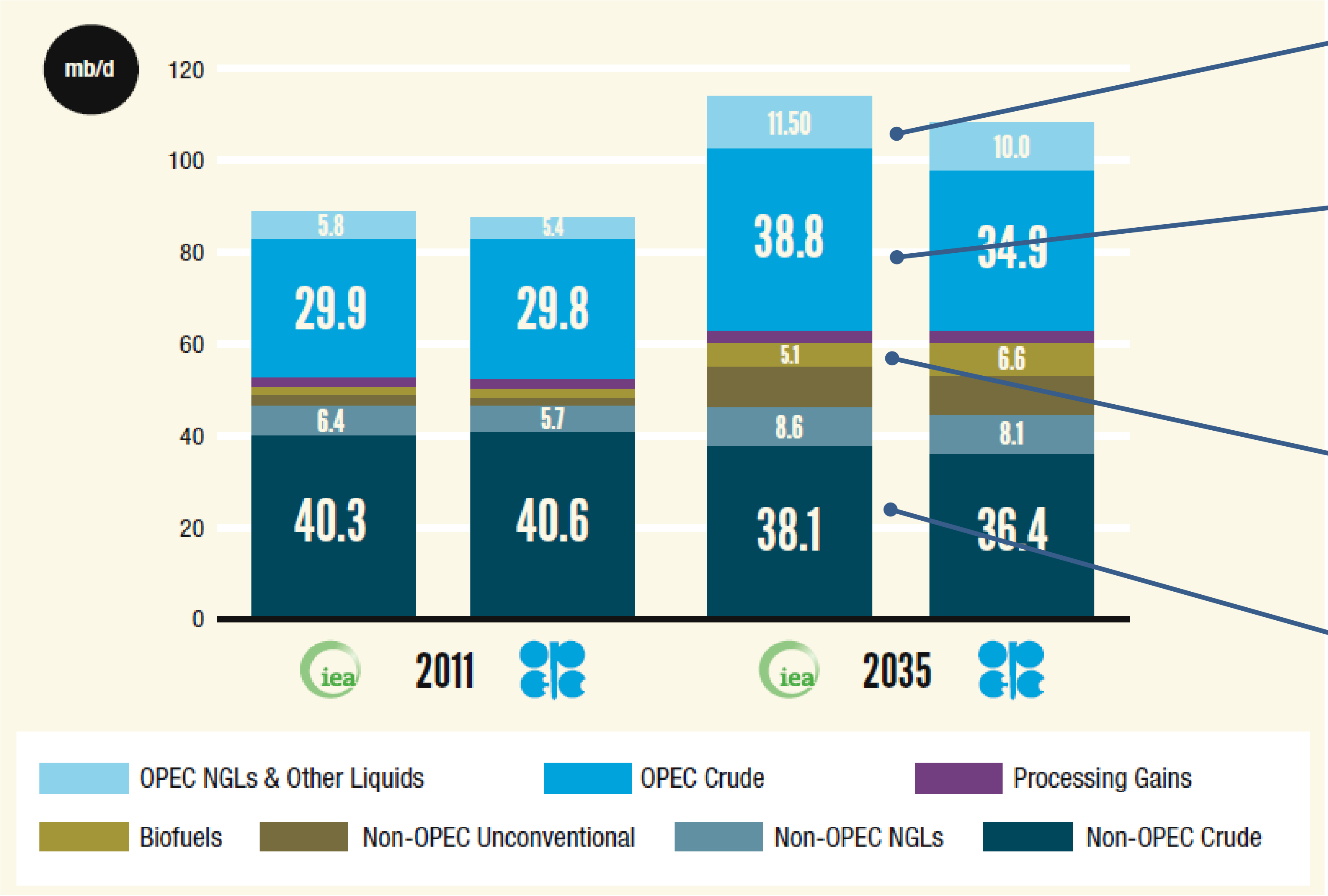


Long-term supply: Fuel-type differences



Focus on Crude oil

Long-term supply: Regional and fuel-type differences



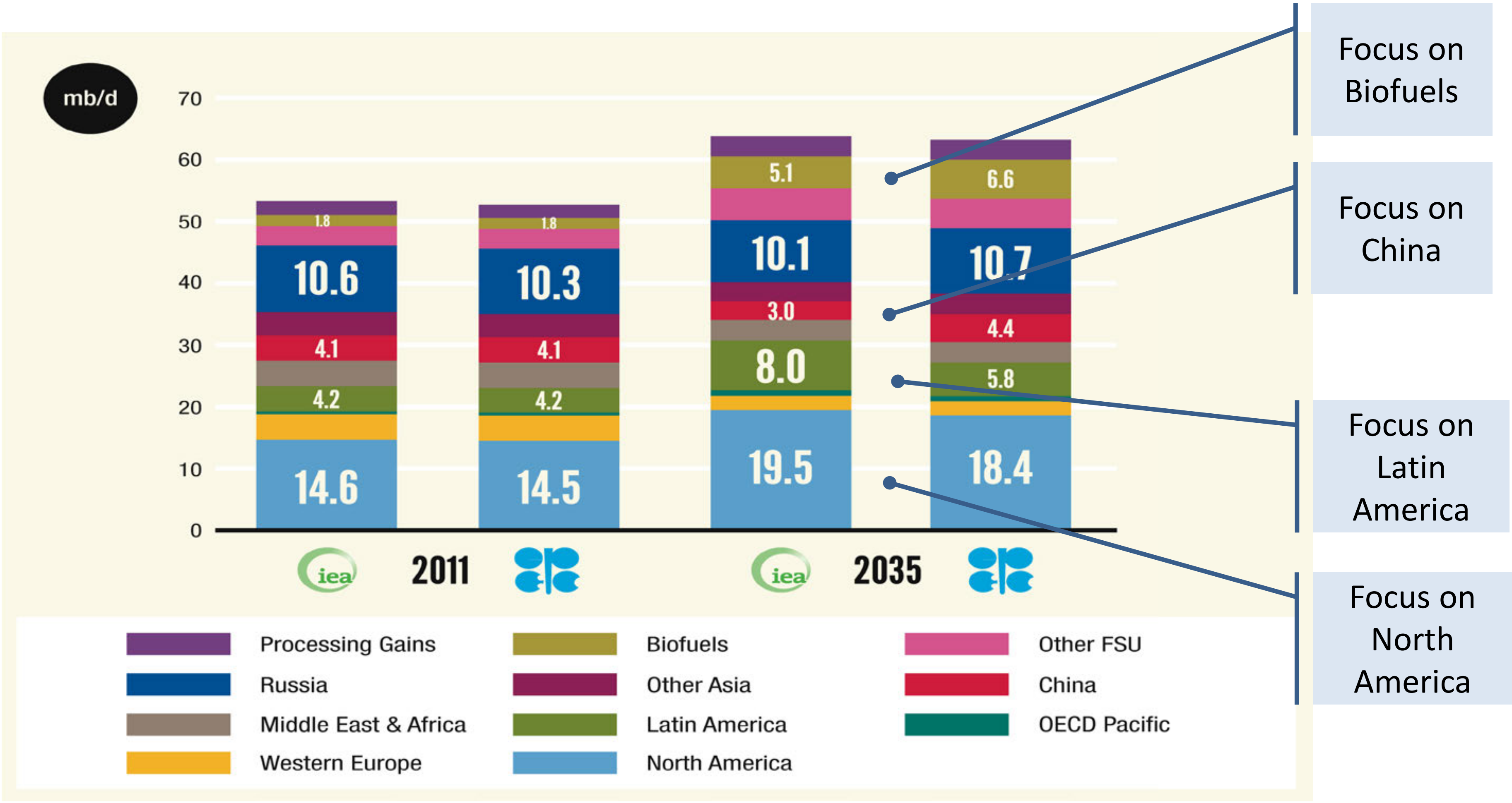
Focus on OPEC NGLs

Focus on OPEC crude

Focus on Biofuels

Focus on non-OPEC Crude

Long-term non-OPEC supply: National, regional and fuel-type differences



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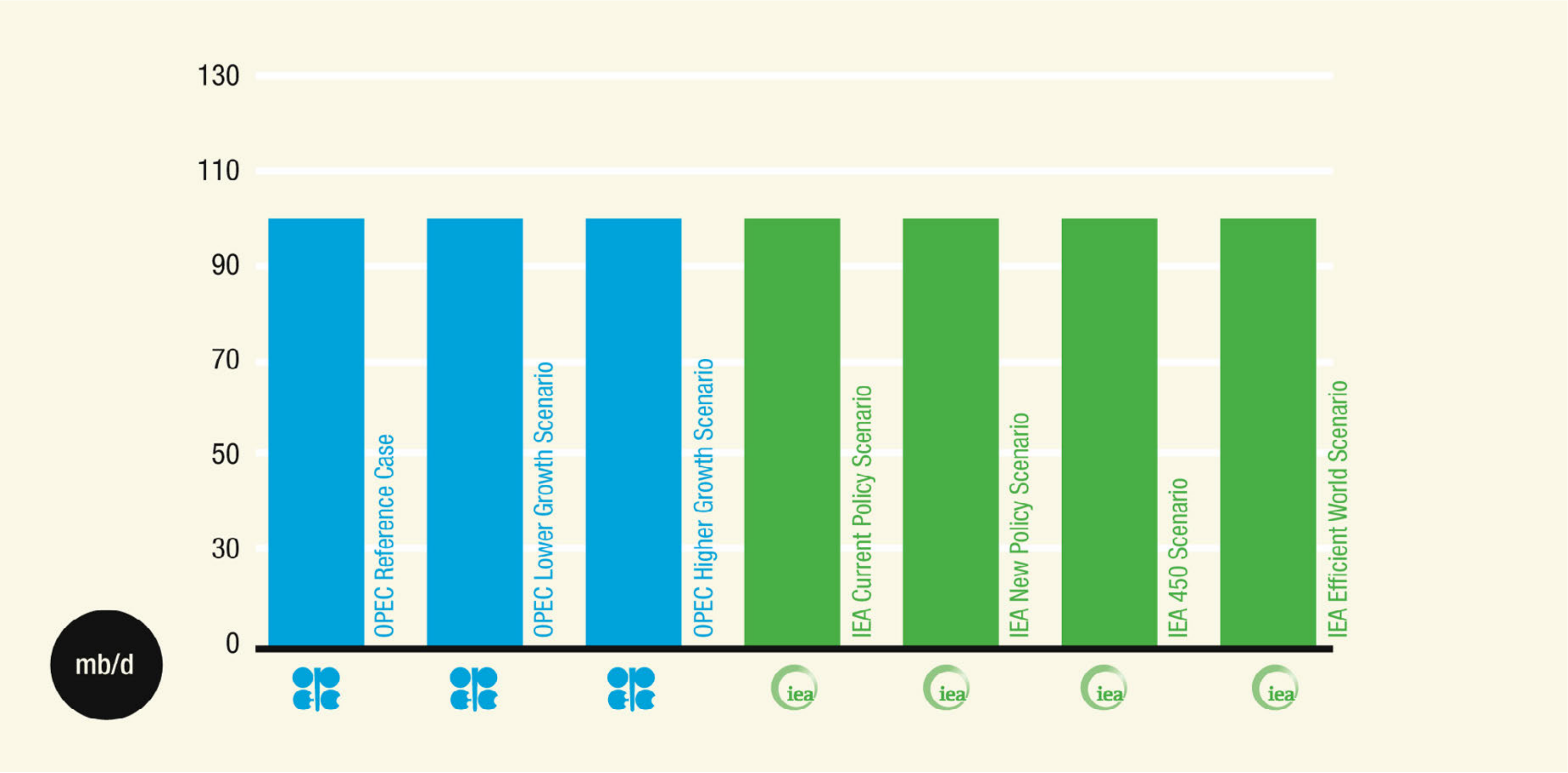
The goal is not necessarily to reach consensus in all scenarios, but to understand their assumptions and drivers



Focus of IEA-IEF-OPEC cooperation to **facilitate comparability** of energy outlooks

- Treatment of ethane
- Treatment of biofuels and unit of measure
- Definition of biomass
- Categorisation of regional long-term oil demand
- Definition of the medium-term
- Definition of the long-term
- Categorisation of light tight oil (US and outside of the US)

The IEF will continue to encourage discussion between the IEA and OPEC

- Treatment of marine bunker fuels
- Sizeable differences in non-OPEC supply for key regions and countries
- Demand growth outlooks in key countries and regions
- Respective outlooks for shale oil
- Differences in historical supply and demand data
- Improving non-OECD stocks data collection through JODI
- Production spare capacity

Thank You