

OIL MARKET OUTLOOK

SEPTEMBER 2018



RYSTAD ENERGY

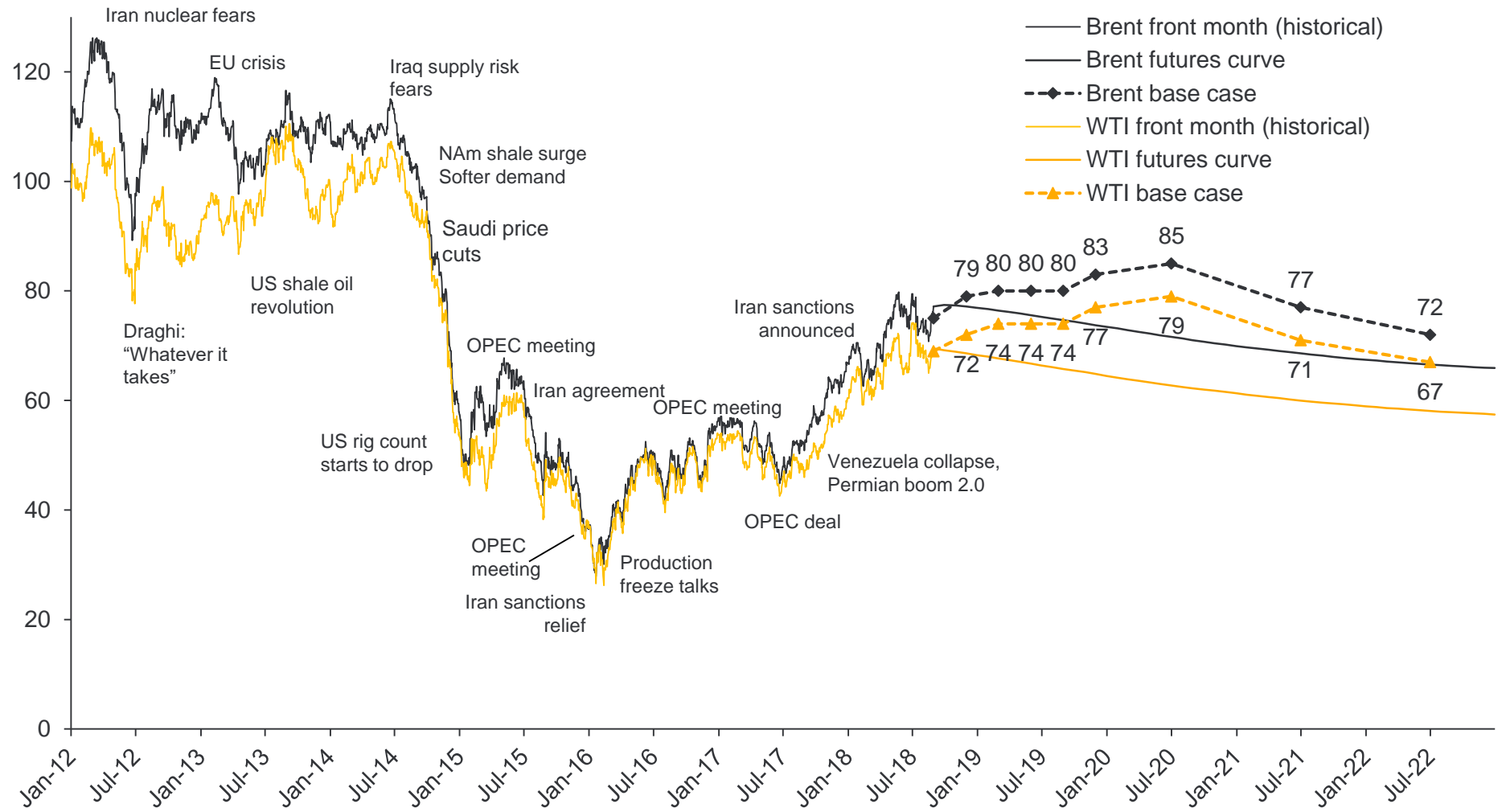
TIGHT MARKET AND HIGH PRICES LAY THE FOUNDATION FOR NEW INVESTMENT CYCLE

SEPTEMBER 2018

Brent timeline and latest forward curve
 Still bullish outlook through 2020, but...

ICE Brent and NYMEX WTI historical 1M prices, latest futures curves and base-case Brent and WTI estimates

USD per barrel

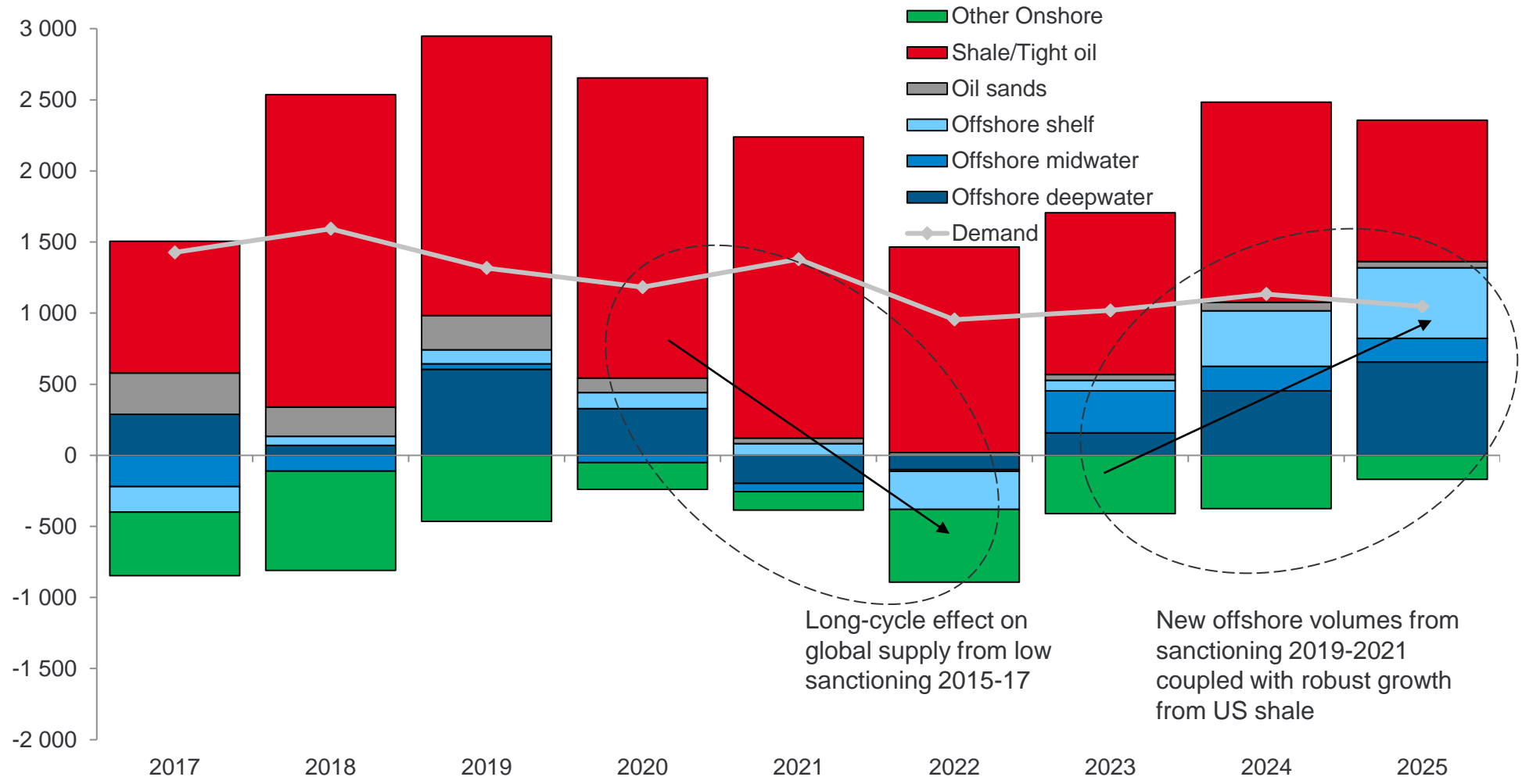


Source: Rystad Energy research and analysis, Bloomberg

New investment cycle potentially creating too much supply 2023-2025 as shale can grow further

Global liquids supply growth by segment vs. demand growth

Thousand barrels per day



Long-cycle effect on global supply from low sanctioning 2015-17

New offshore volumes from sanctioning 2019-2021 coupled with robust growth from US shale

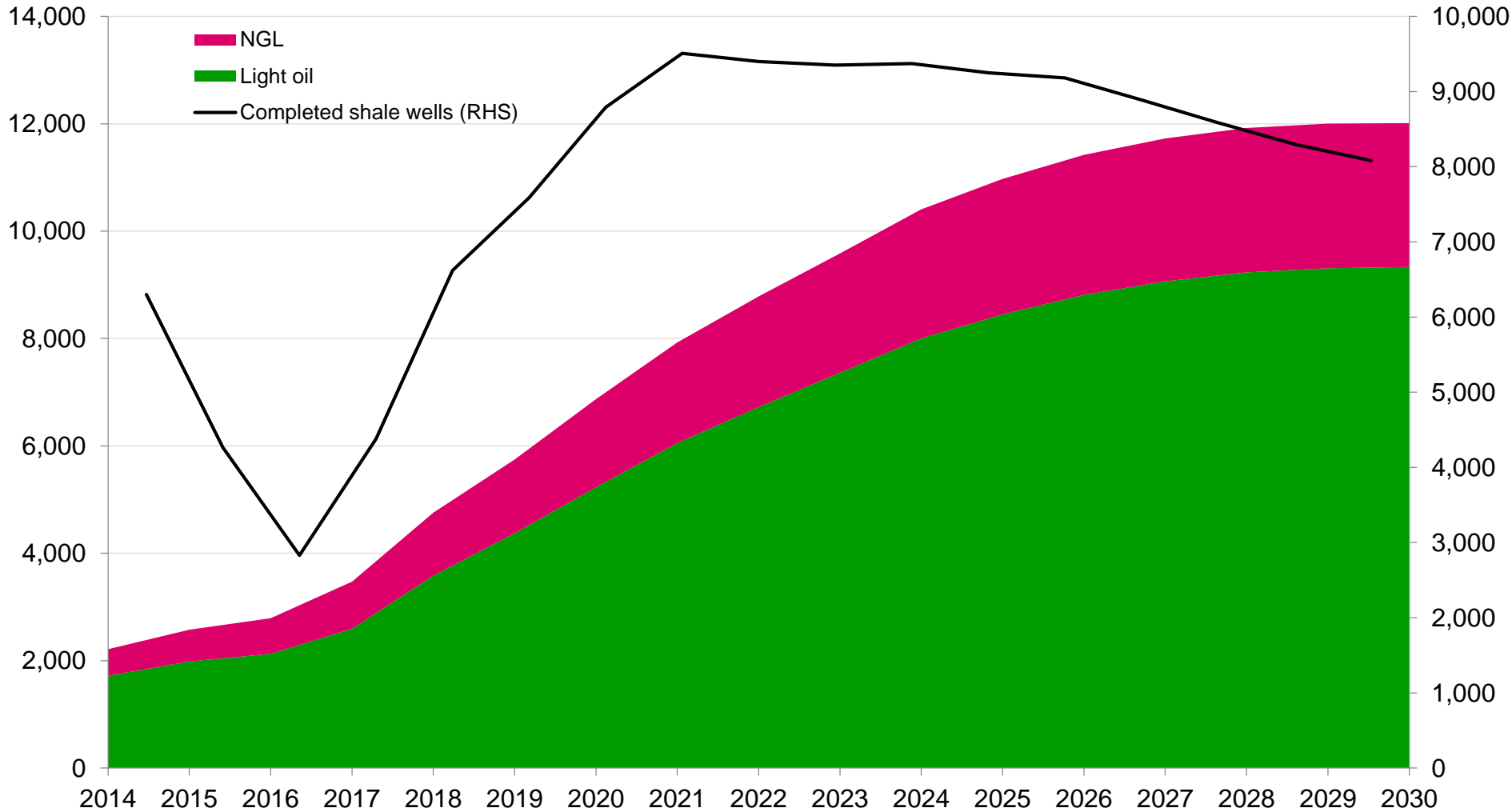
Source: Rystad Energy research and analysis, UCube

Permian Basin liquids production and activity in the base case price scenario

Permian: oil and NGL production, completed shale wells

Thousand barrels per day

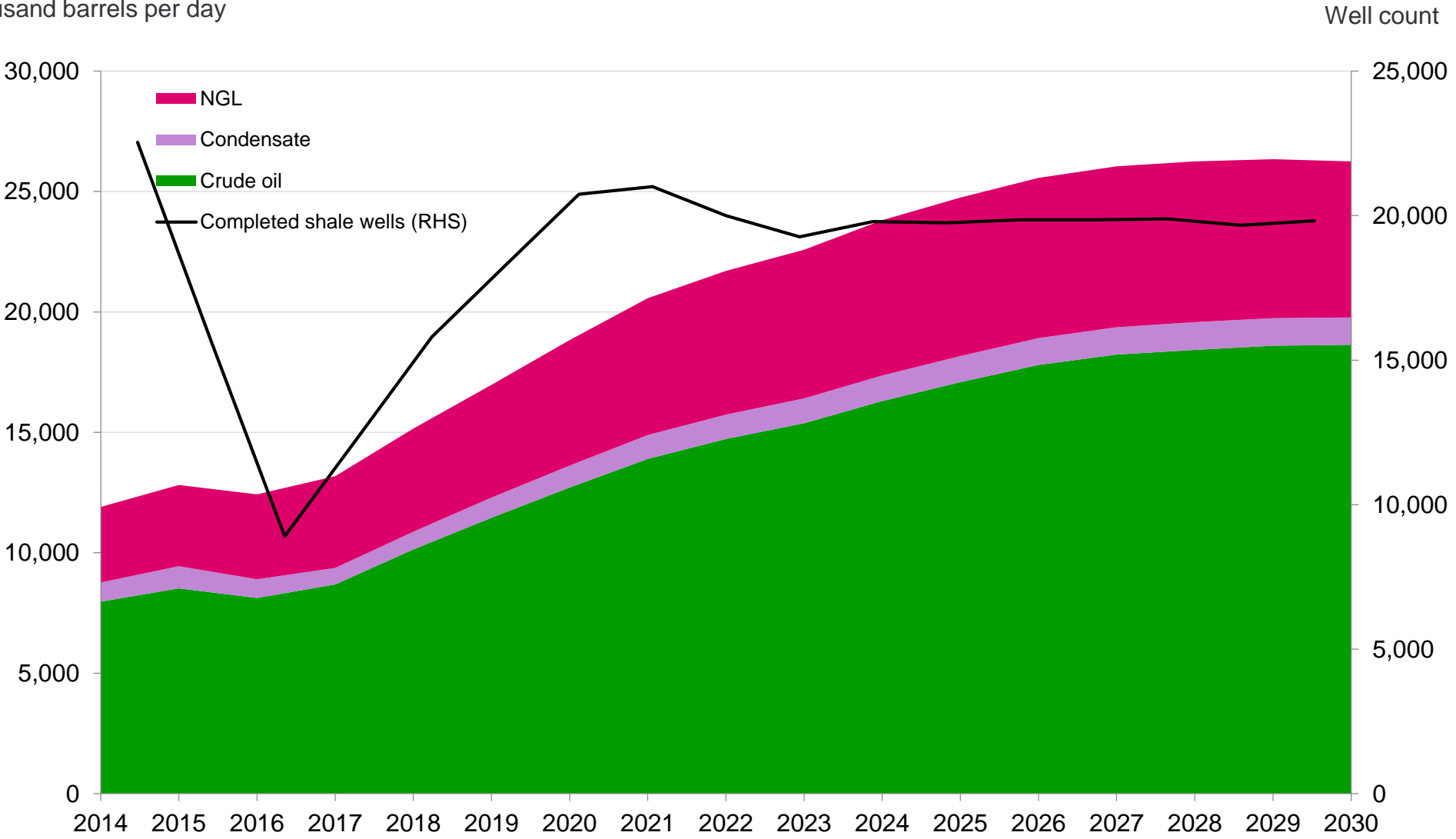
Well count



Source: Rystad Energy UCube September 2018

Total U.S. liquids production and activity in the base case price scenario

U.S. oil and NGL production, completed shale wells
 Thousand barrels per day

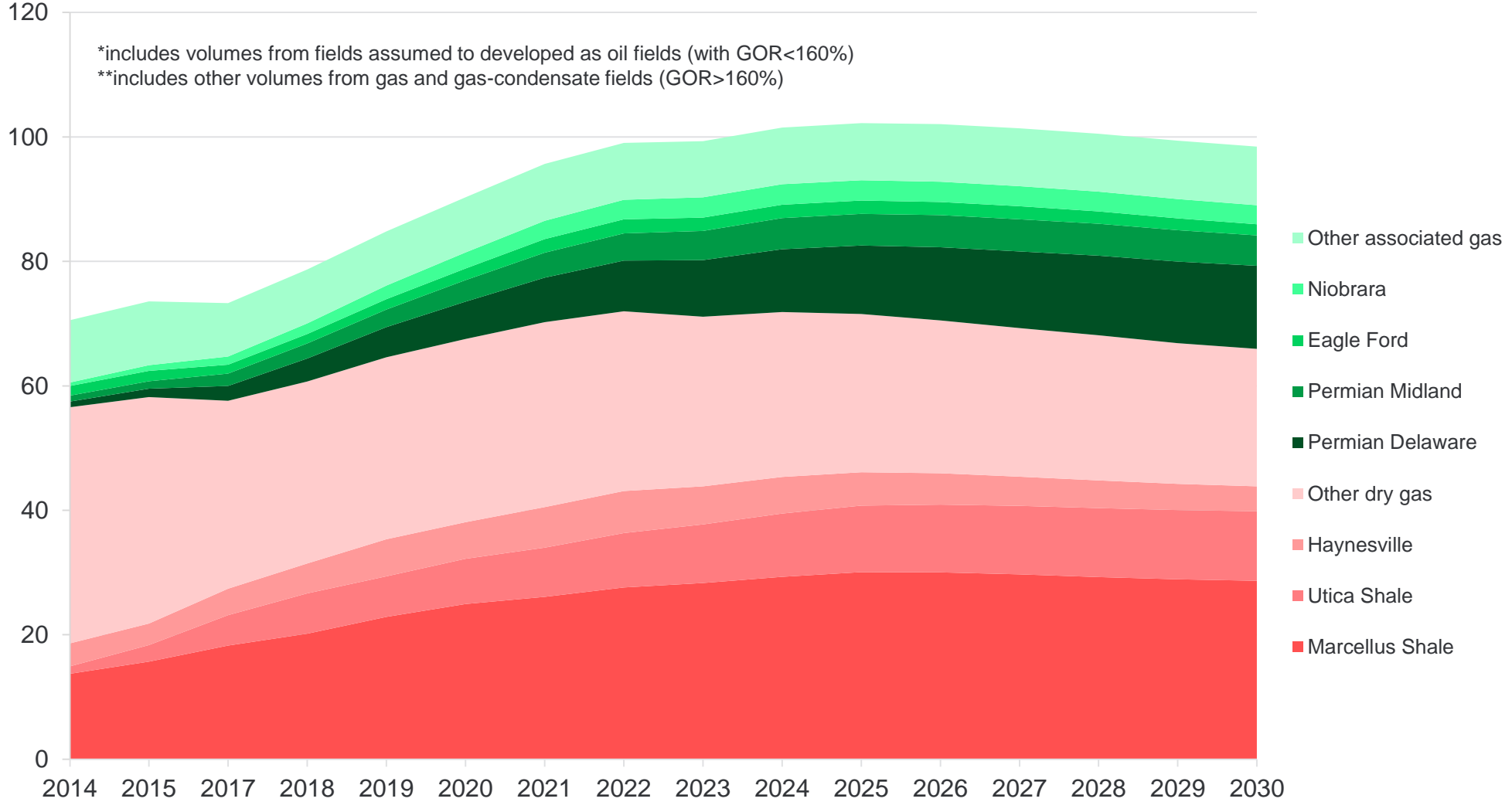


Source: Rystad Energy UCube September 2018

Total U.S. gas production in the base case scenario

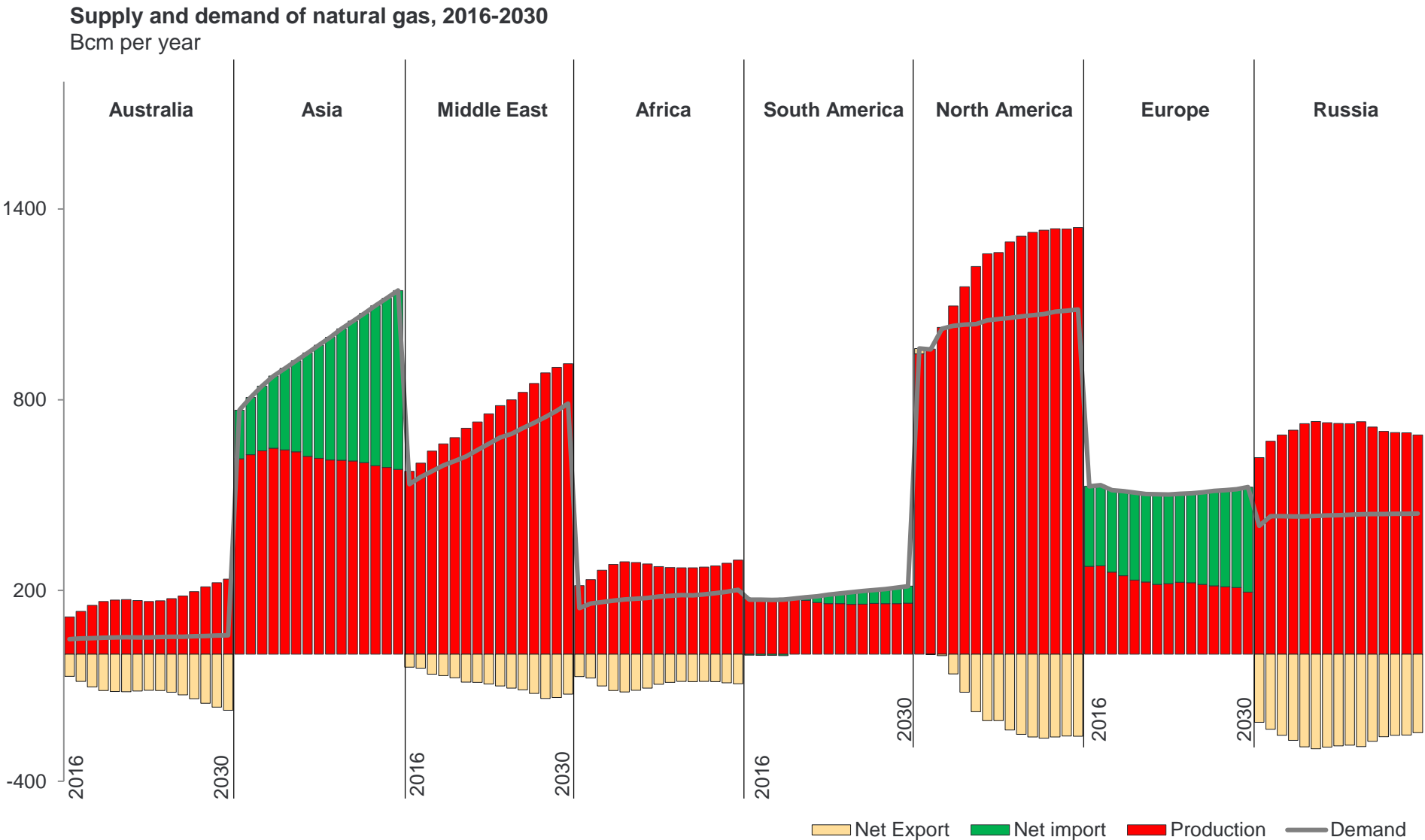
Total U.S. gas production by field type (associated*, dry**) and basin

Billion cubic feet per day



Source: Rystad Energy UCube, September 2018

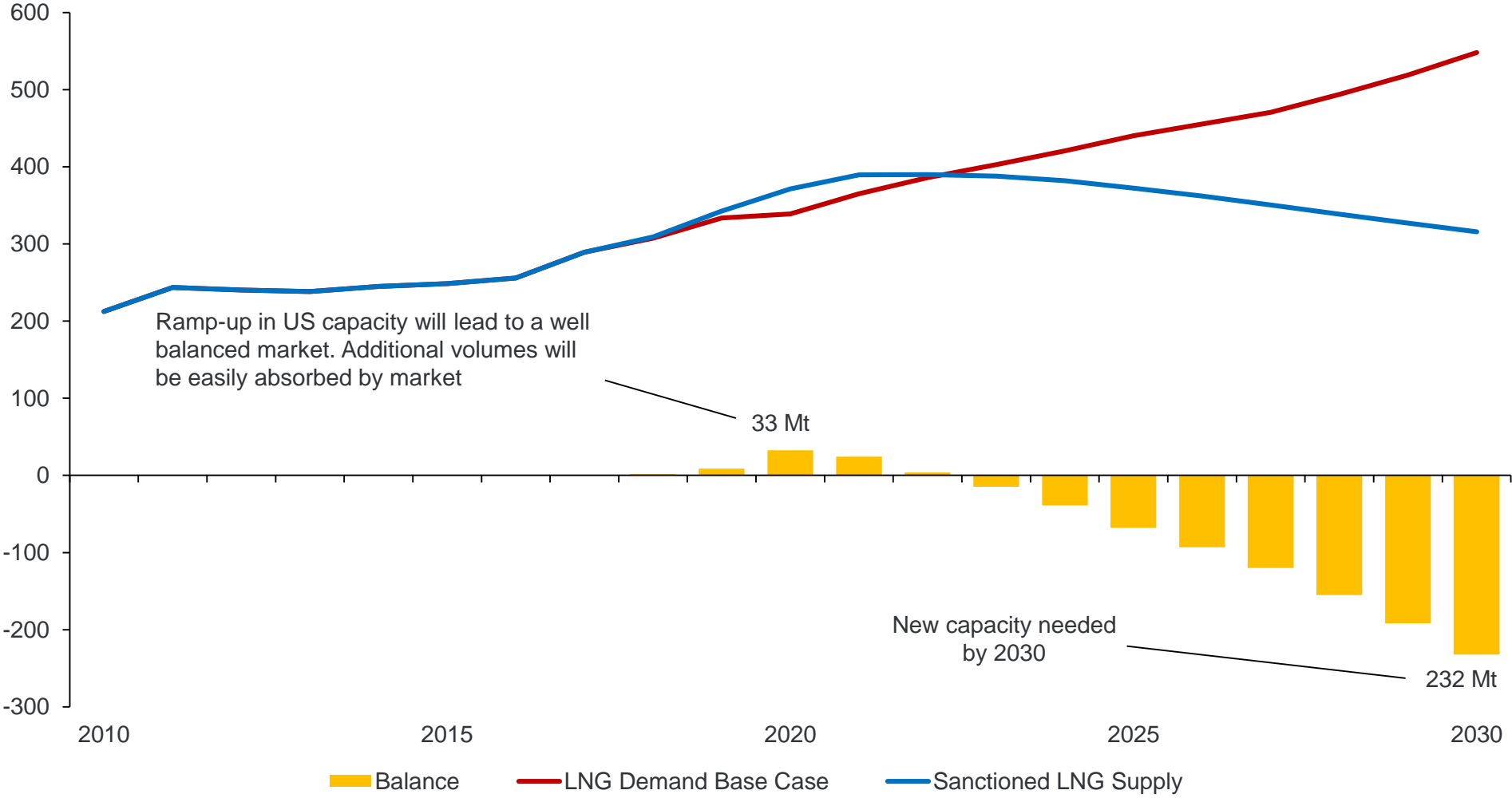
Longer distances between supply and demand to facilitate more LNG trade



Source: Rystad Energy research and analysis, Rystad Energy GasMarketsCube Pilot

LNG market to tighten after 2022, over 200 Mt of liquefaction projects need to be sanctioned to meet demand by 2030

Global LNG supply-demand balance
Mt



Thank You!