

Lower oil prices and the energy outlook



For

Alaska Oil & Gas Association Conference

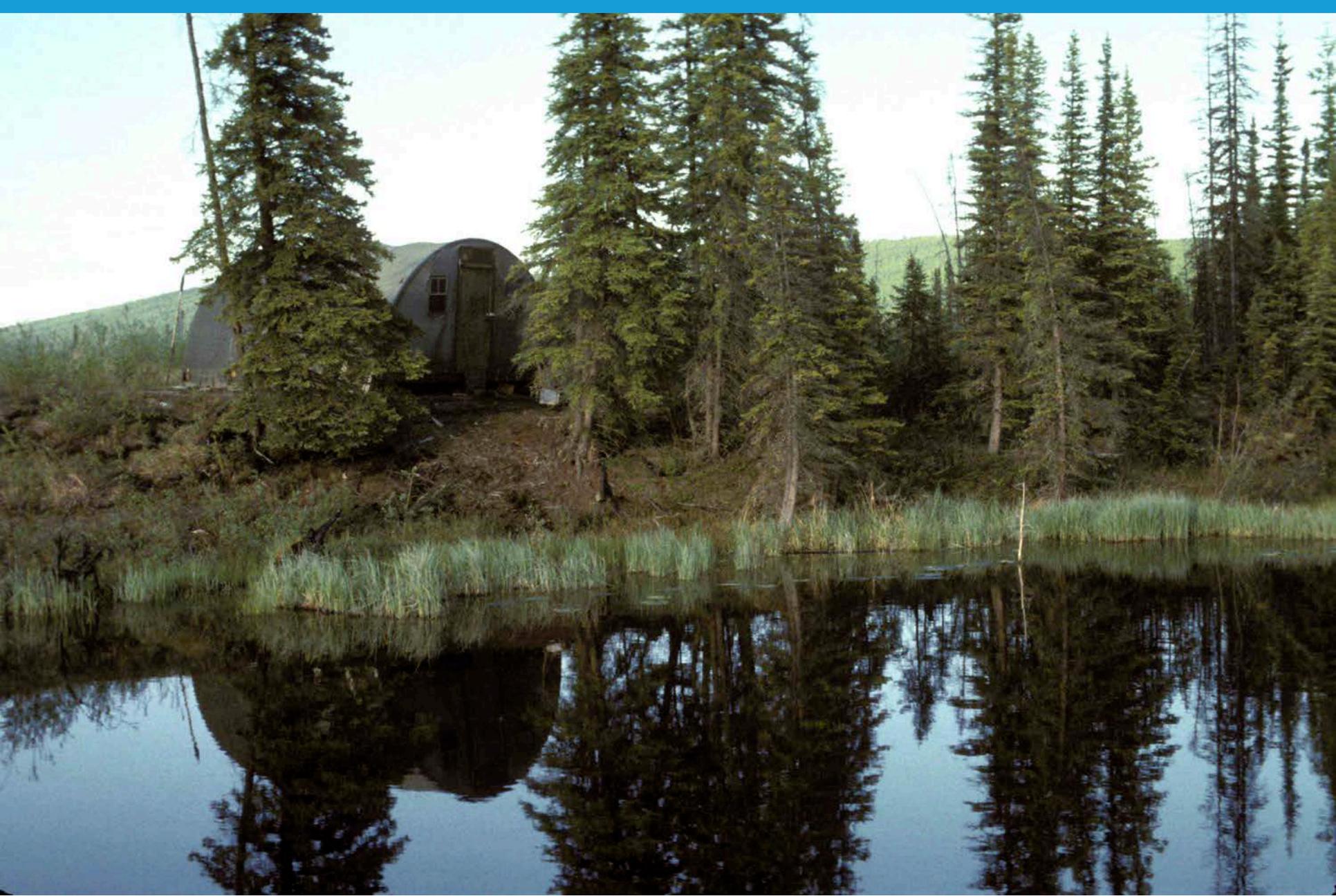
May 2015 | Anchorage, AK

By

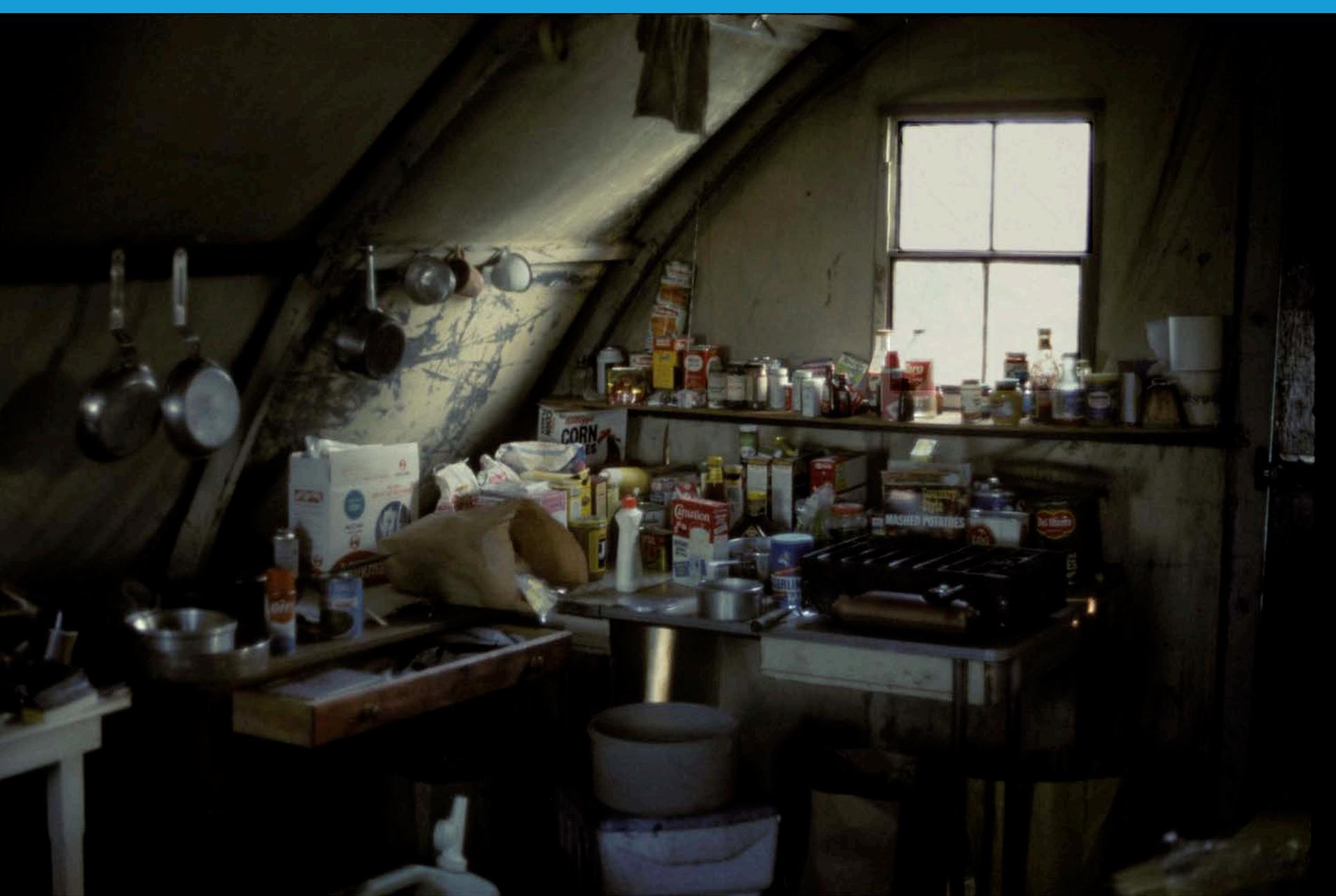
Adam Sieminski

U.S. Energy Information Administration







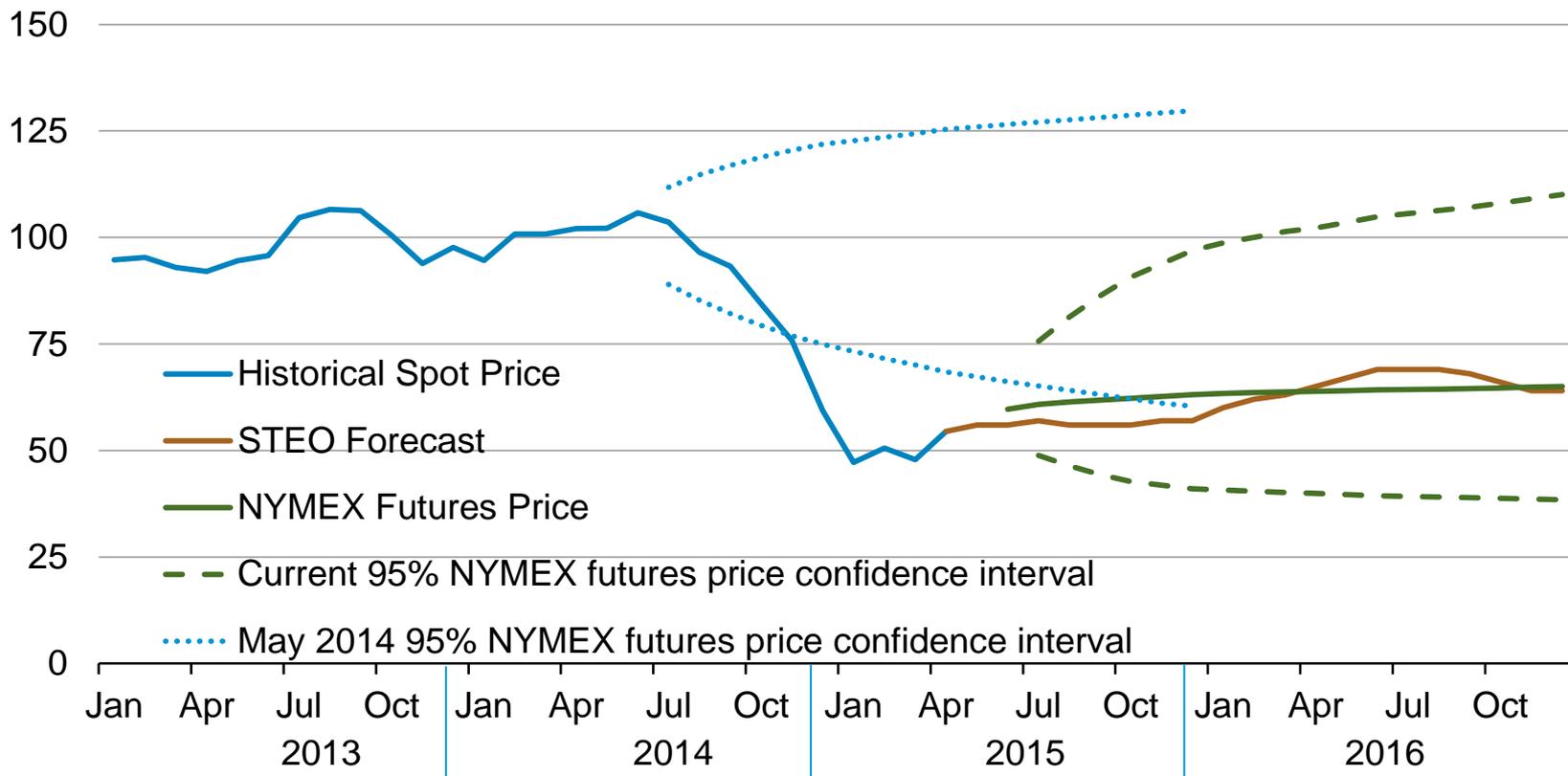


Short-term considerations

For oil prices, the market-implied confidence band is very wide

WTI price

dollars per barrel

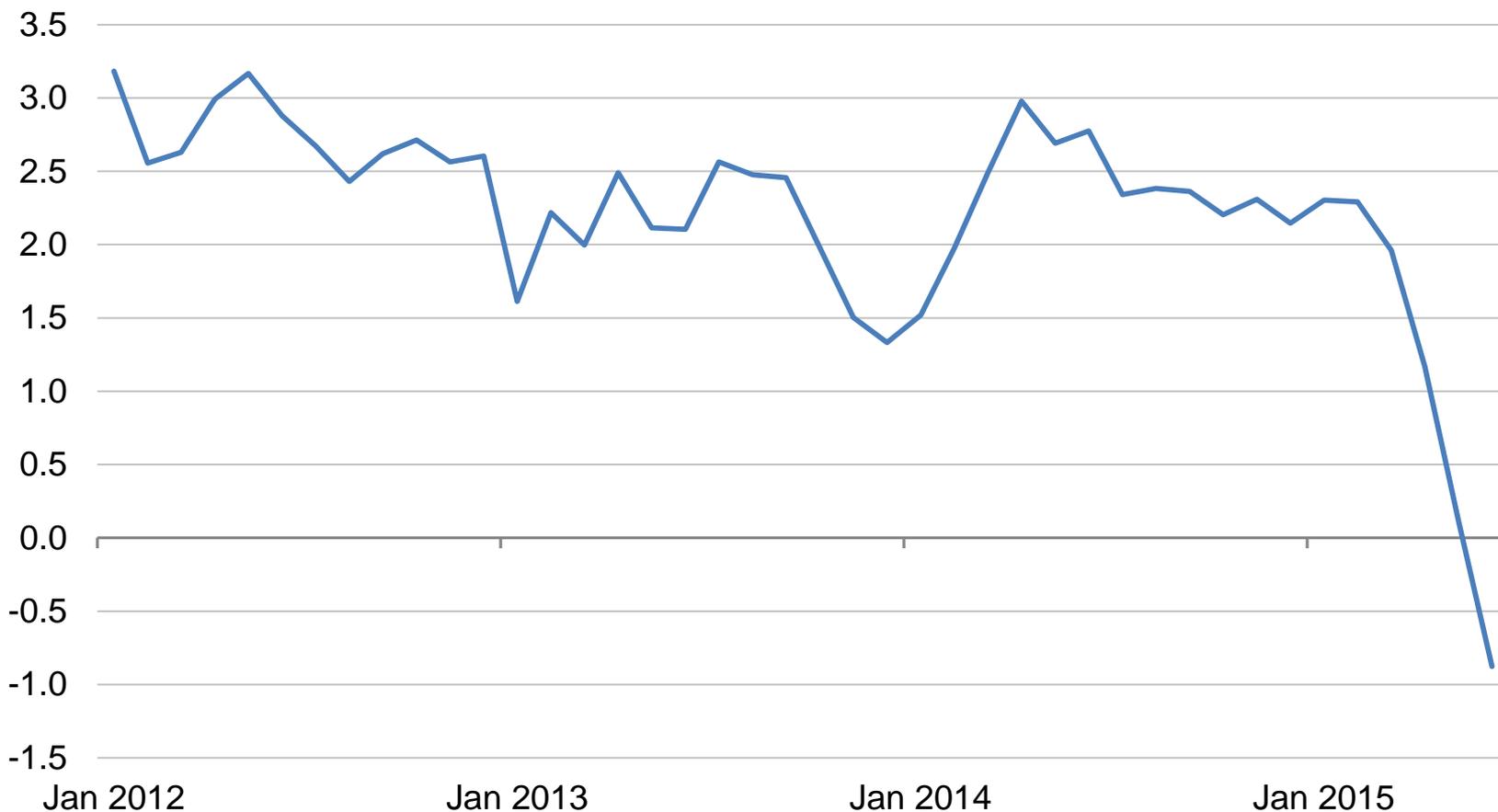


Source: EIA, Short-Term Energy Outlook, May 2015

Production growth in top crude producing regions (Permian, Bakken, Niobrara, and Eagle Ford) reverses in early 2015

monthly percent change

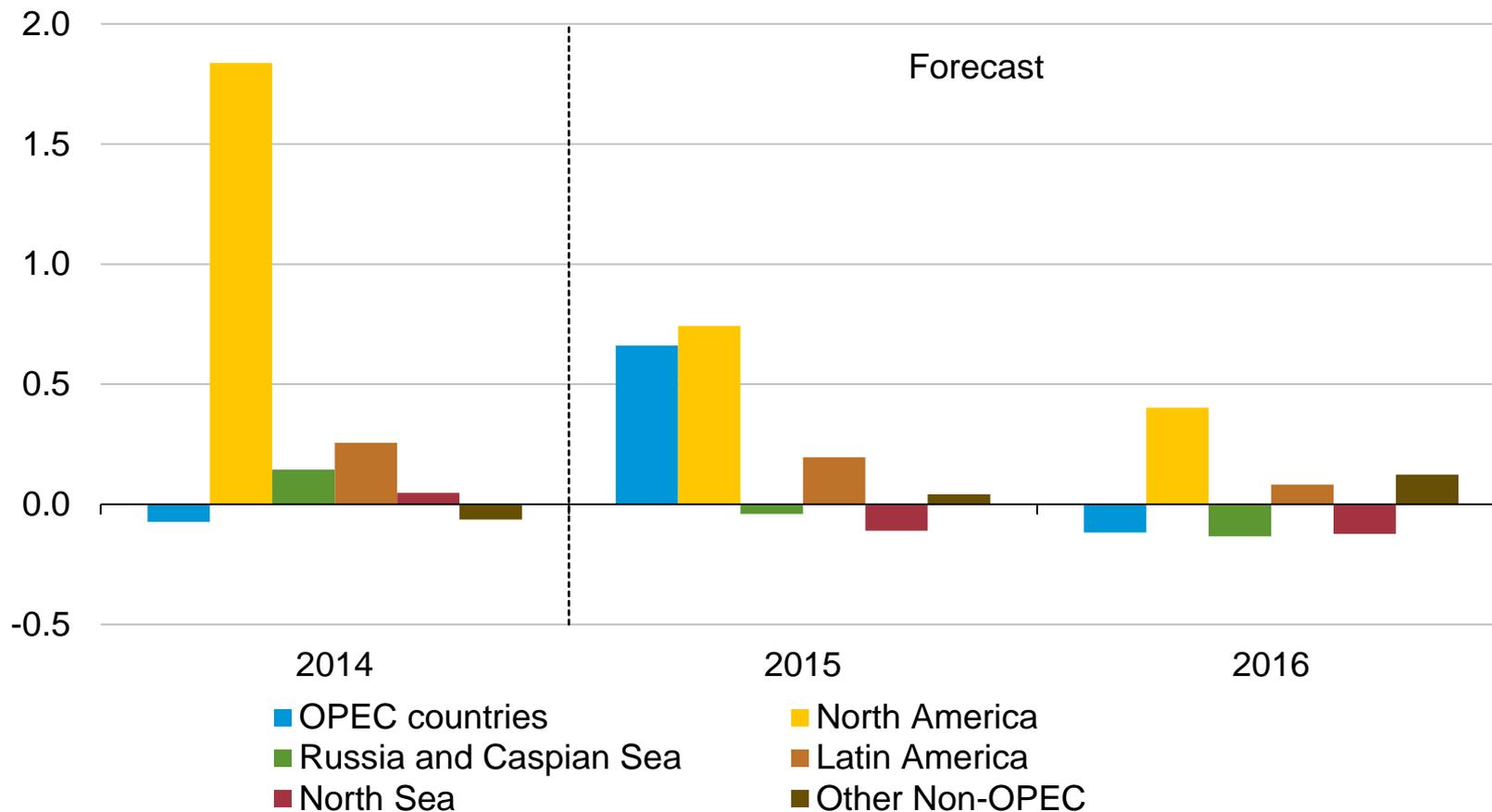
three month rolling average



Source: EIA, DPR, May 2015

North American oil production growth slows with lower oil prices but remains the main driver of global production growth

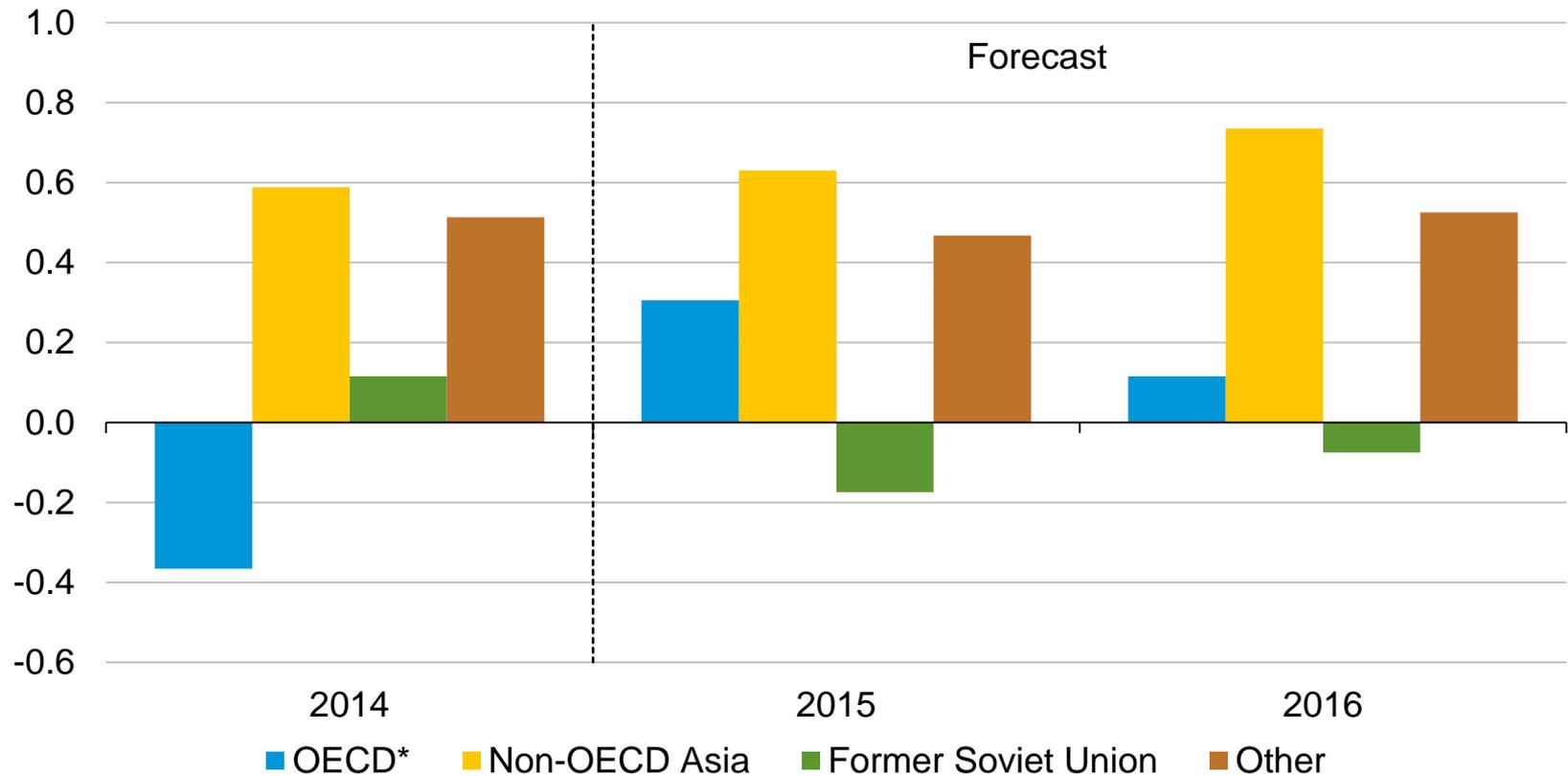
world crude oil and liquid fuels production growth
million barrels per day



Source: EIA, Short-Term Energy Outlook, May 2015

World liquid fuels consumption picks up

million barrels per day (MMbbl/d)



* Countries belonging to the Organization for Economic Cooperation and Development

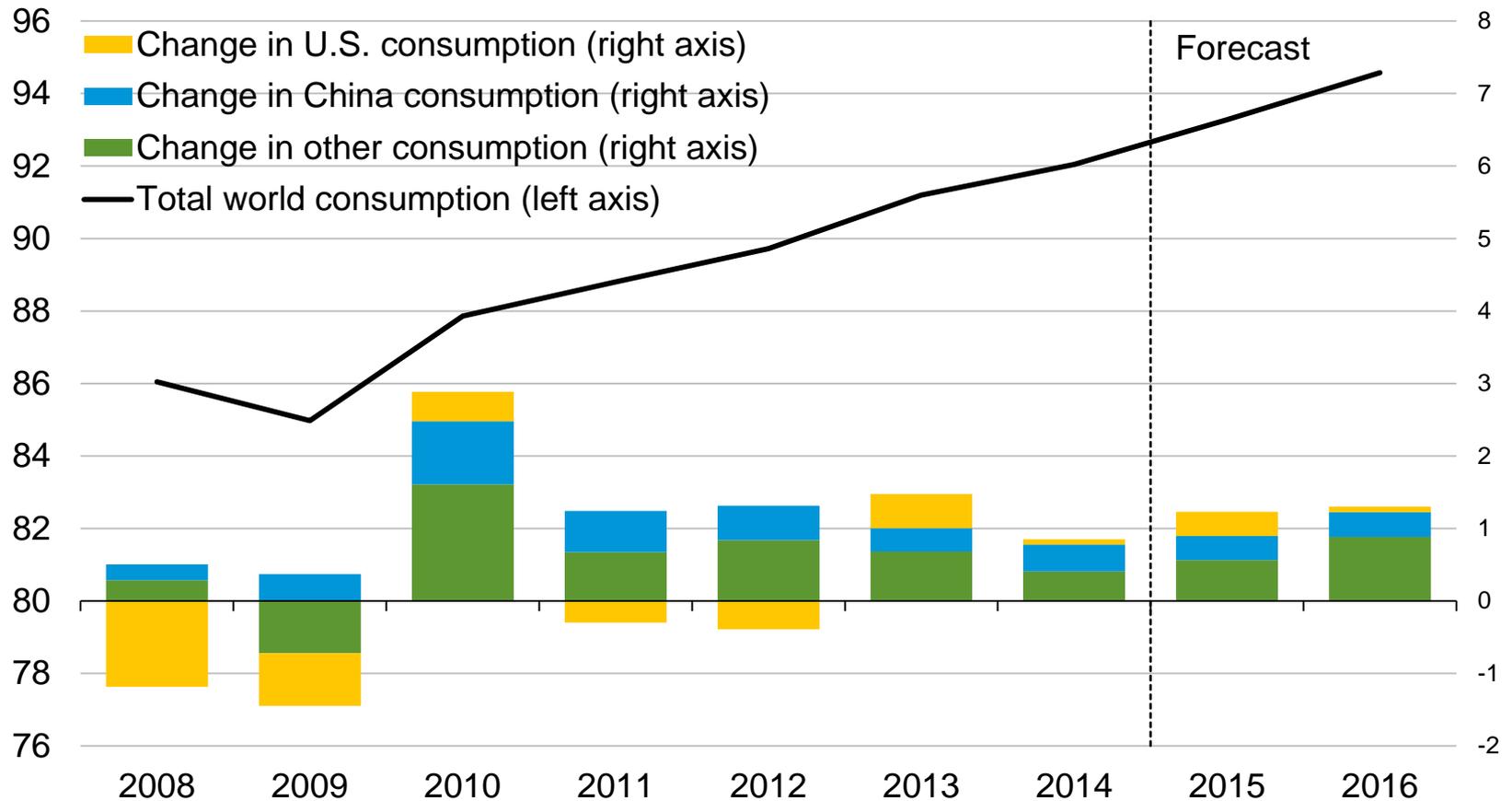
Source: EIA, Short-Term Energy Outlook, May 2015

Surprises in liquid fuel demand to the upside are rare

world liquid fuels consumption

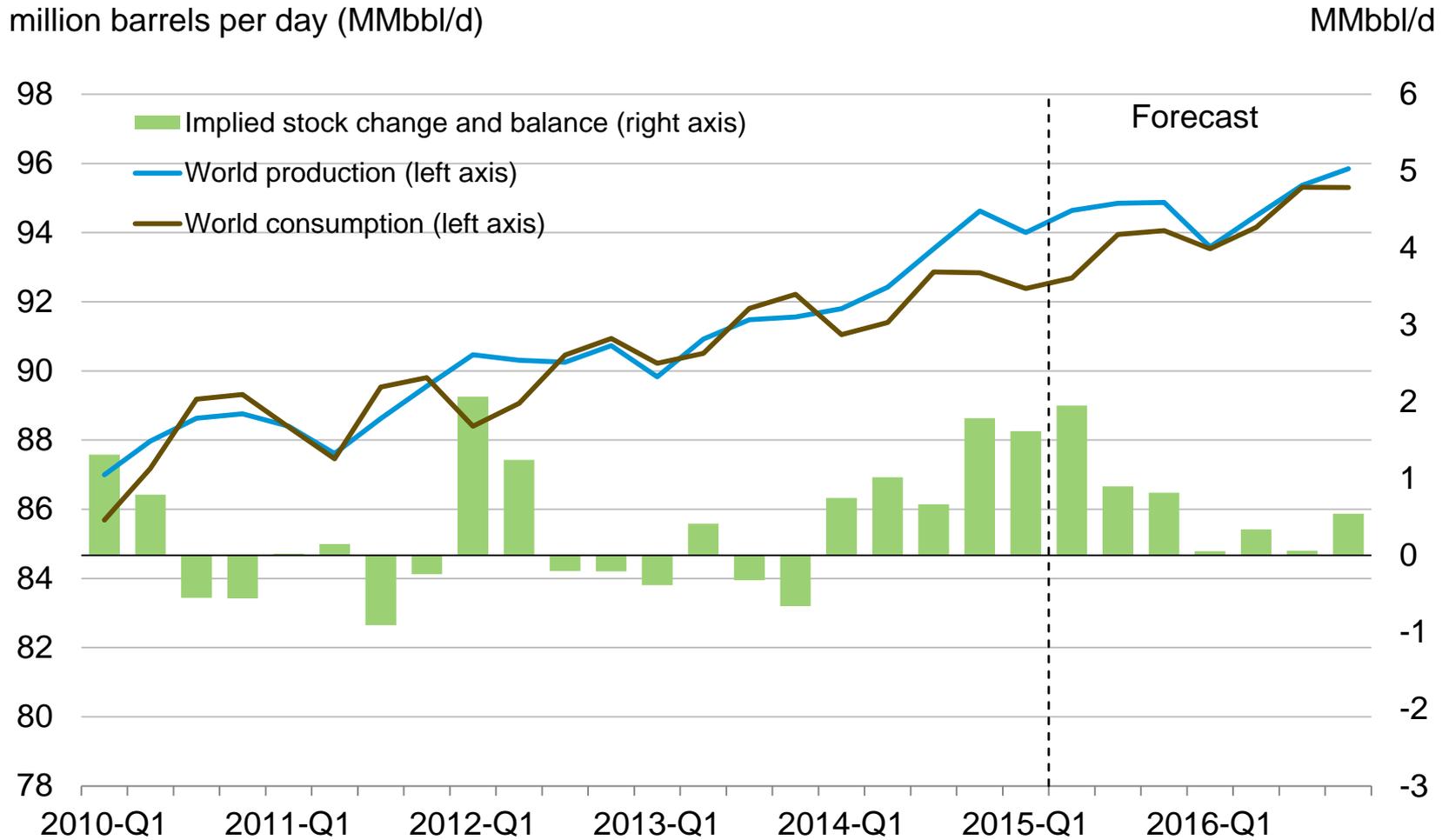
million barrels per day (MMbbl/d)

annual change (MMbbl/d)



Source: EIA, Short-Term Energy Outlook, May 2015

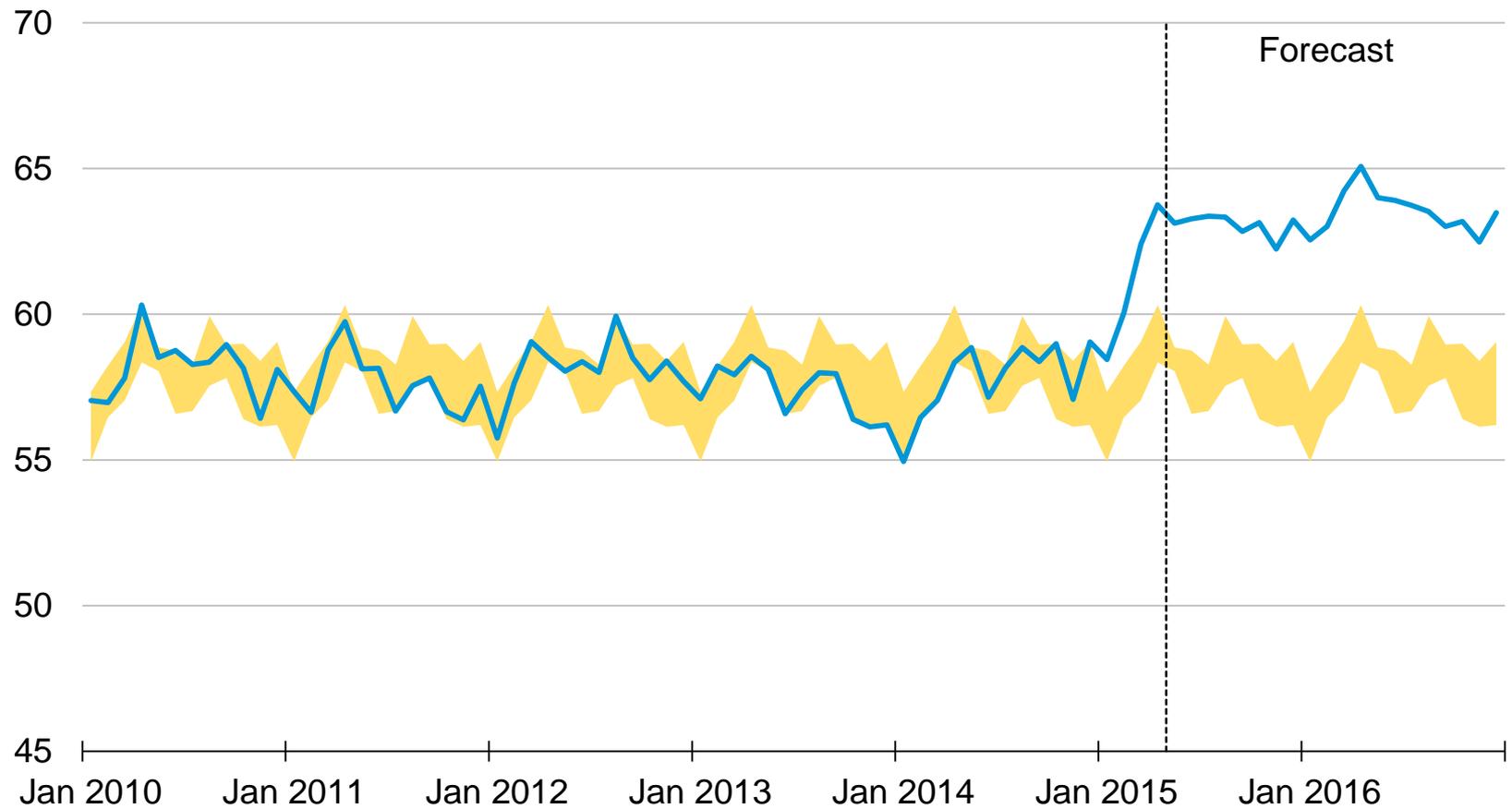
Oil supply and demand rebalance by late 2016



Source: EIA, Short-Term Energy Outlook, May 2015

OECD commercial crude oil stocks remain high

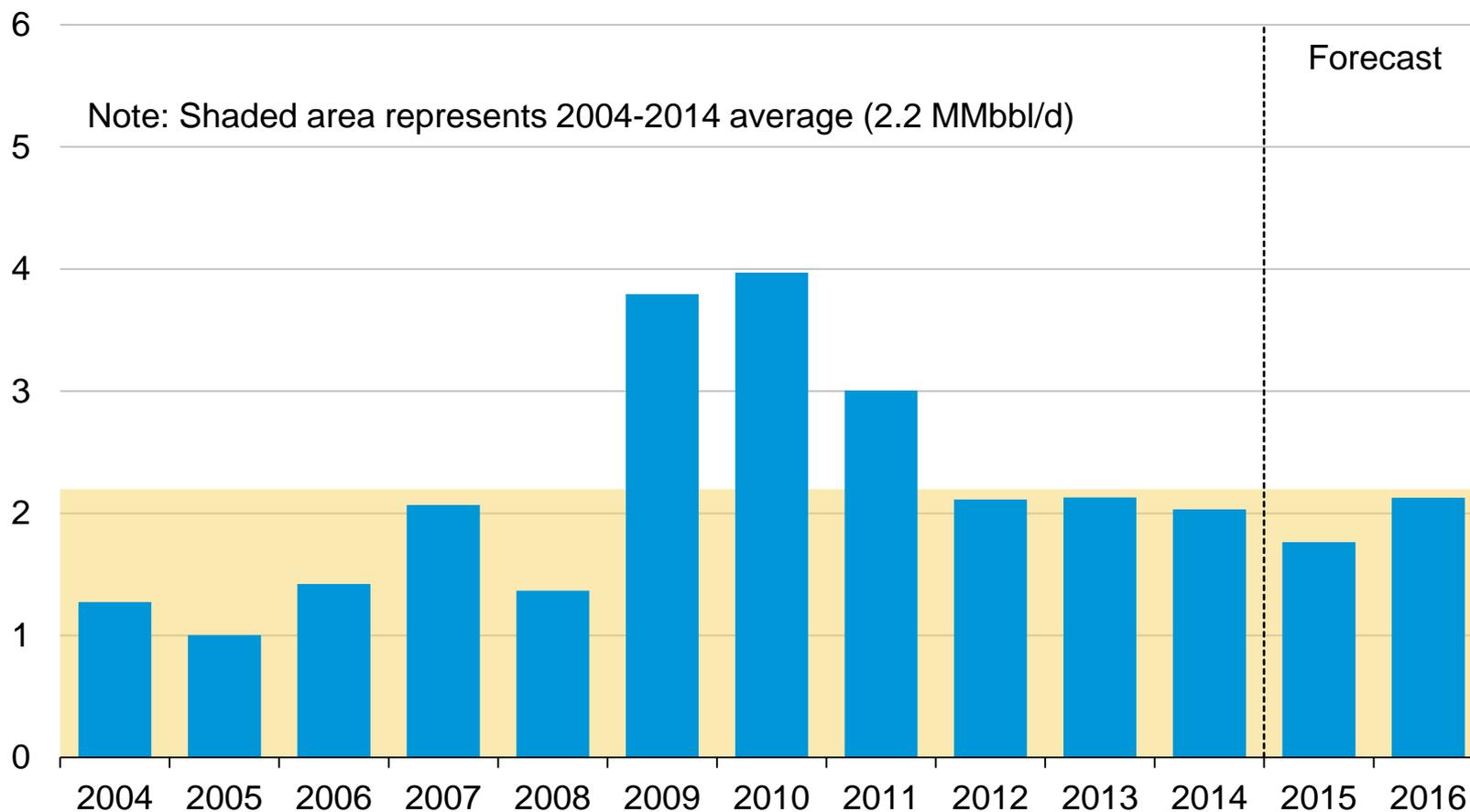
days of supply



Source: EIA, Short-Term Energy Outlook, May 2015

OPEC surplus crude oil production capacity remains moderate to low

million barrels per day (MMbbl/d)

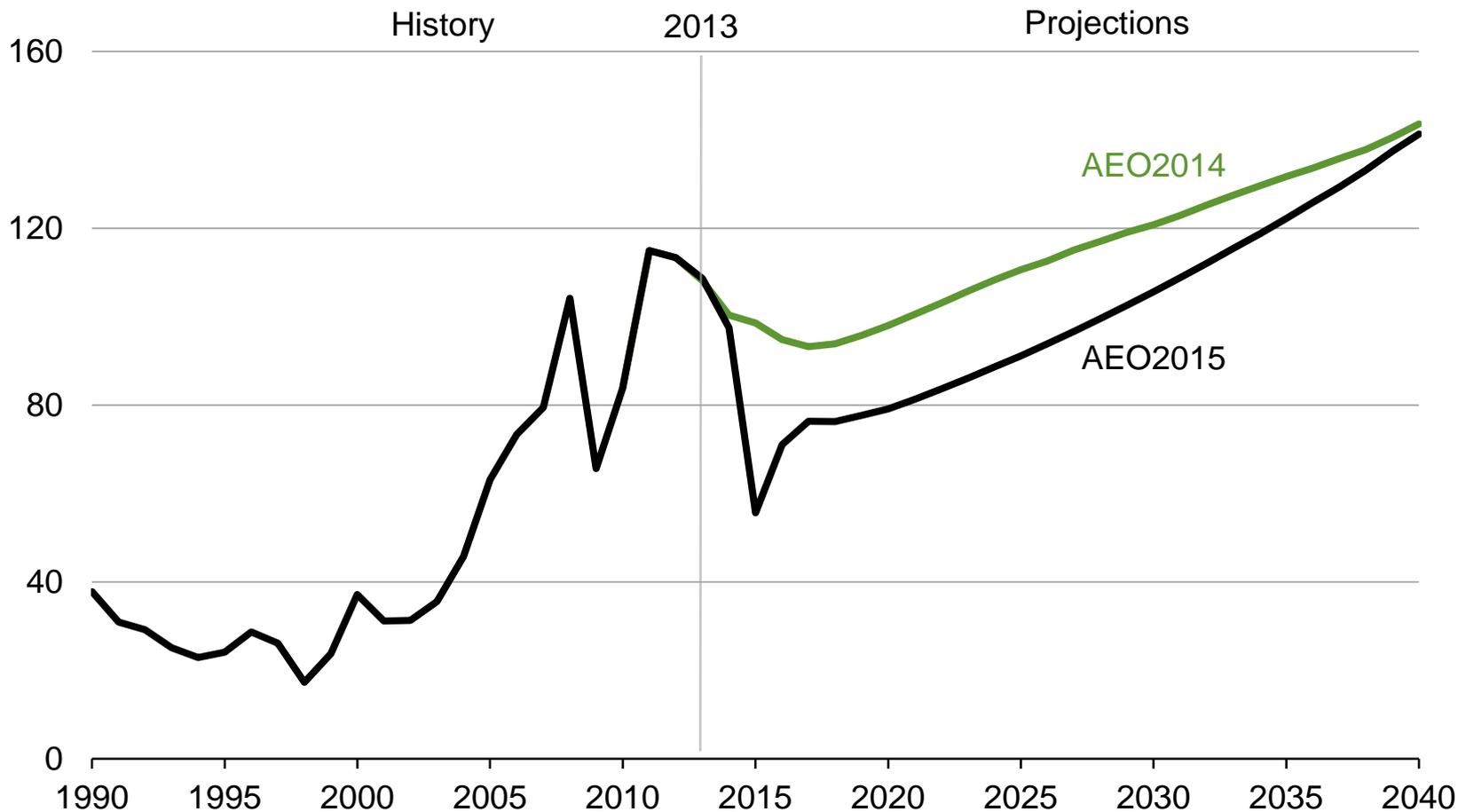


Source: EIA, Short-Term Energy Outlook, May 2015

Long-term considerations

World crude oil price projection is lower in the AEO2015 Reference case than in AEO2014, particularly in the near term

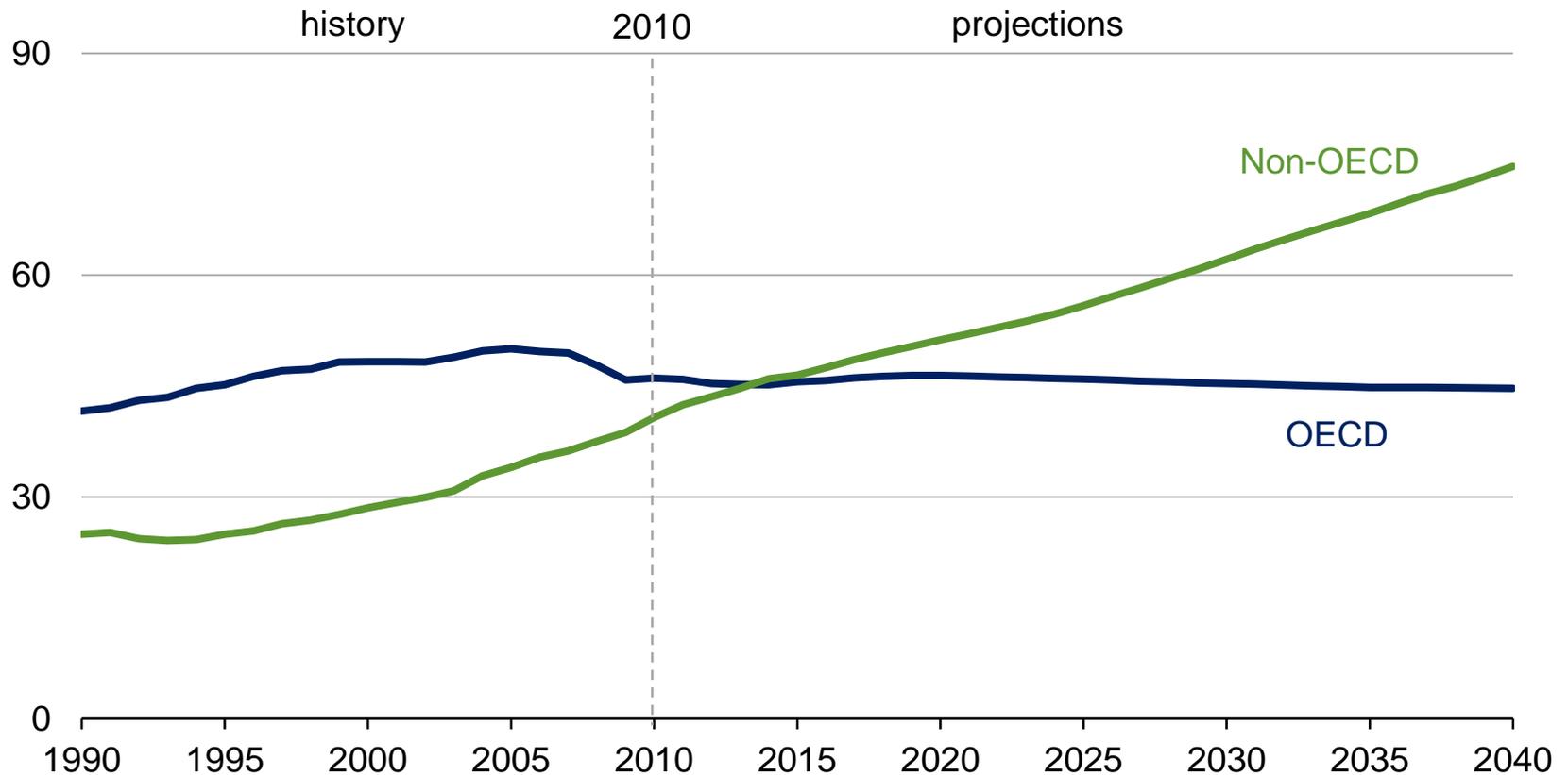
Brent crude oil spot price
2013 dollars per barrel



Source: EIA, Annual Energy Outlook 2015 Reference case and Annual Energy Outlook 2014 Reference case

All of the growth in liquid fuels consumption occurs in the emerging non-OECD (million barrels per day)

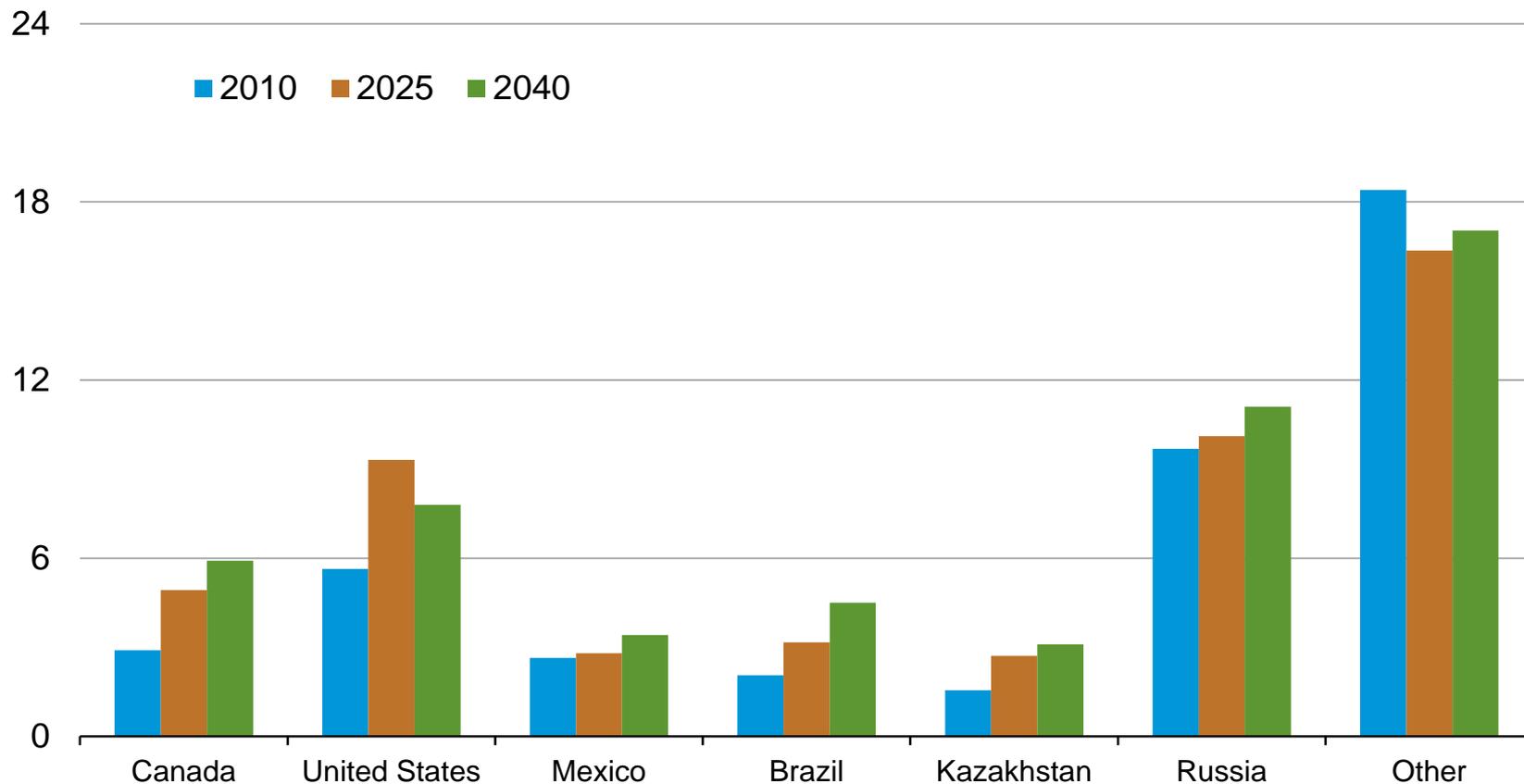
petroleum and other liquid fuels consumption, 1990-2040
million barrels per day



Source: EIA, International Energy Outlook 2014

Most significant contributors to non-OPEC crude and lease condensate production: Canada, Brazil, U.S., Kazakhstan, Russia

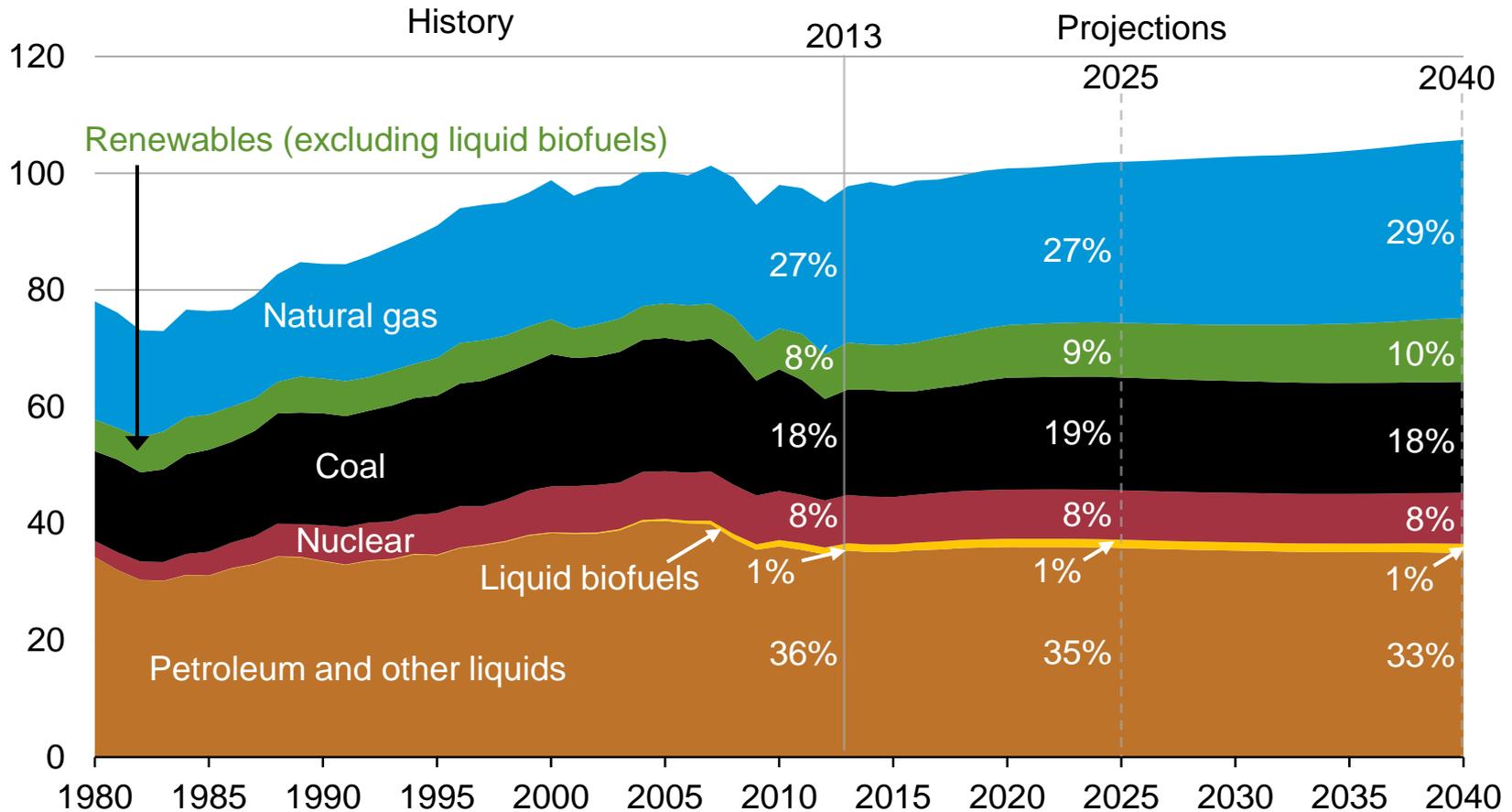
non-OPEC crude and lease condensate production, Reference case
million barrels per day



Source: EIA, International Energy Outlook 2014

Reductions in energy intensity largely offset impact of GDP growth, leading to slow projected growth in energy use

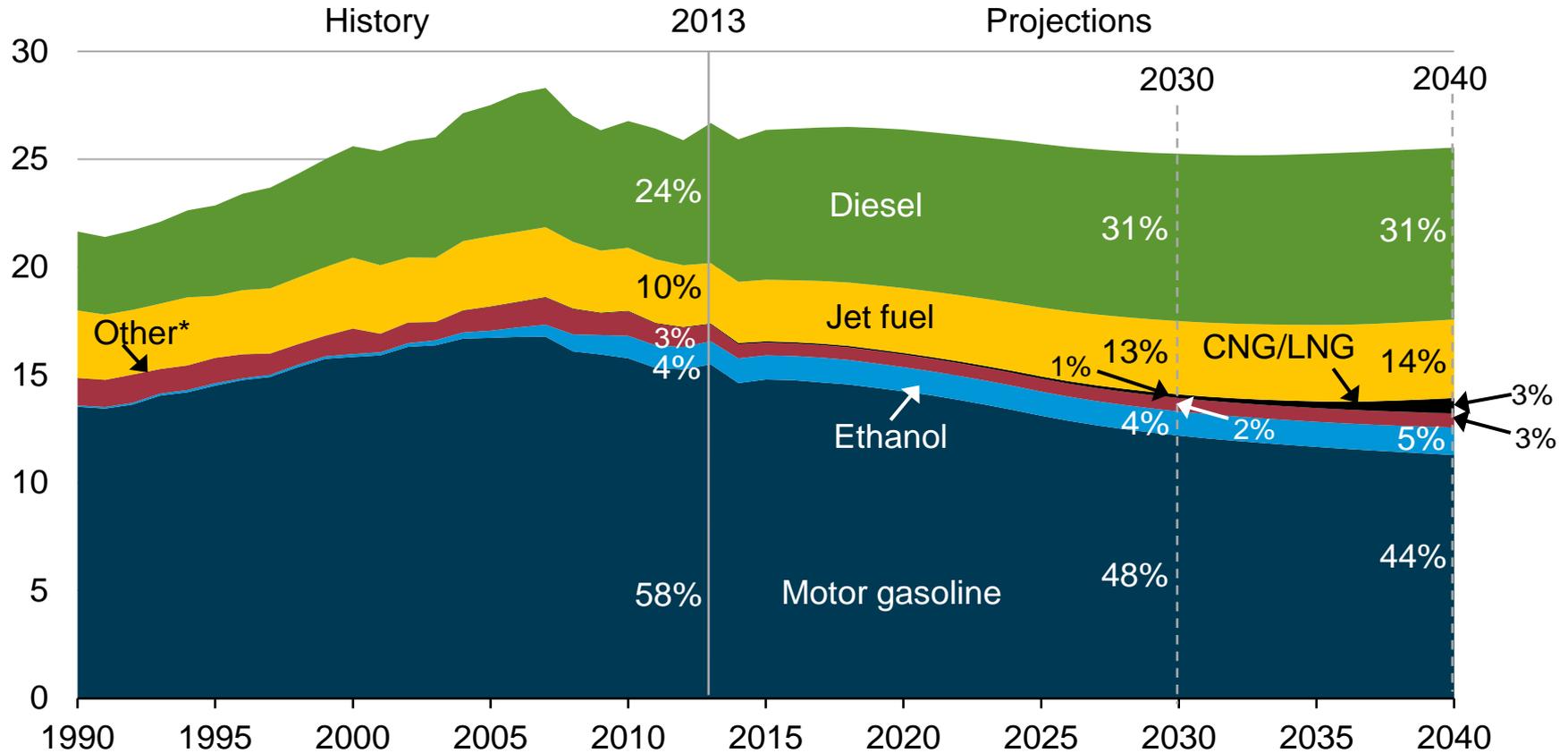
U.S. primary energy consumption
quadrillion Btu



Source: EIA, Annual Energy Outlook 2015 Reference case

In the transportation sector, motor gasoline use declines; diesel fuel, jet fuel, and natural gas use all grow

transportation energy consumption by fuel
quadrillion Btu

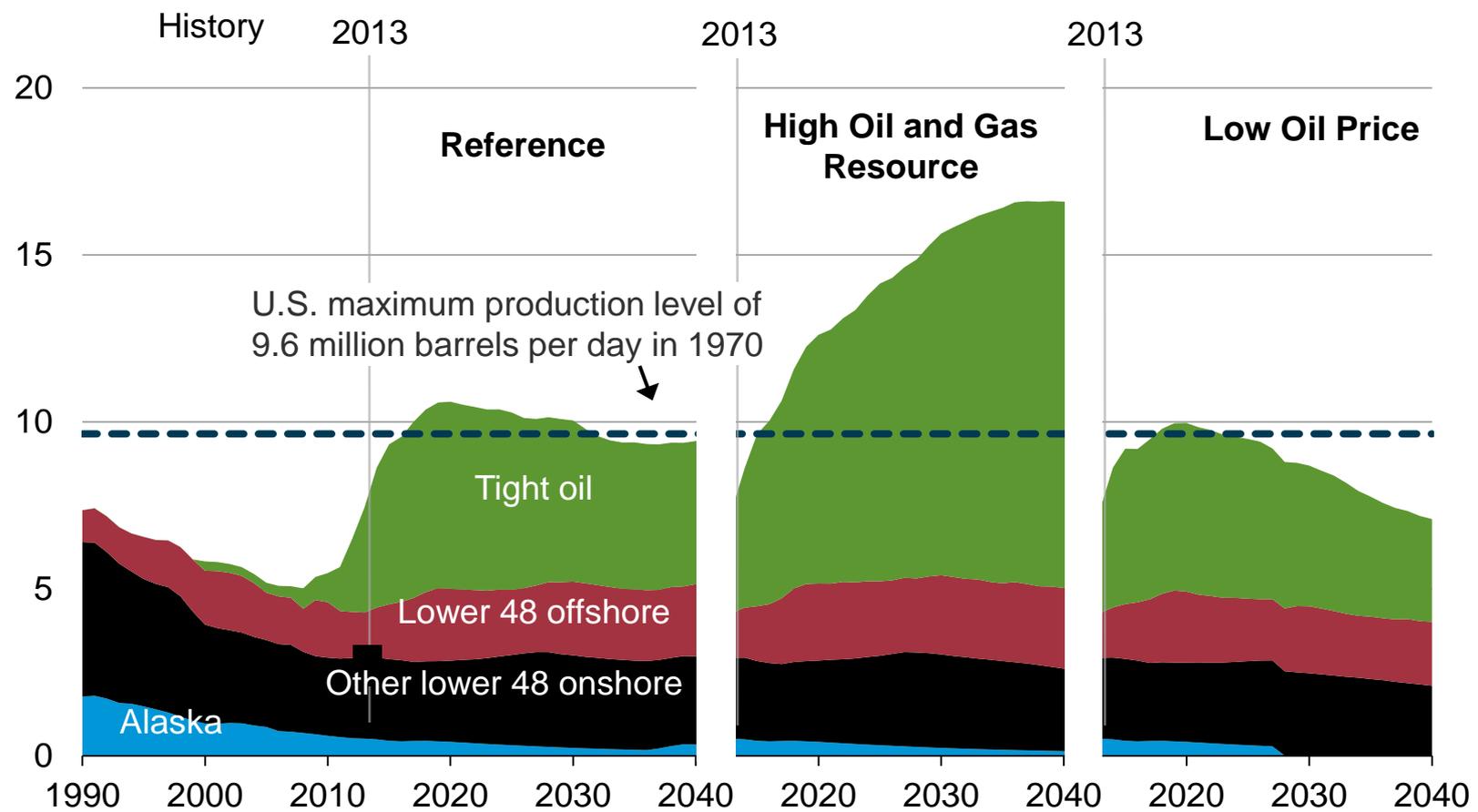


Source: EIA, Annual Energy Outlook 2015 Reference case

*Includes aviation gasoline, propane, residual fuel oil, lubricants, electricity, and liquid hydrogen

U.S. crude oil production rises above previous historical highs before 2020 in all AEO2015 cases, with a range of longer-term outcomes

U.S. crude oil production
million barrels per day



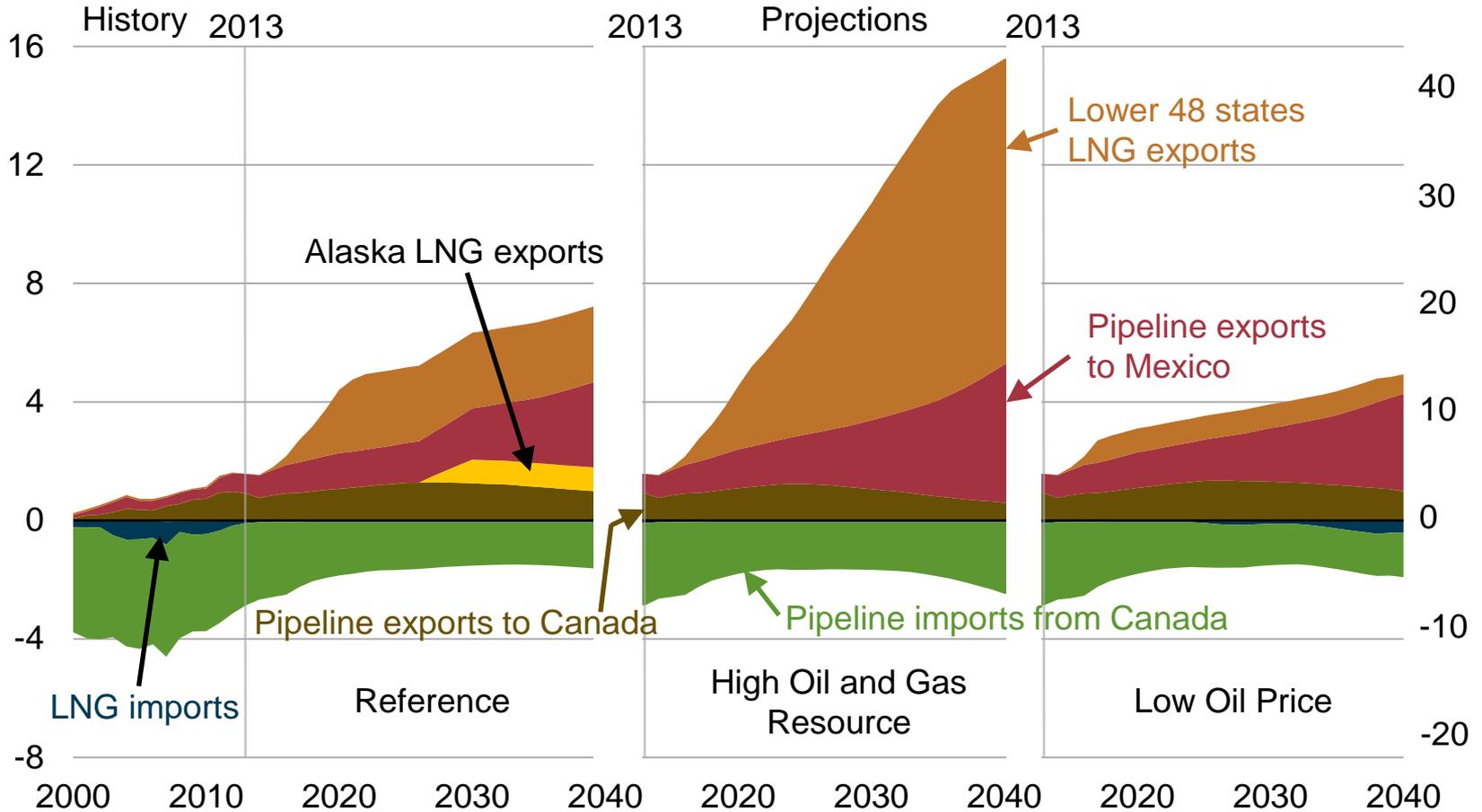
Source: EIA, Annual Energy Outlook 2015

Projected U.S. natural gas exports reflect the spread between domestic natural gas prices and world energy prices

U.S. natural gas imports and exports

trillion cubic feet

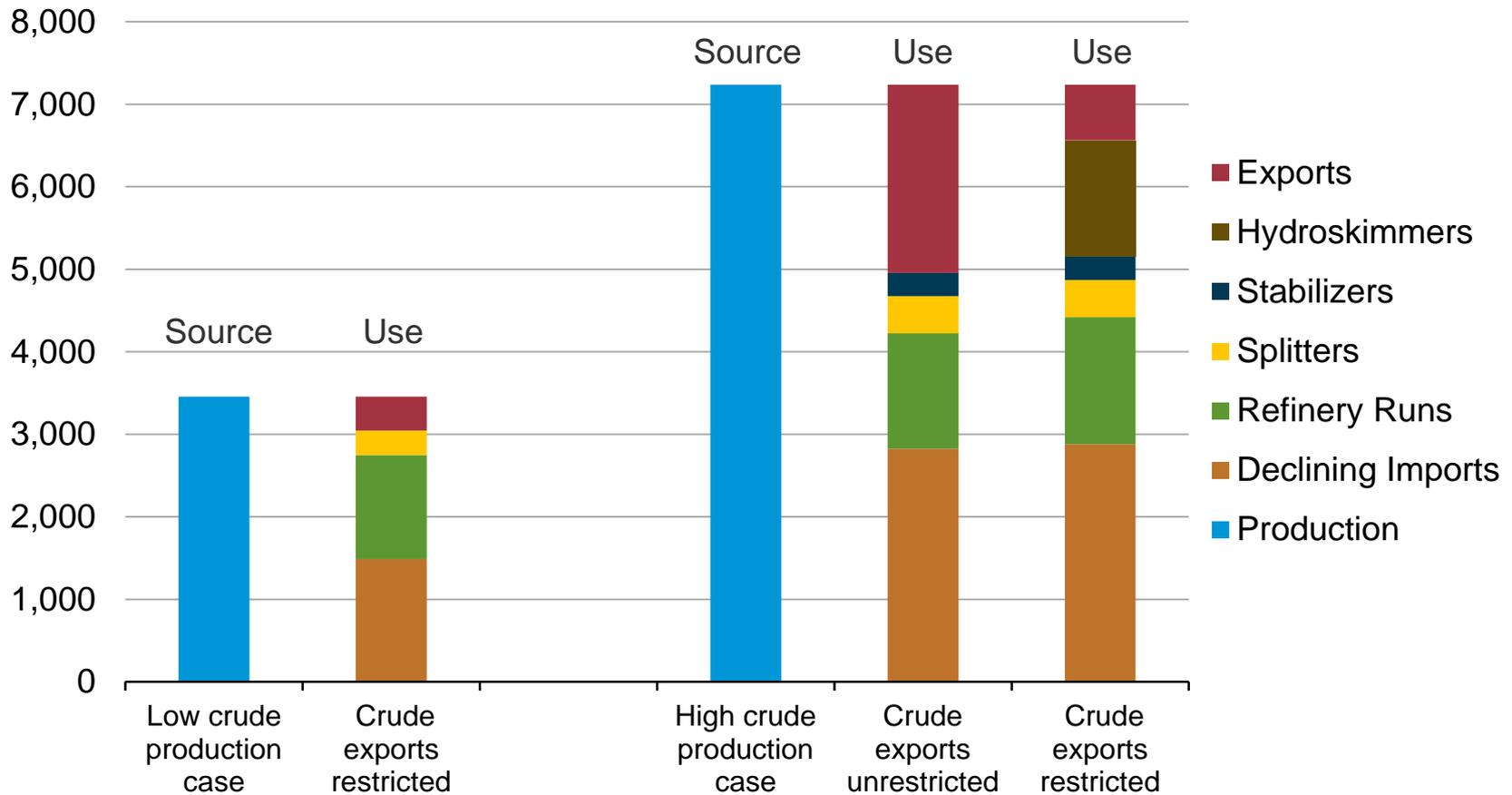
billion cubic feet per day



Source: EIA, Annual Energy Outlook 2015

U.S. crude oil supply and disposition change, 2025 v. 2013

thousand barrels per day



Source: U.S. Energy Information Administration, based on Turner, Mason and Company

EIA is publishing a series of reports on U.S. crude exports

Report	Publish date
U.S. crude oil production forecast—analysis of crude types www.eia.gov/analysis/petroleum/crudetypes/	<i>May 2014</i>
What drives U.S. gasoline prices www.eia.gov/analysis/studies/gasoline/	<i>October 2014</i>
U.S crude oil import tracking tool www.eia.gov/beta/petroleum/imports/browser/	<i>November 2014</i>
Technical options for processing additional light tight oil volumes within the United States www.eia.gov/analysis/studies/petroleum/lto/	<i>April 2015</i>
Implications of increasing light tight oil production for U.S. refining (Turner Mason) www.eia.gov/analysis/studies/petroleum/morelto/	<i>April 2015</i>
U.S. crude oil production to 2025: Updated projection of crude types http://www.eia.gov/analysis/petroleum/crudetypes/	<i>May 2015</i>
Effects of relaxing U.S. crude export restrictions	<i>June 2015</i>

For more information

U.S. Energy Information Administration home page | www.eia.gov

Annual Energy Outlook | www.eia.gov/aeo

Short-Term Energy Outlook | www.eia.gov/steo

International Energy Outlook | www.eia.gov/ieo

Monthly Energy Review | www.eia.gov/mer

Today in Energy | www.eia.gov/todayinenergy

State Energy Profiles | www.eia.gov/state

Drilling Productivity Report | www.eia.gov/petroleum/drilling/

International Energy Portal | www.eia.gov/beta/international/?src=home-b1