

The U.S. Natural Gas and Shale Production Outlook



for

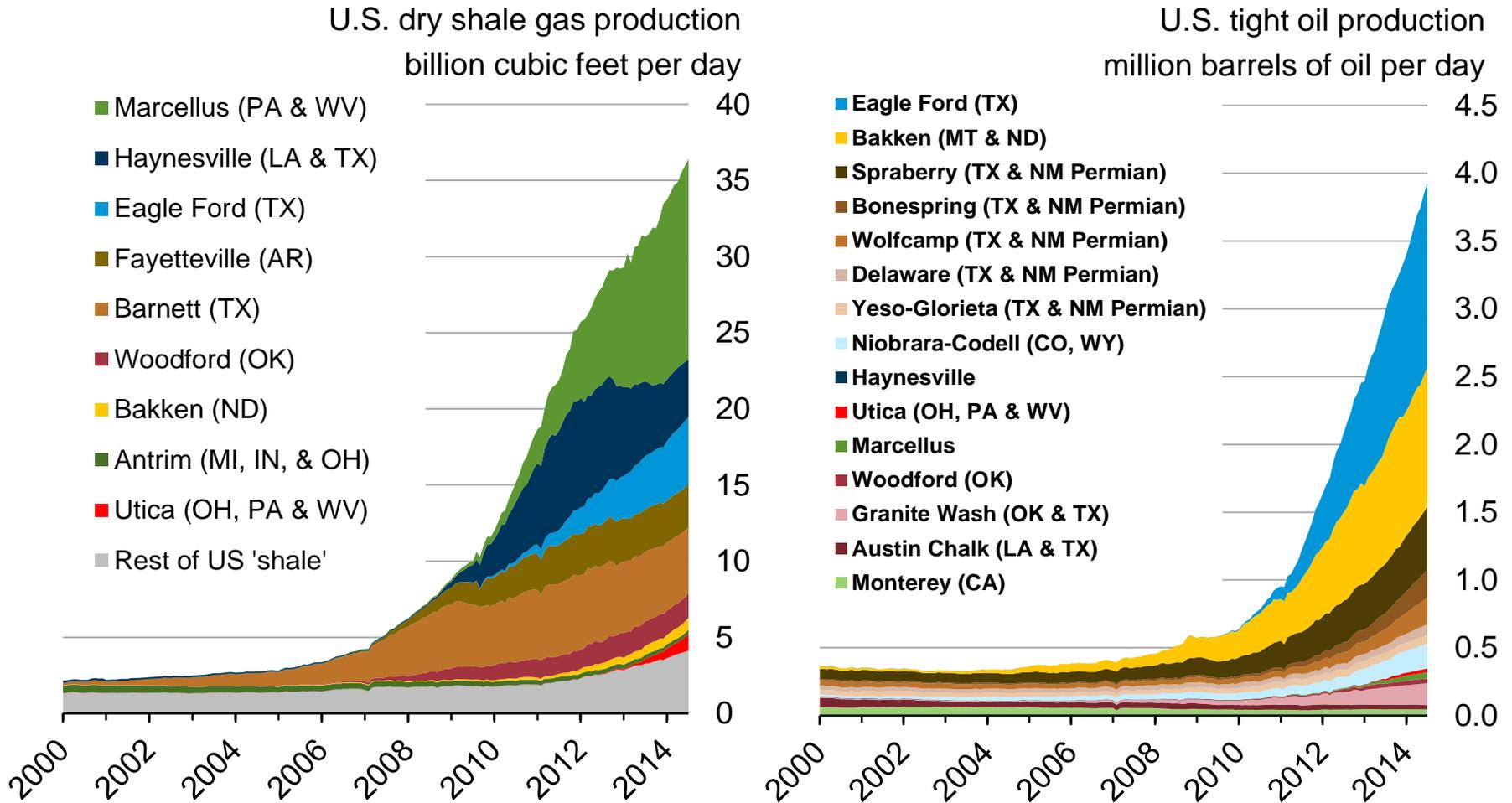
North American Gas Forum

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by

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The U.S. has experienced a rapid increase in natural gas and oil production from shale and other tight resources

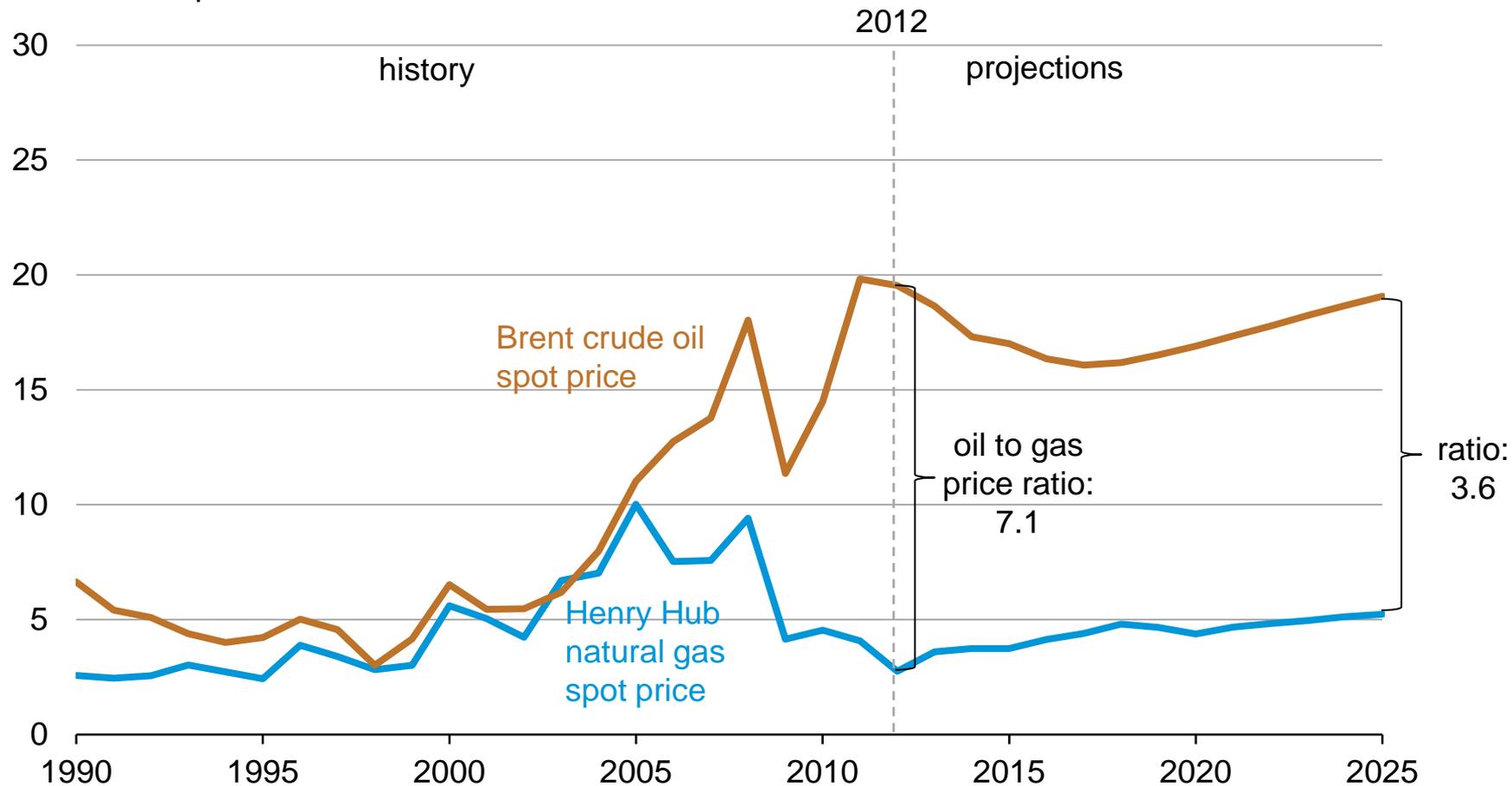


Sources: EIA derived from state administrative data collected by DrillingInfo Inc. Data are through July 2014 and represent EIA's official tight oil & shale gas estimates, but are not survey data. State abbreviations indicate primary state(s).

U.S. natural gas prices are expected to remain well below crude oil prices

energy spot prices

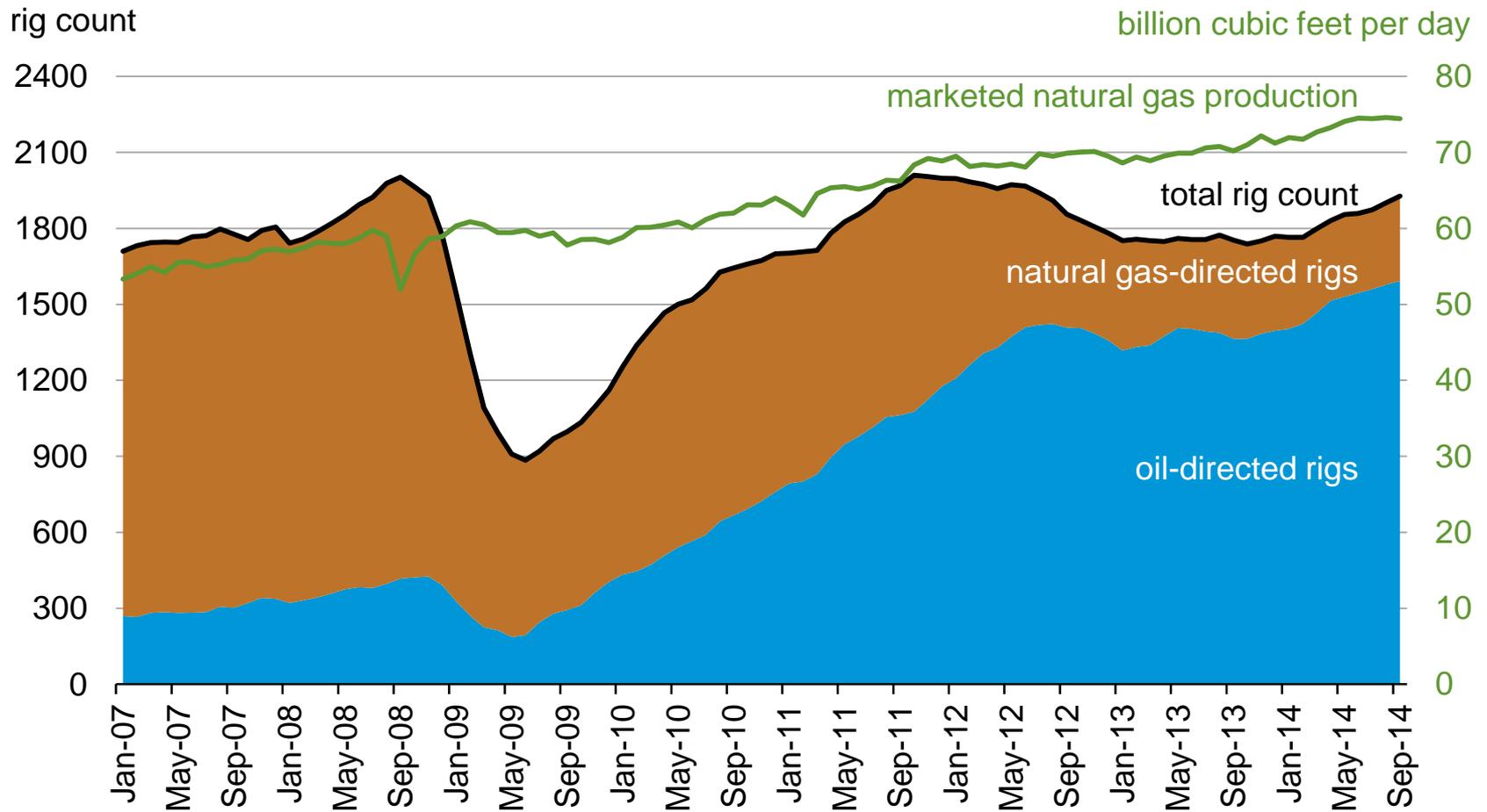
2012 dollars per million Btu



Source: EIA, Annual Energy Outlook 2014, Reference case

Rig productivity has increased greatly, making rig count no longer correlated with production

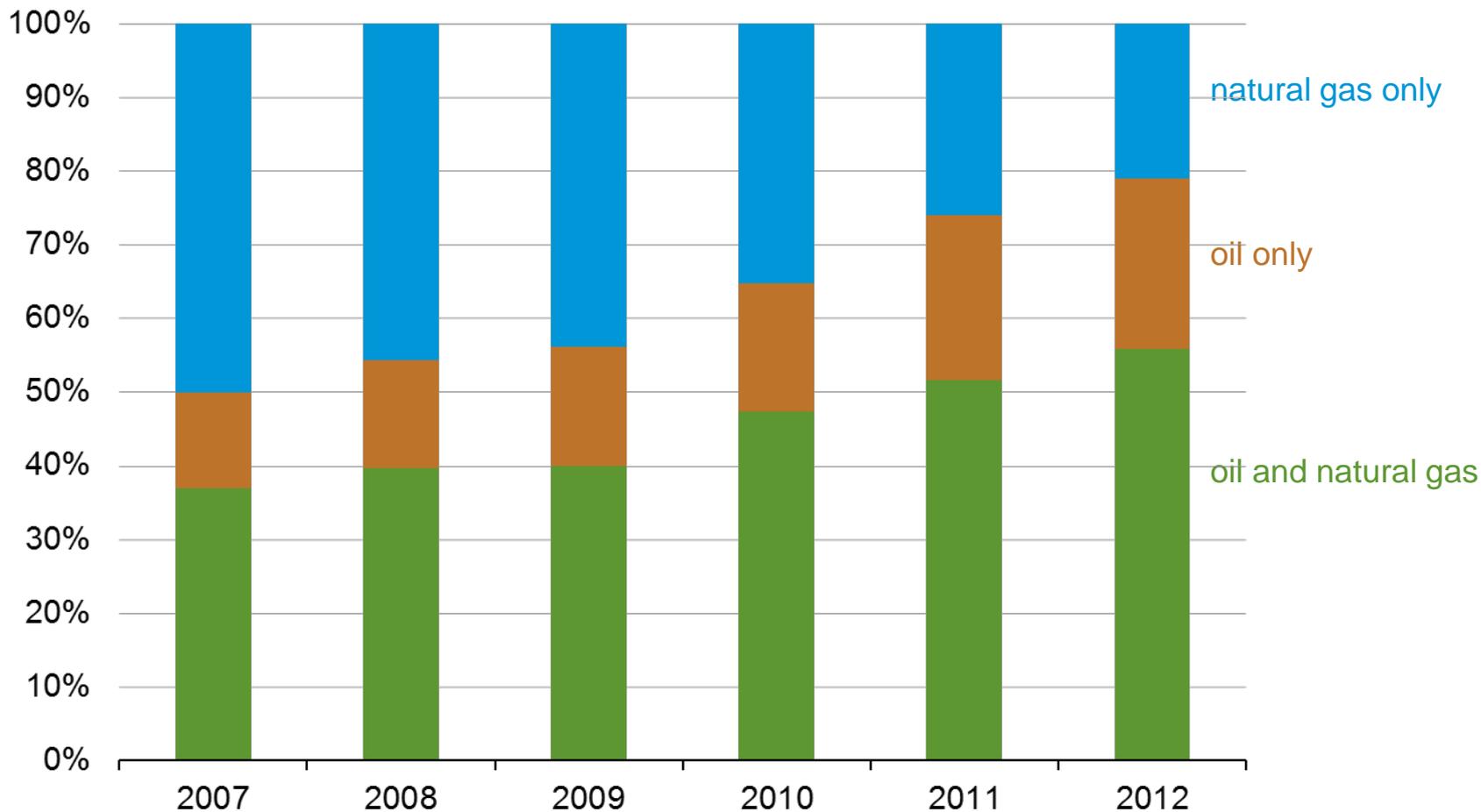
Natural gas and oil-directed rig counts and natural gas marketed production



Sources: Natural gas production figures from EIA Short-term Energy Outlook, rig counts from Baker Hughes

A larger share of new wells produce both oil and natural gas

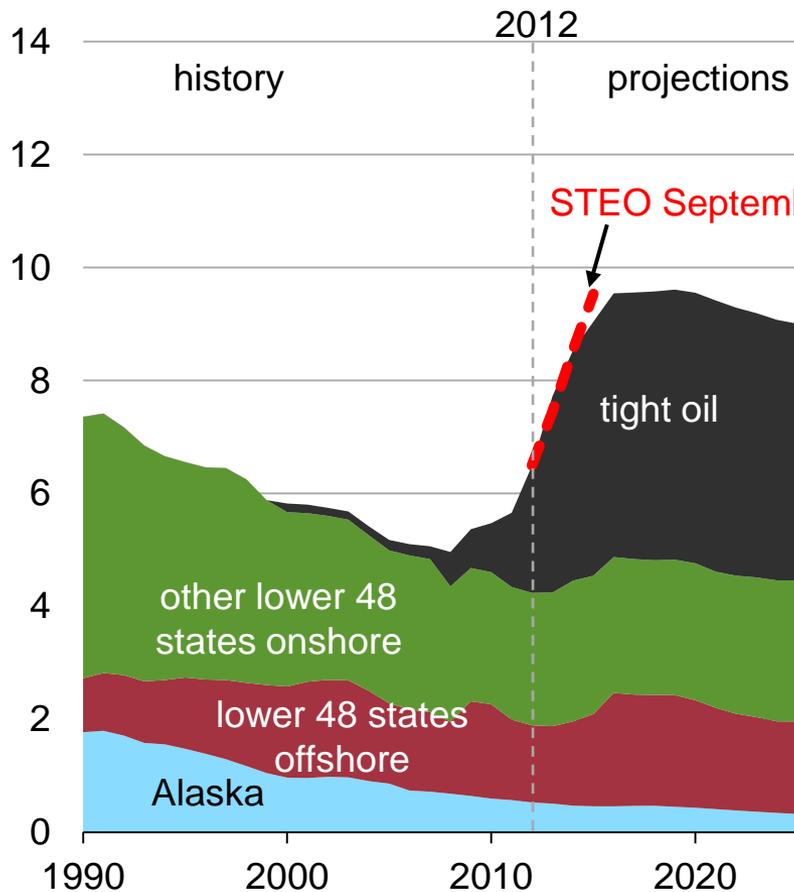
Share of new wells by production type



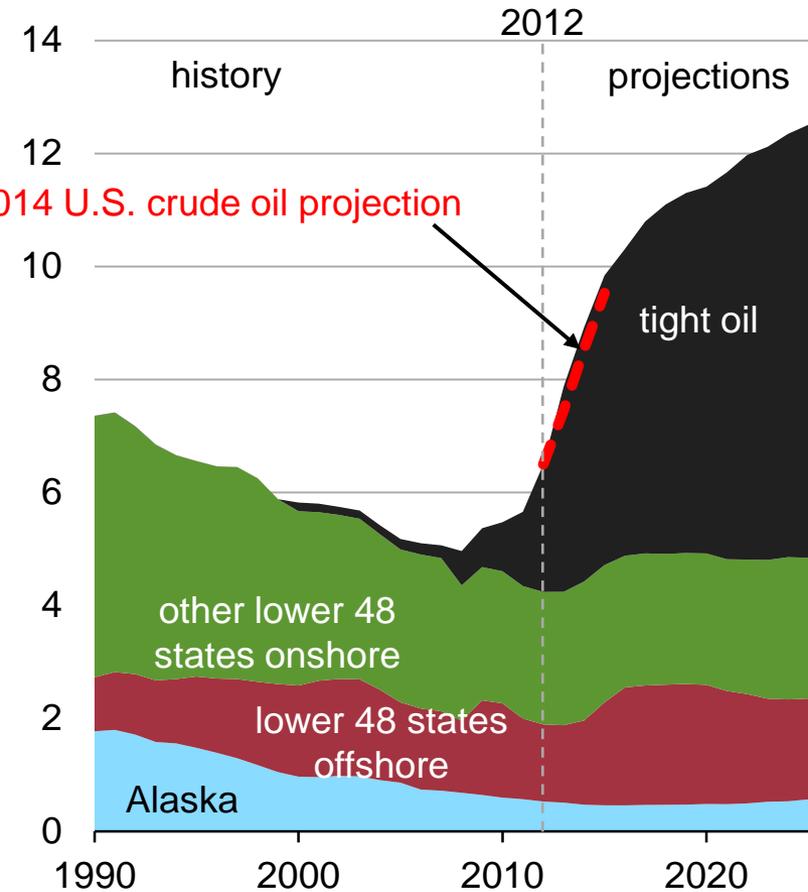
Source: EIA based on DrillingInfo

Resource and technology assumptions have major implications for projected U.S. crude oil production beyond the next few years

Reference case
million barrels per day



High Oil and Gas Resource case
million barrels per day

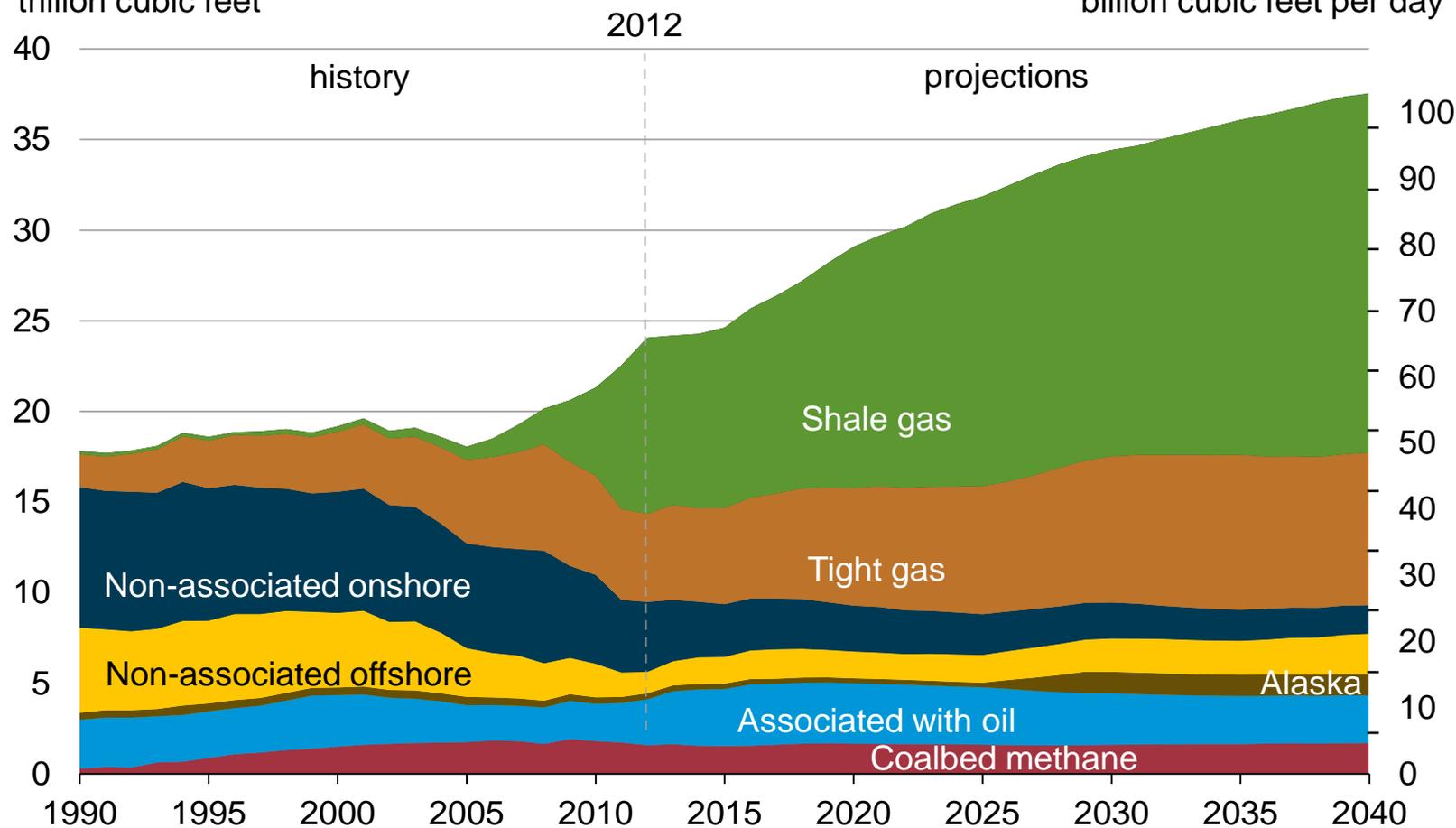


Source: EIA, Annual Energy Outlook 2014 Reference case and High Oil and Gas Resource case; Short Term Energy Outlook, September 2014

U.S. shale gas leads growth in total gas production through 2040, when production exceeds 100 billion cubic feet per day

U.S. dry natural gas production
trillion cubic feet

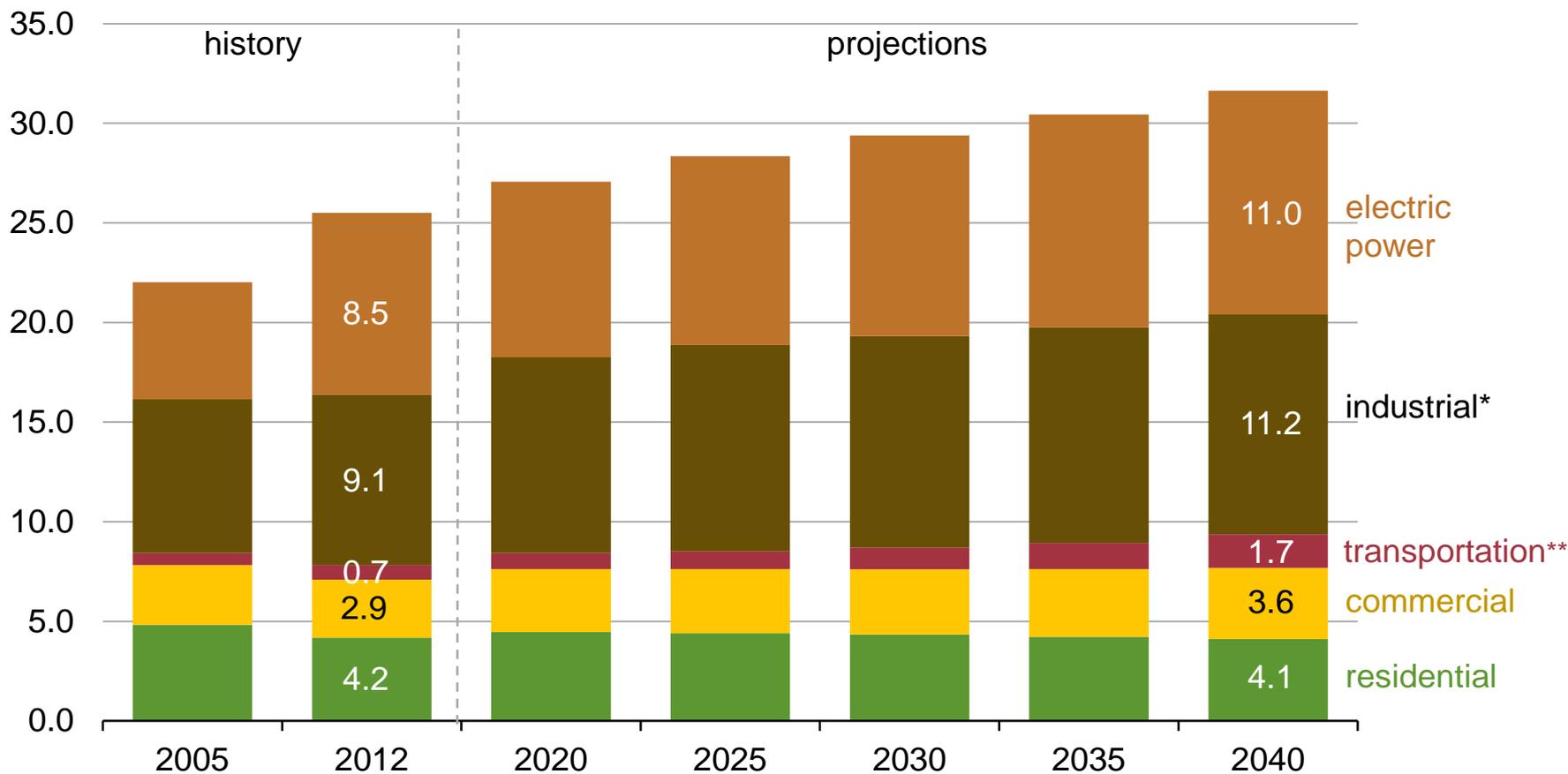
billion cubic feet per day



Source: EIA, Annual Energy Outlook 2014, Reference case

Natural gas consumption growth is driven by electric power, industrial, and transportation use

U.S. dry gas consumption
trillion cubic feet



Source: EIA, Annual Energy Outlook 2014, Reference case

*Includes combined heat-and-power and lease and plant fuel

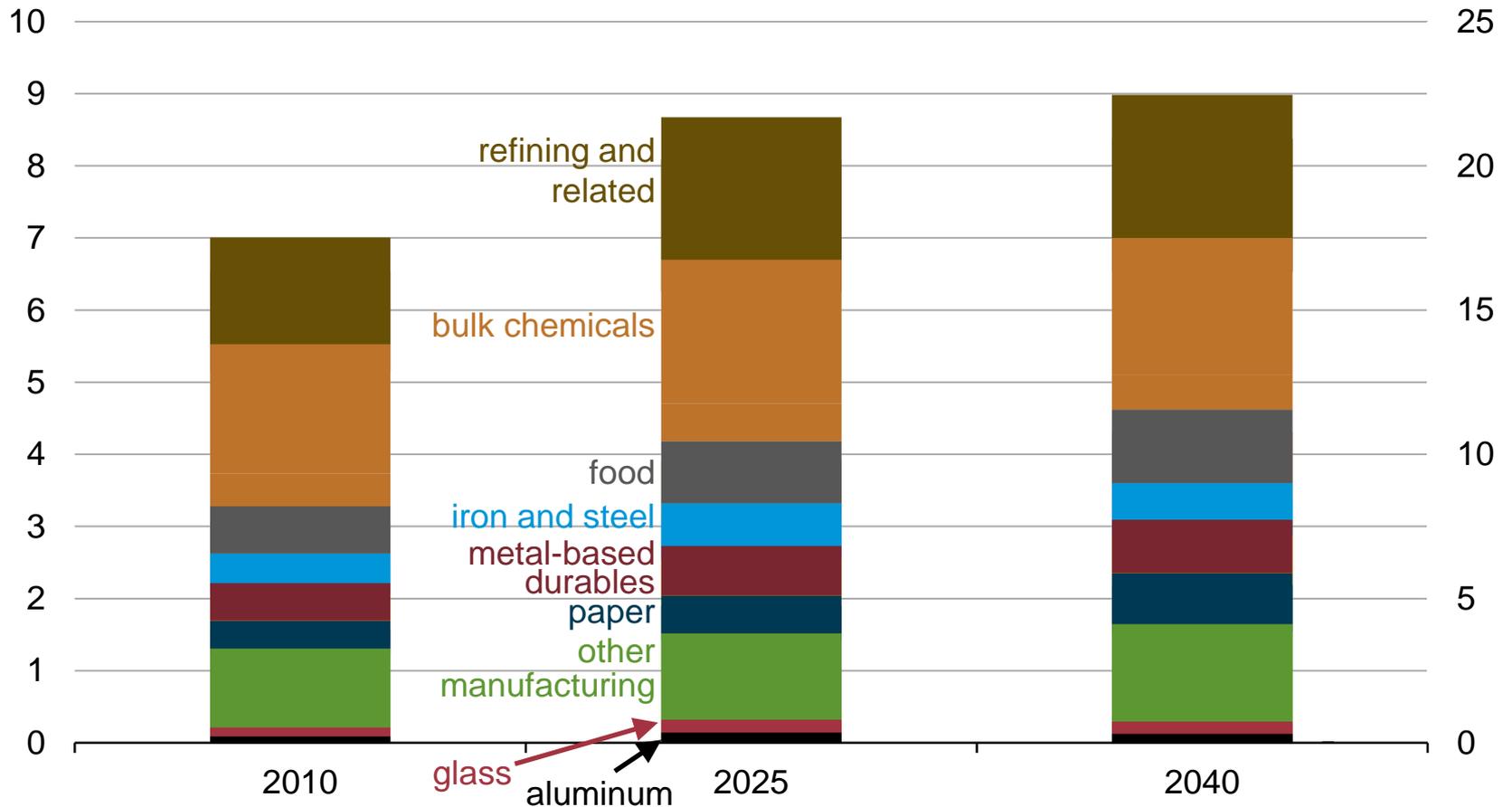
**Includes pipeline fuel

Manufacturing output and natural gas use grows with low natural gas prices, particularly in the near term

manufacturing natural gas consumption

quadrillion British thermal units

billion cubic feet per day

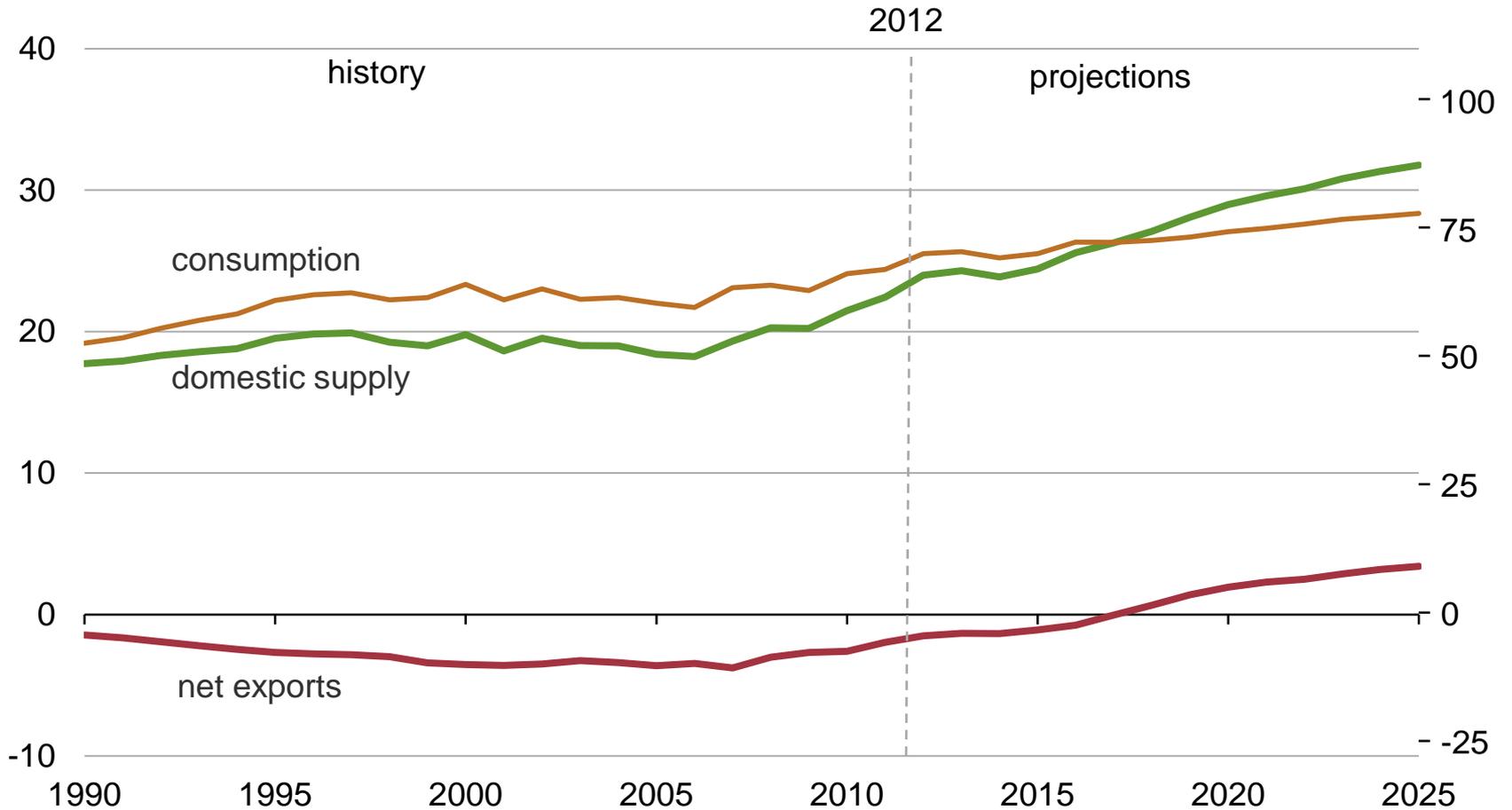


Source: EIA, Annual Energy Outlook 2014, Reference case

U.S. becomes a net exporter of natural gas in the near future

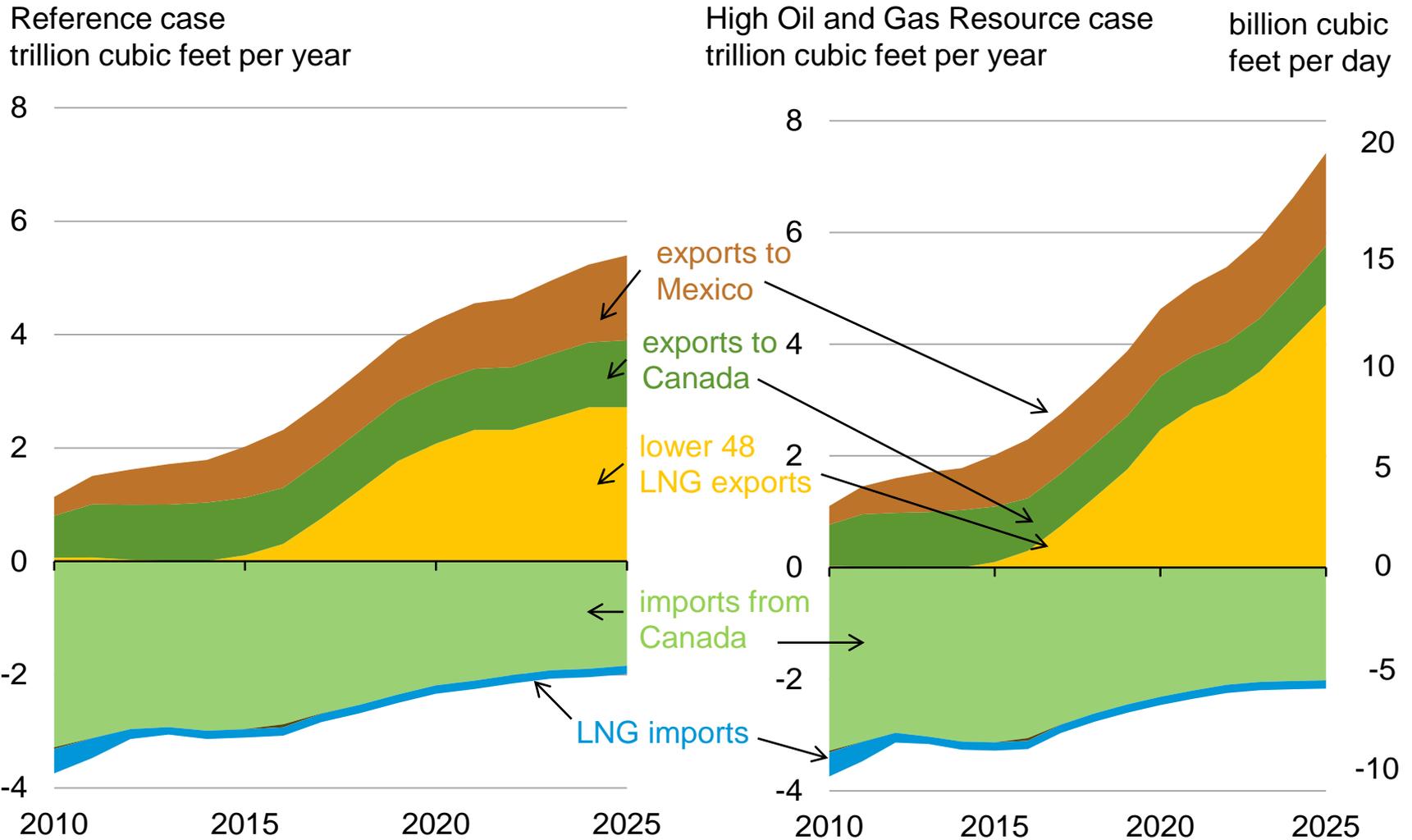
U.S. dry natural gas
trillion cubic feet per year

billion cubic feet per day



Source: EIA, Annual Energy Outlook 2014 Reference case

Projected U.S. natural gas trade depends on assumptions regarding resources and future technology advances



Source: EIA, Annual Energy Outlook 2014 Reference case and High Oil and Gas Resource case

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

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