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Russia and FSU Oil & Gas

A Multi-Vector Approach

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CSIS

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Landlocked region, part of greater Middle East?



Oil Resources

Country	Reserves (Billion Barrels)	Production (‘000 b/d)	R/P ratio
Russia	110	11,227	27
Kazakhstan	30	1,672	49
Azerbaijan	7	826	23
Turkmenistan	1	261	6
Uzbekistan	1	55	29
Iran	158	4,600	94

Source: BP Statistical Review of World Energy 2017

Natural Gas Resources

Country	Reserves (tcm)	Production (bcm/a)	R/P ratio
Russia	32	579	56
Kazakhstan	1	20	48
Azerbaijan	1	18	66
Turkmenistan	18	67	262
Uzbekistan	1	63	17
Iran	34	202	166

Source: BP Statistical Review of World Energy 2017

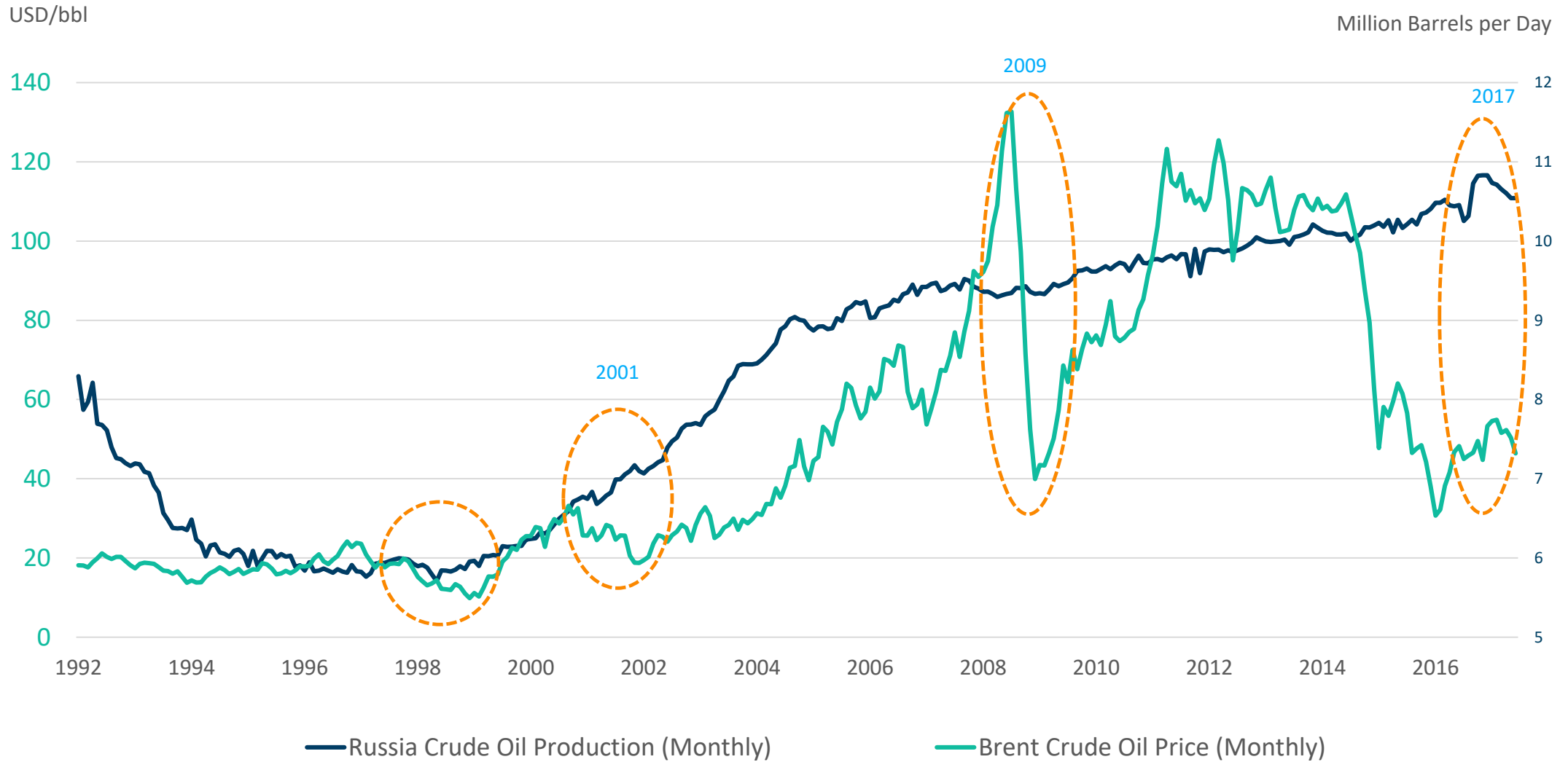


The New Petrostate

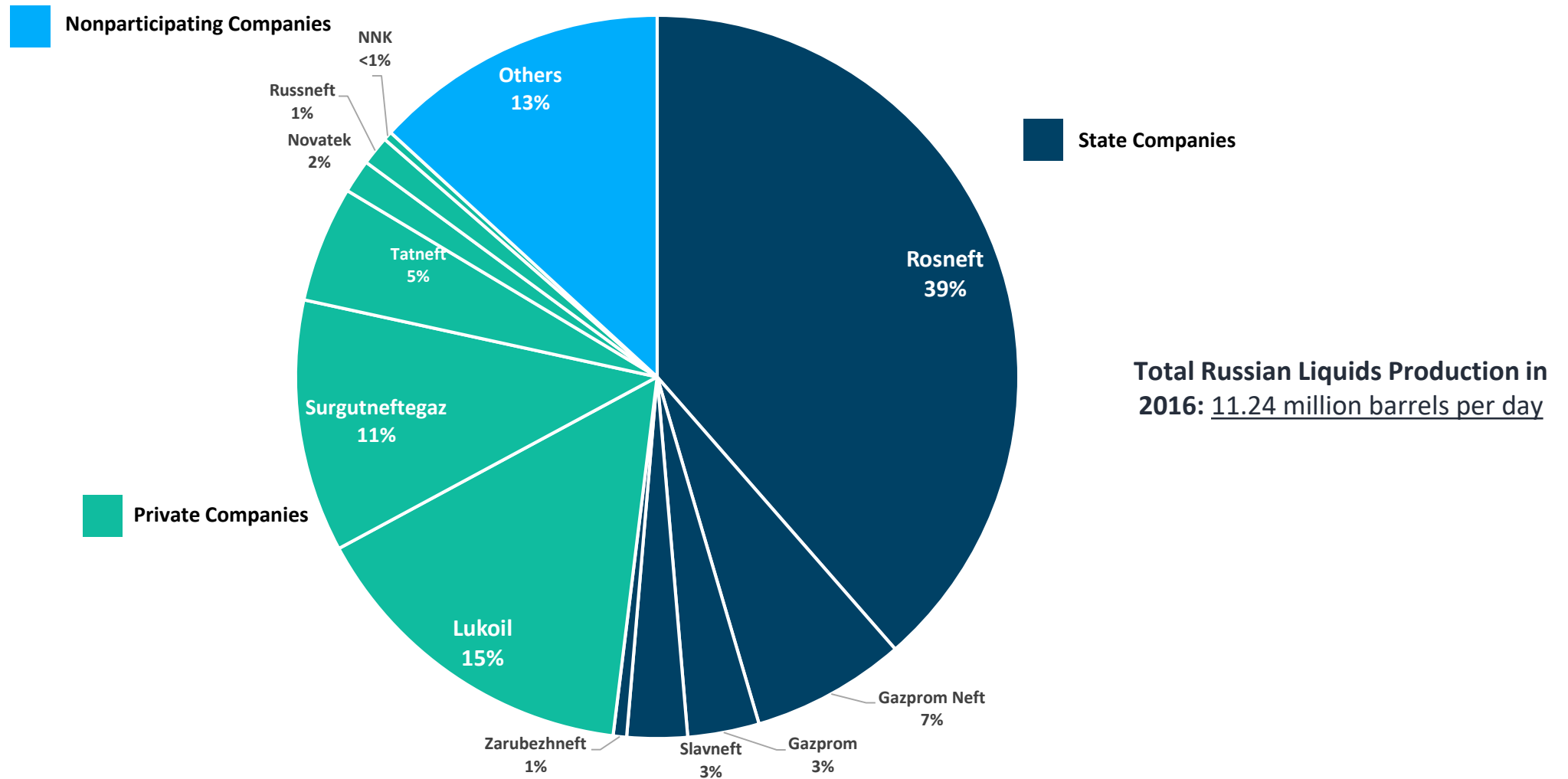
Russia is more of a petrostate than the Soviet Union. Oil and gas equaled more than 50% of budget revenue and 70% of export earnings in 2014.

Oil is about money and politics.
Gas is about politics and money.

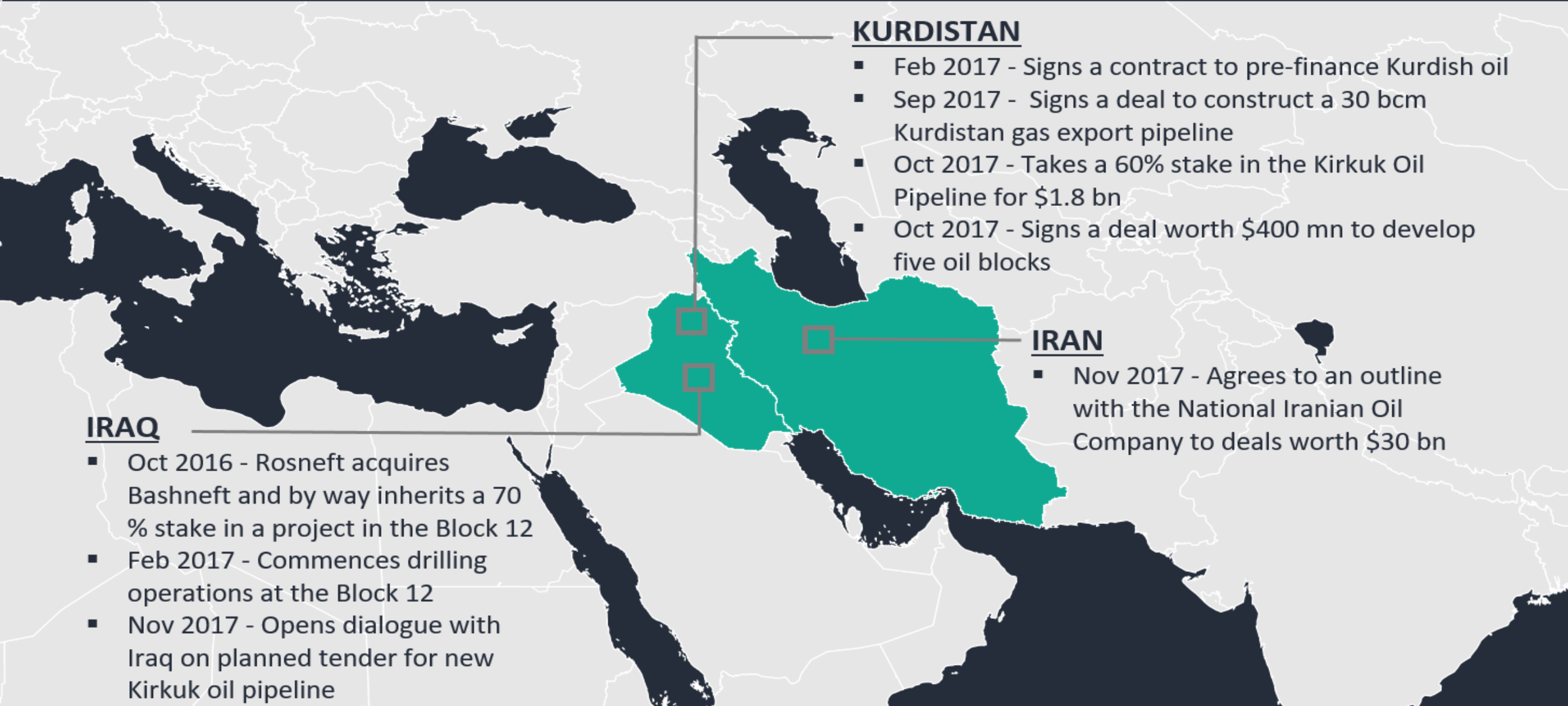
Russian Crude Oil Production and Timing of OPEC/non-OPEC Cuts



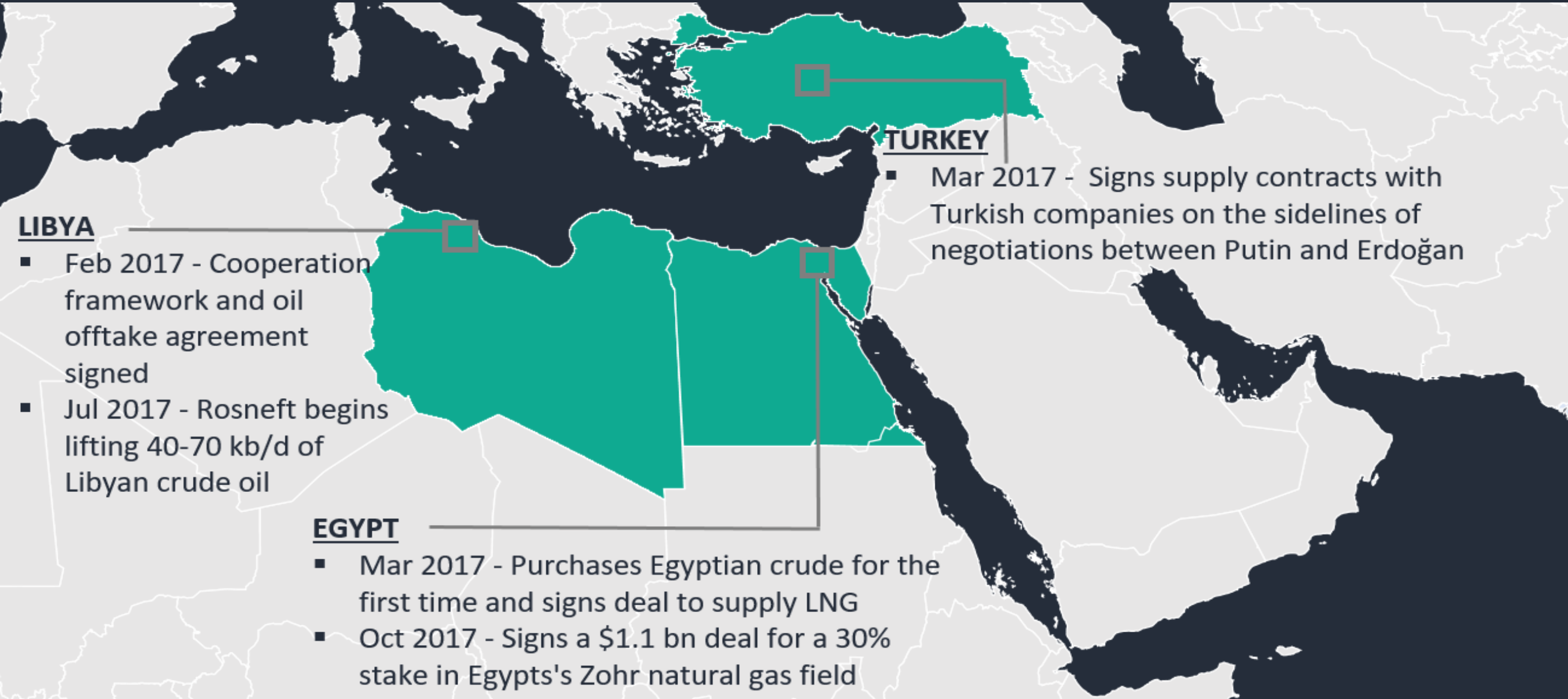
Share of Russian Liquids Production by Company in 2016



Rosneft in the Middle East



Rosneft in the Middle East



Rosneft in Asia

CHINA

- Nov 2017 - Signs a supply deal with CEFC China Energy to supply 60.8 million tonnes of crude oil between 2018 – 2022
- Sep 2017 - CEFC to acquire a 14.2% equity stake in Rosneft for \$9.1bn

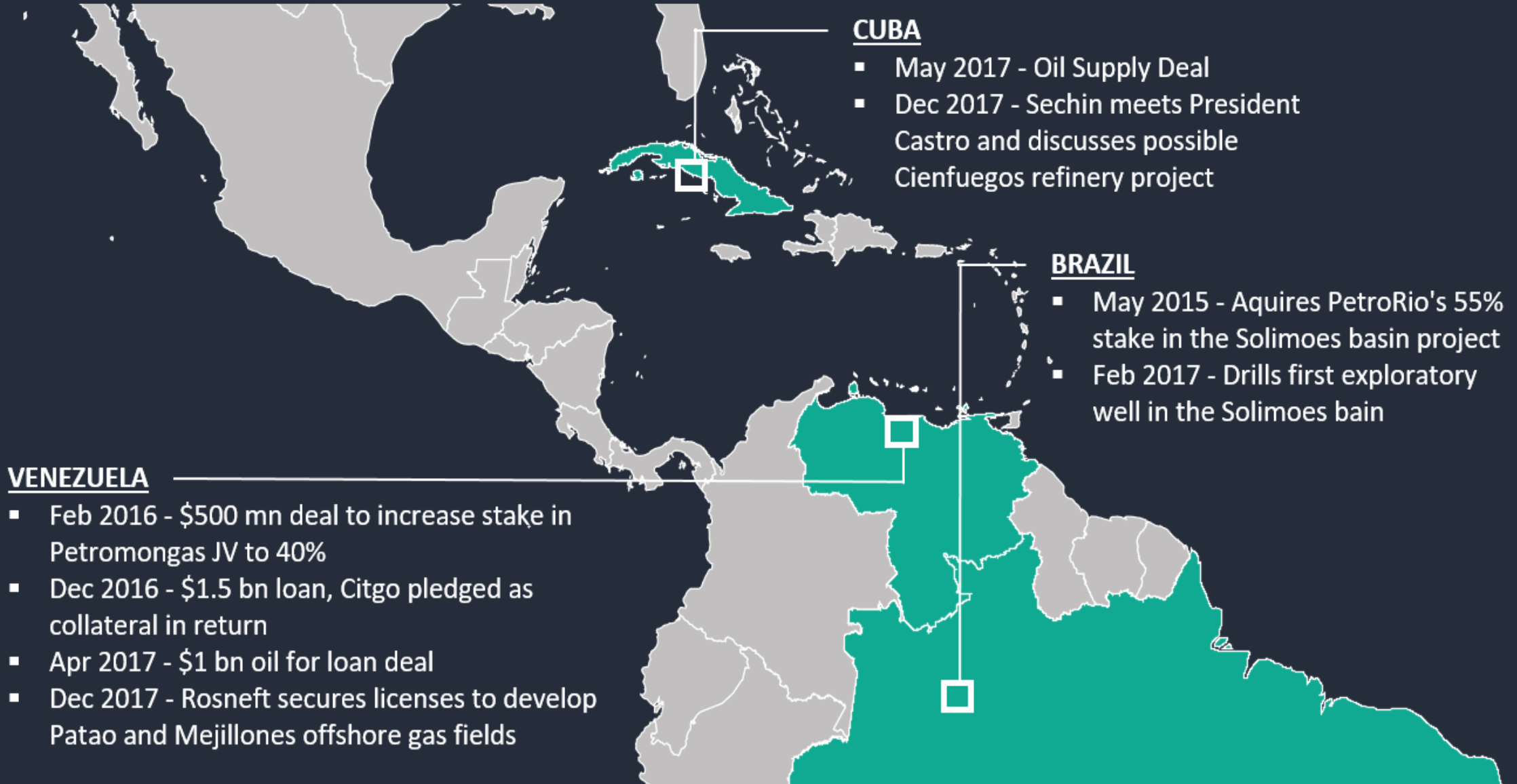
INDIA

- Aug 2017 - Finalizes a \$13bn takeover of the Indian refiner Essar oil, including 400 kb/d Gujarat refinery

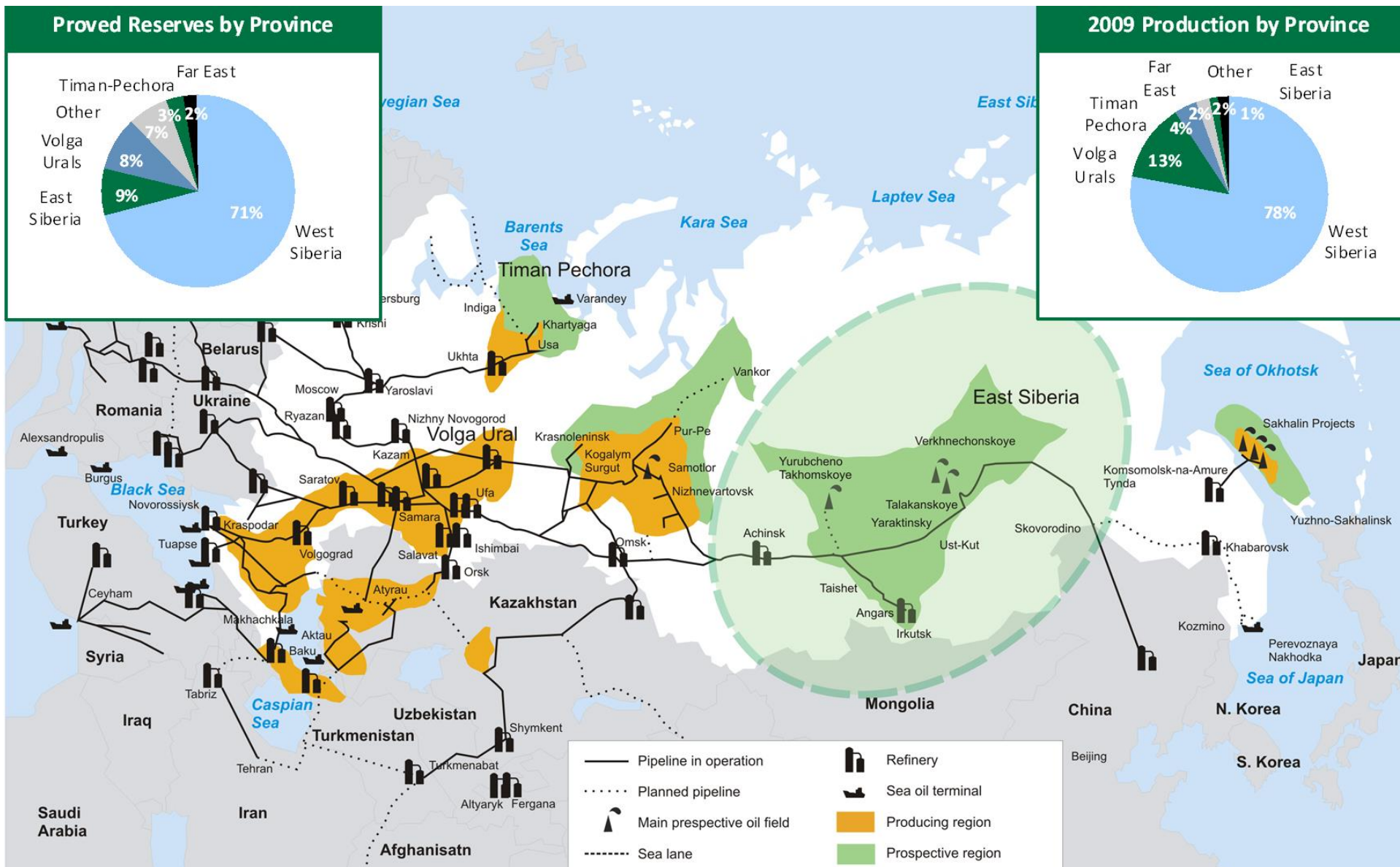
VIETNAM

- Mar 2016 - Commences exploratory natural gas drilling at Block 06.1

Rosneft in Latin America

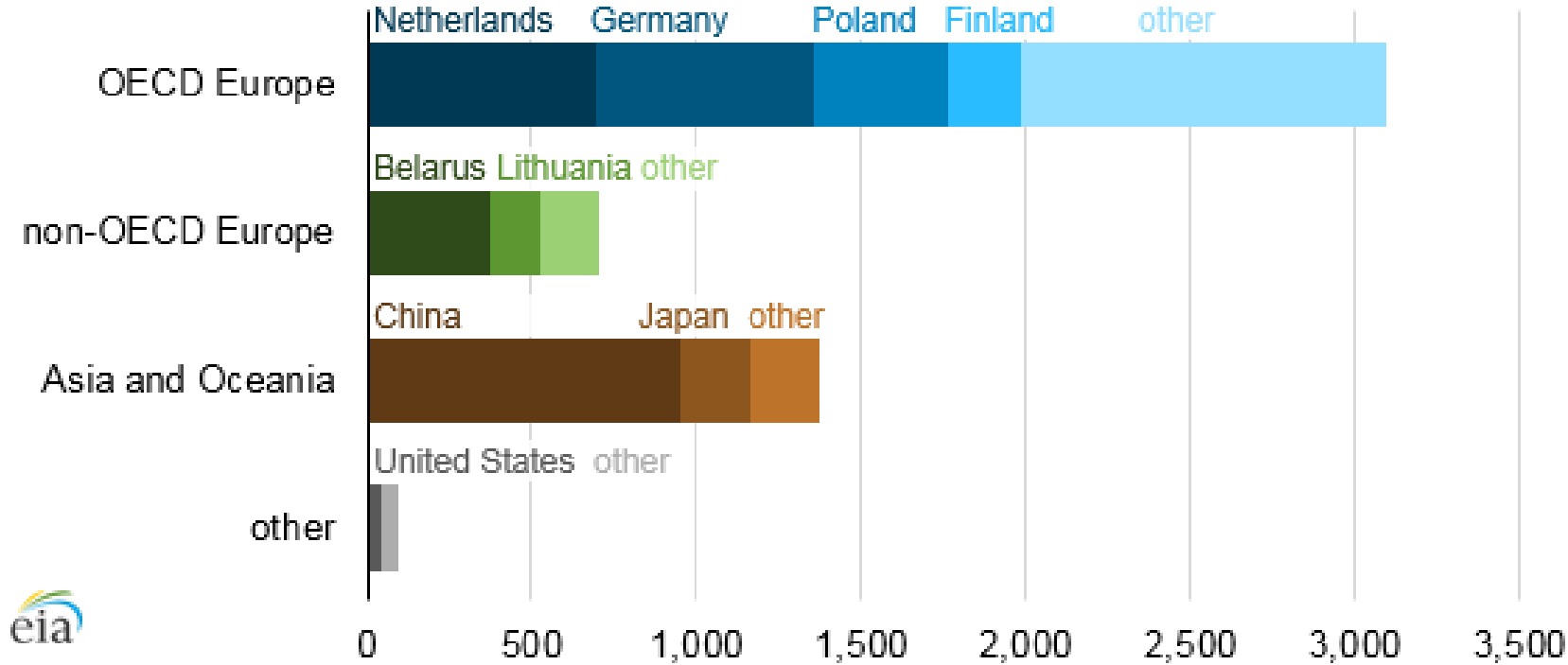


Russian Oil and Gas Provinces



Russian Crude Oil and Condensate Exports

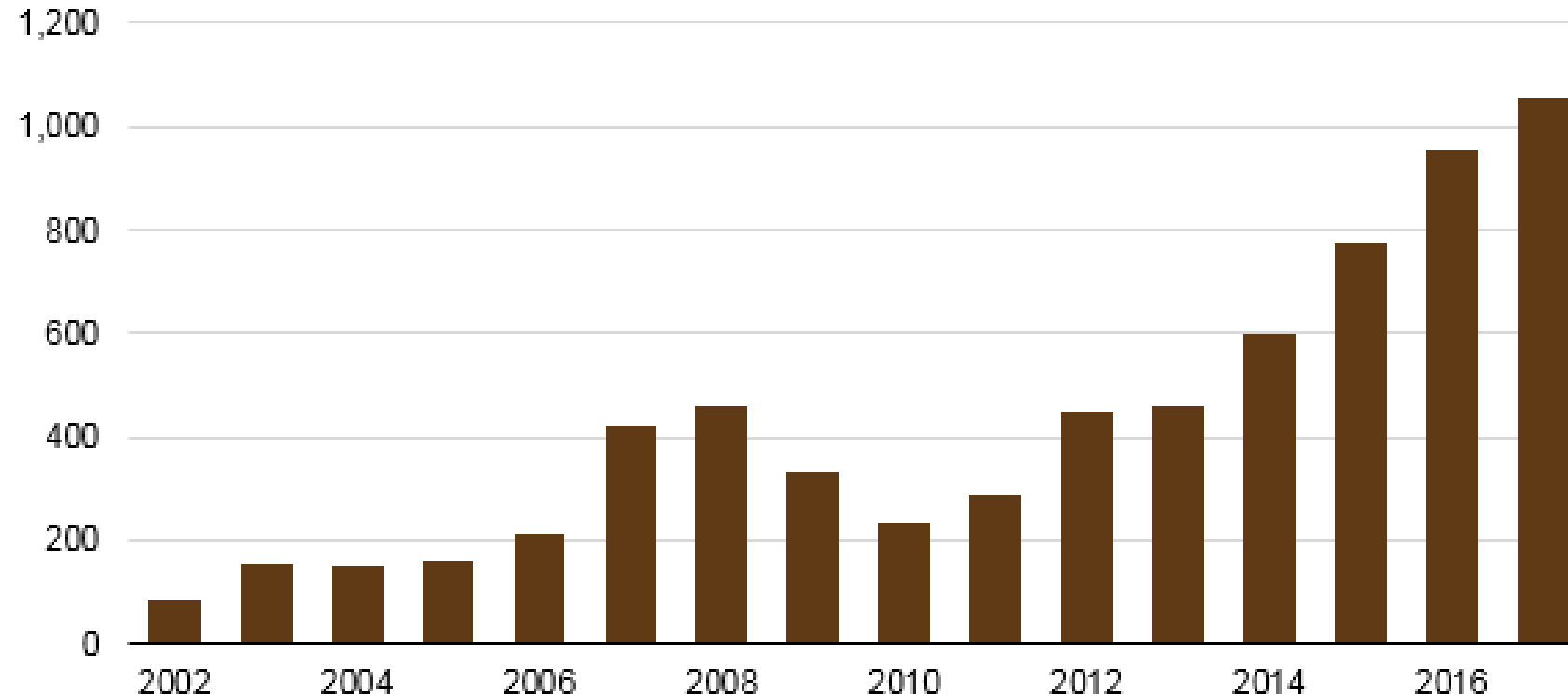
Russia crude oil and condensate exports by destination (2016)
thousand barrels per day



Source: EIA

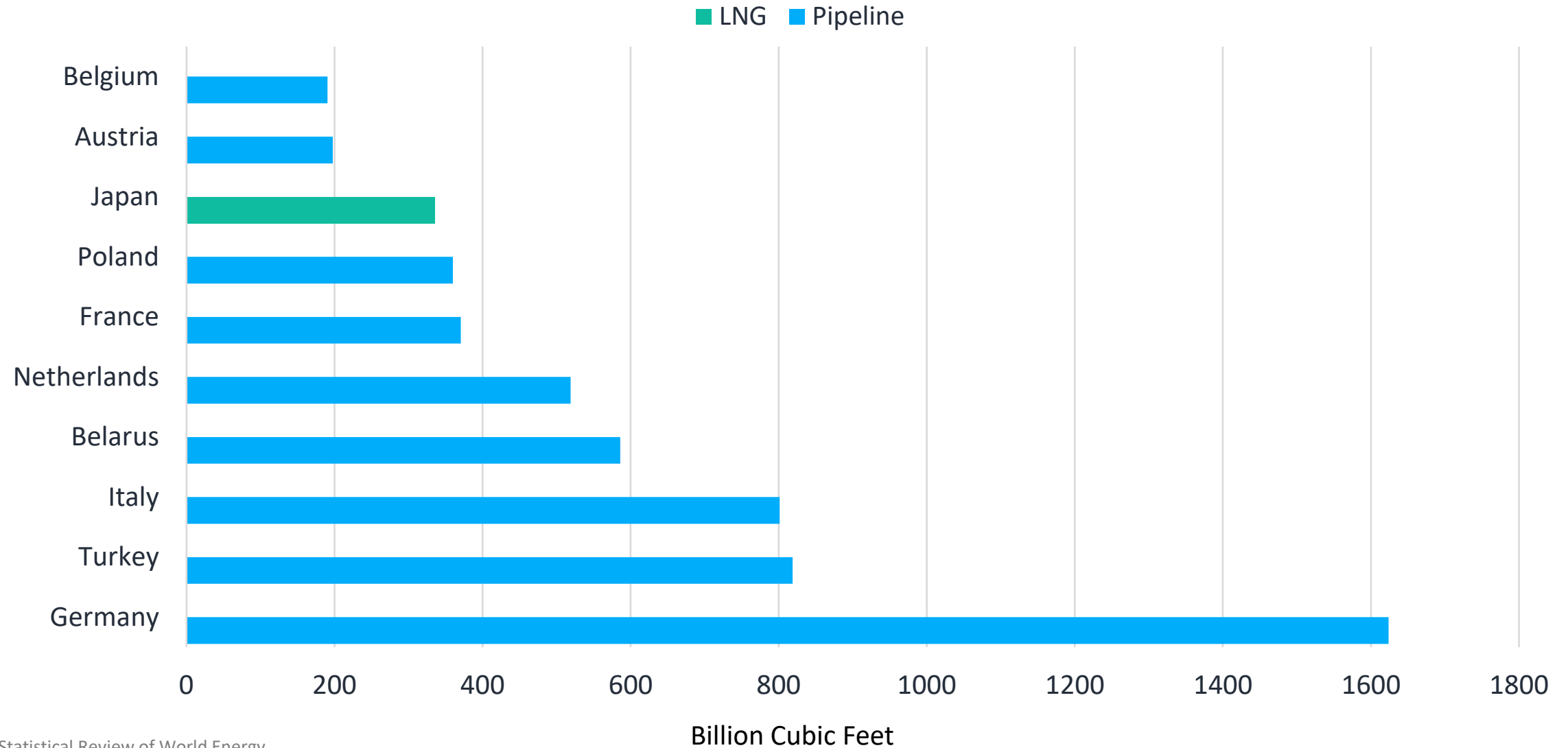
Russian Crude Oil and Condensate Exports to China

Russia crude oil and condensate exports to China (2002-2017)
thousand barrels per day



Source: EIA

Russian Natural Gas Exports by Destination (2016)

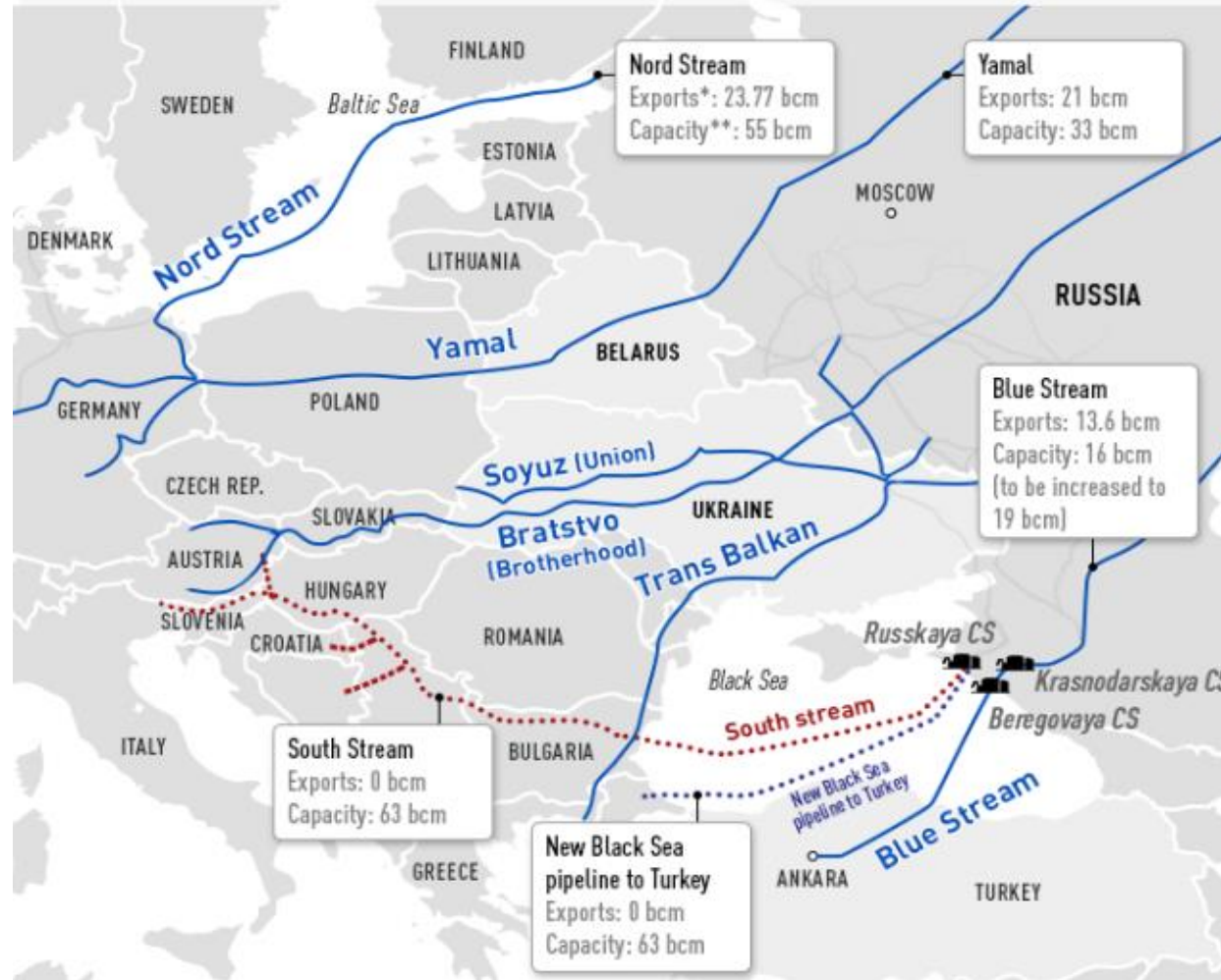


Source: BP Statistical Review of World Energy



Turkey's 'South Stream' and Russian Oil and Gas

Russia has decided to redirect its 63 billion cubic meter (bcm) pipeline to deliver gas to southern Europe. Instead of constructing the first overland section through Bulgaria, a member of the European Union, the pipeline will instead go through Turkey and onto Greece.



Smooth Sailing?



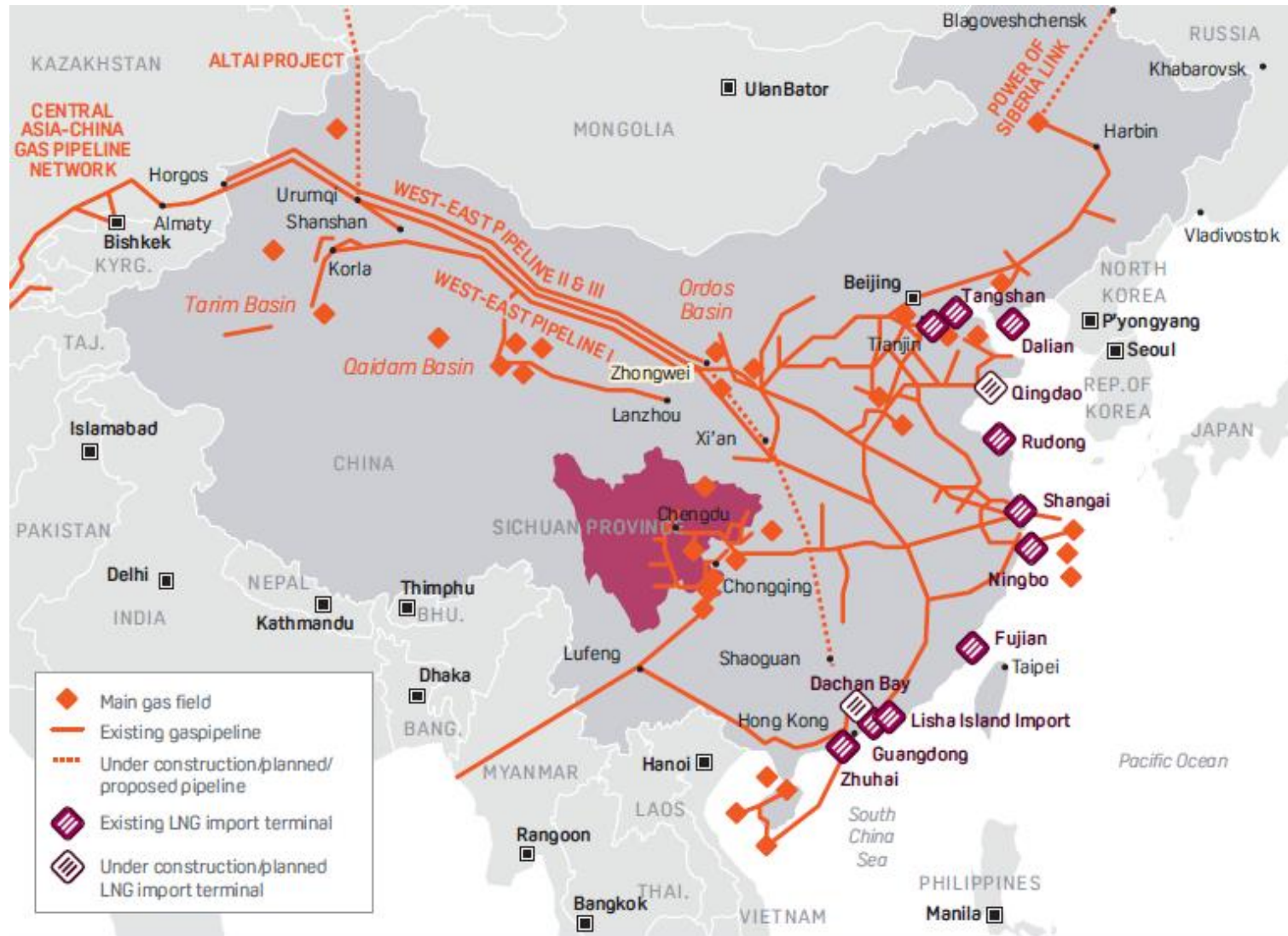
Challenge - Investment (Lifeblood of Petroleum Industry)

- Brownfield revival period over
- Price increases cannot be counted on to make up stagnate volume
- High-risk frontier exploration and development needed
- Need better technology and project management
- Availability and cost of capital
- Access to Western capital and technology under sanctions
- Who will bear the risks?
- Role of foreign investment

Political Drivers of Petroleum Industry

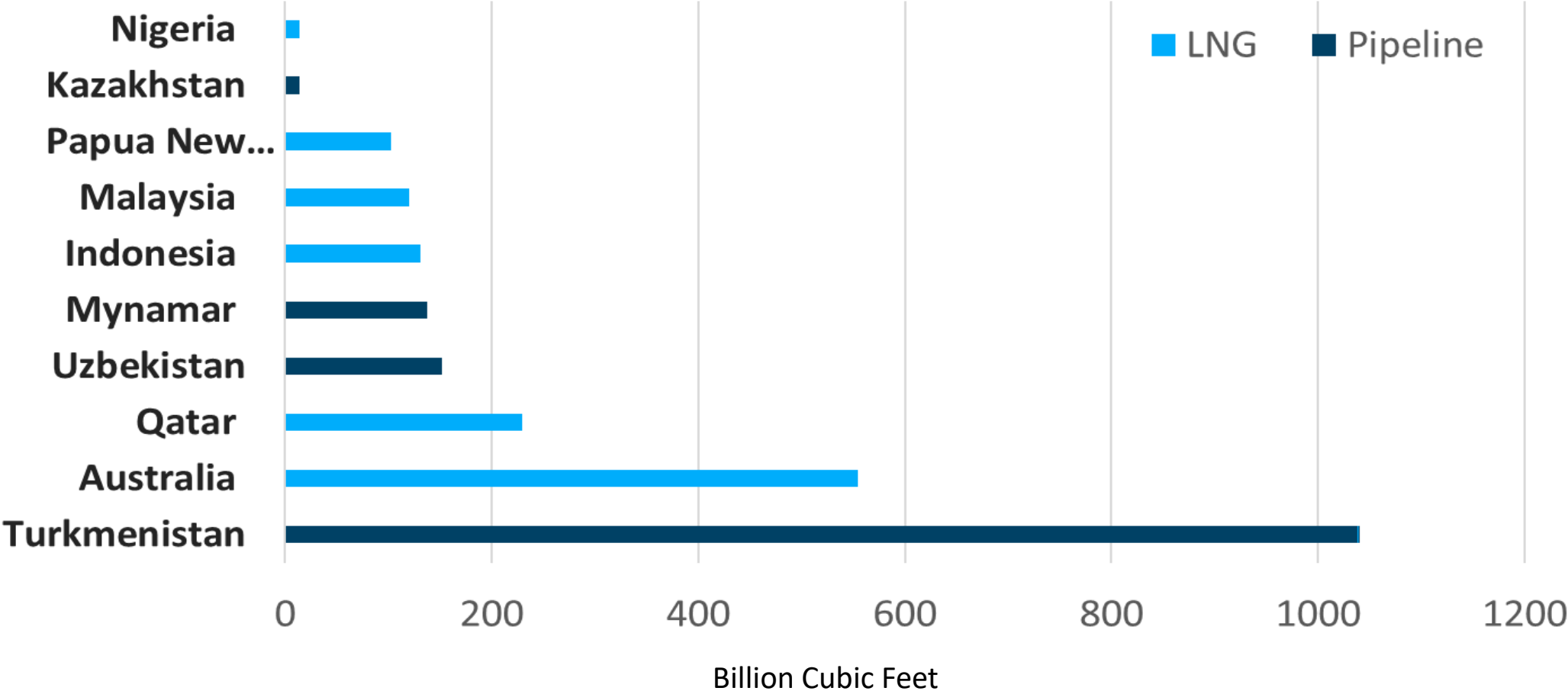
- Demand and enable centralization
- Maximize government take
- **Control paramount, profitability secondary**
- Social benefit, public work, employment
- Public spending, not investment
- Strategic industry justifies national champions, Rosneft and Gazprom
- Facilitates rent seeking by elites

China's Gas Supply Infrastructure



Source: S&P Global Platts (March 2018)

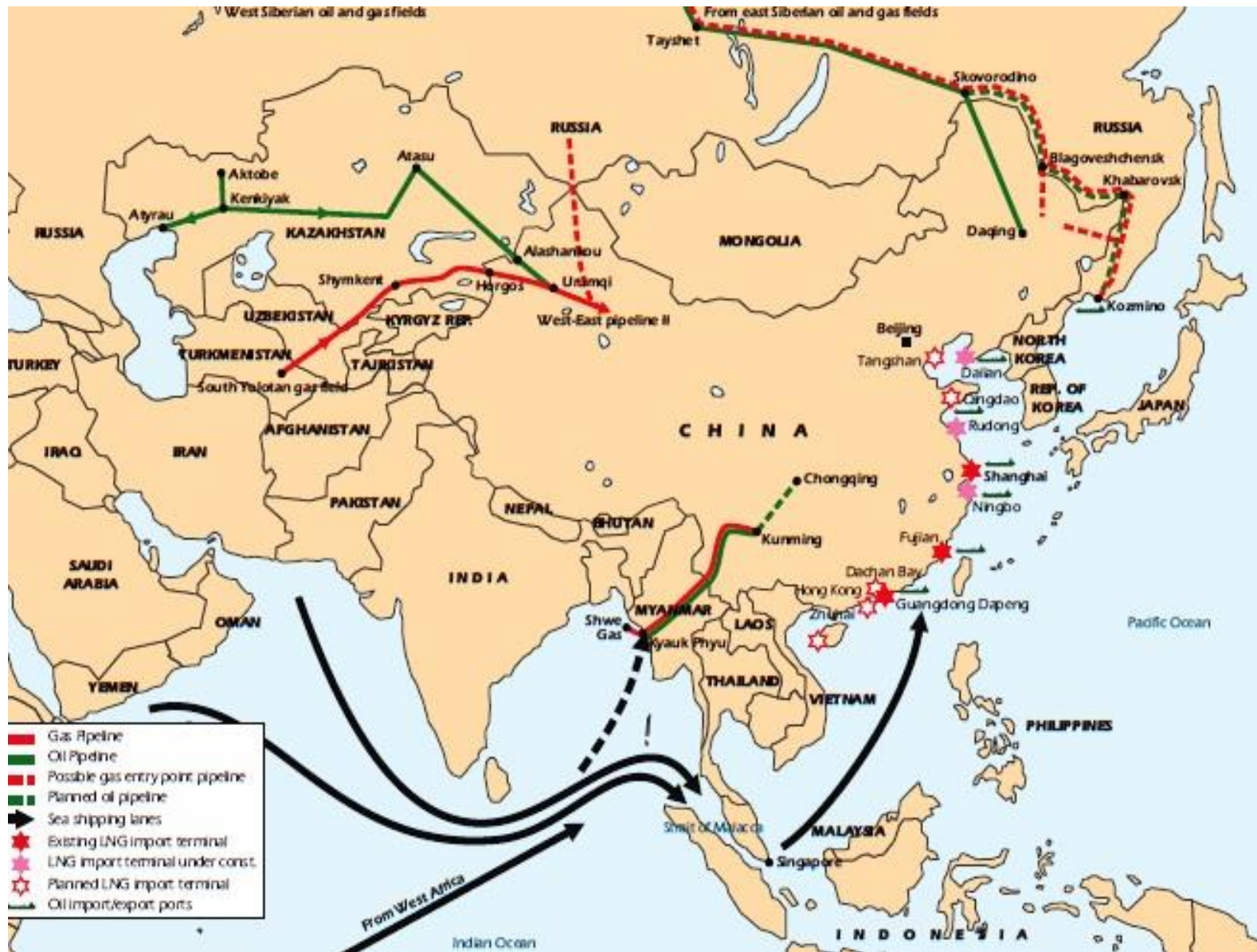
Chinese Natural Gas Suppliers (2016)



Source: BP Statistical Review of World Energy

Future of Sino-Russian Oil and Gas Relations

- Compelling needs on both sides
- Shifting bargaining positions
- Chinese demand uncertainties
- Russian production uncertainties
- Economics and financial realities – loans or equity
- Geopolitics
- Elite requirements



Key Issues for Russia

Major Issues (Industry)

- Sustaining Production and New Development
- Aged and Lacking Infrastructure
- Access to Technology and Capital
- Lower Price Environment
- European Dependence

Major Issues (Political)

- Sanctions
- Barriers to Market Entry (State Owned Monopolies)
- Reform of Tax and Regulatory System / Special Favors
- OPEC

Issues for Other FSU

- Bargain of the '90s on FDI now obsolete?
- Price volatility and resource curse
- Contract extension on big deals on mega-projects
- Still landlocked
- Role of China, SCO, OBOR, Eurasian Economic Union
- Political stability and succession

About Us

The CSIS Energy & National Security Program is a leader in understanding and analyzing the shifting global and domestic energy landscape. Our approach seeks to analyze and explain the intersection of policy, markets, and technologies. The team is comprised of scholars with a wide range of professional experience in the private and public sectors as well as firsthand regional expertise, who work together to formulate innovative yet pragmatic policy recommendations.

Continuing its collaboration with leaders in industry, government, academia, and nonprofits, the CSIS Energy & National Security Program has events and projects designed to help decision-makers craft smart energy policies that balance economic, environmental, and security priorities.