

Outlook for natural gas trade in APEC

15 May, 2019

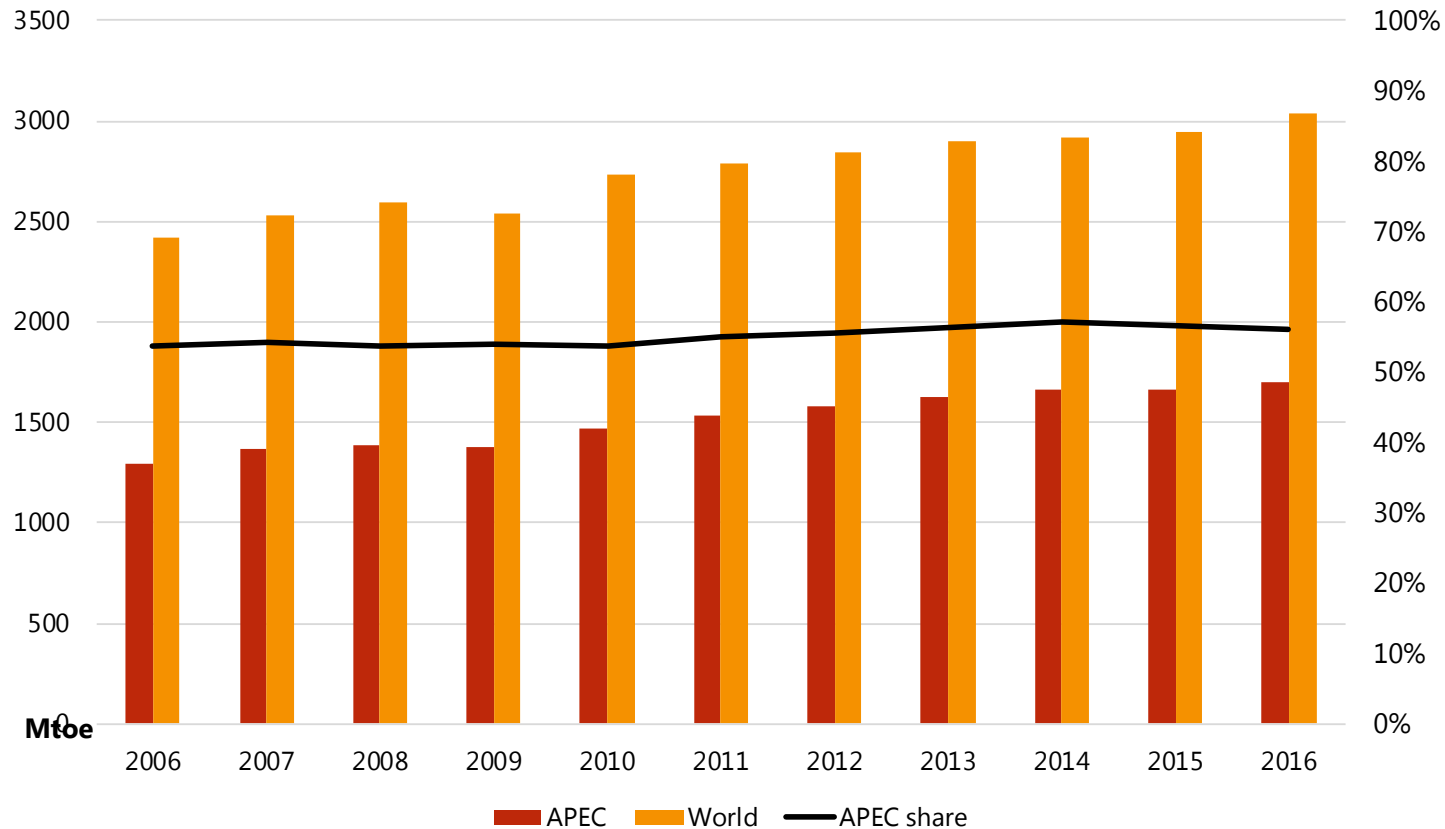
APERC Annual Conference

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APEC accounts for 56% of global gas demand

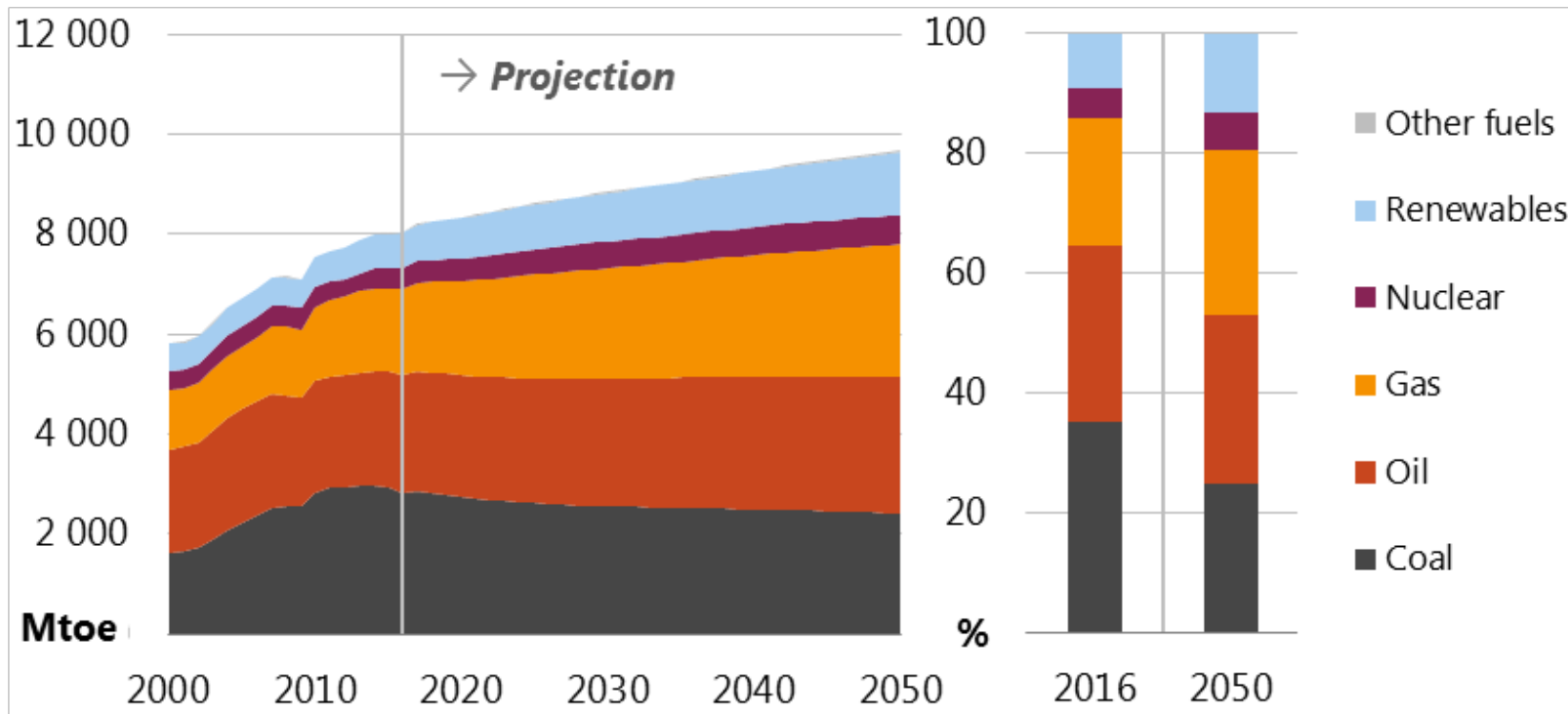
World and APEC primary demand for natural gas, 2006-16



More than half of global gas is produced in the APEC region, with three out of the four top producers being APEC members.

APEC TPES increases by 22% through 2050

Total primary energy supply by fuel in BAU, 2000-50

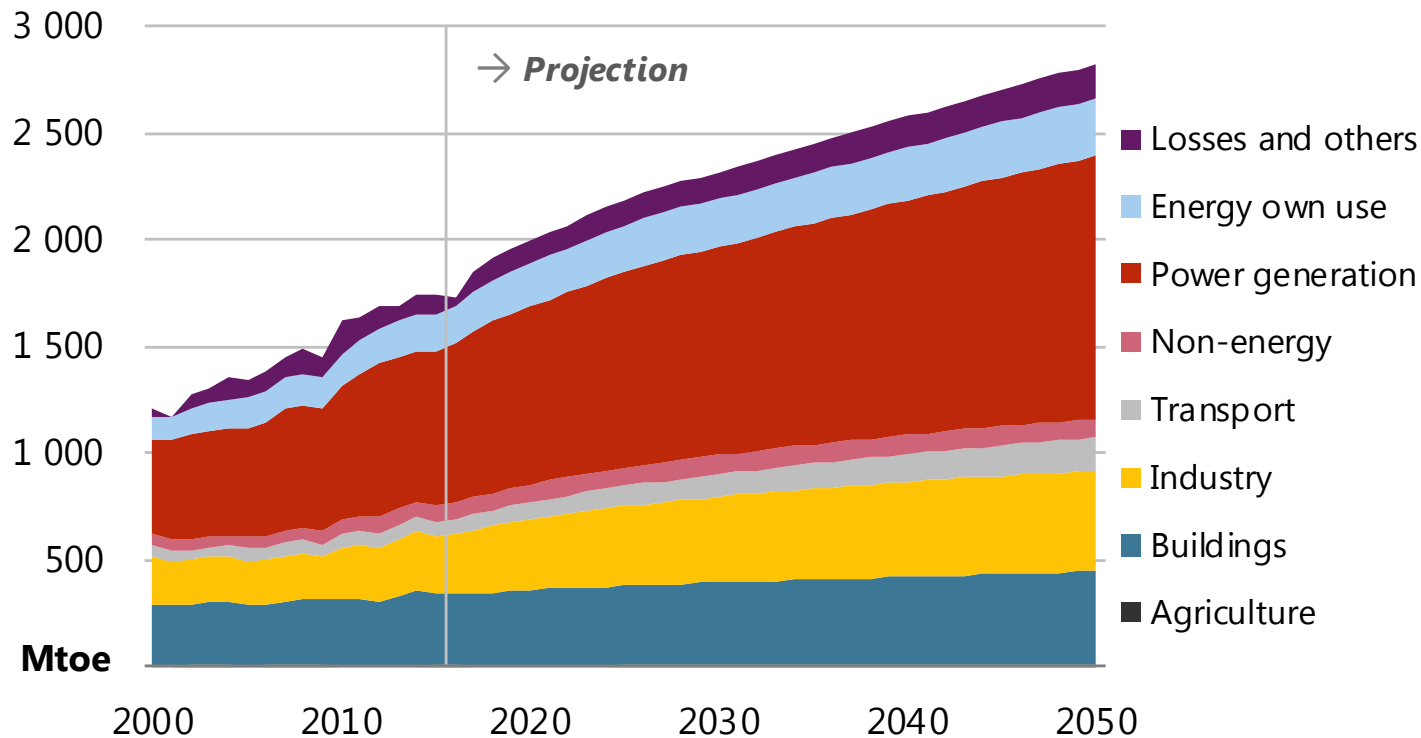


Sources: APERC analysis and IEA (2018a).

APEC natural gas supply grows by 57% over the Outlook period. Its share also grows from 21% in 2016 to 27% in 2050.

Power generation leads natural gas growth

Total primary gas supply by use, 2000-50

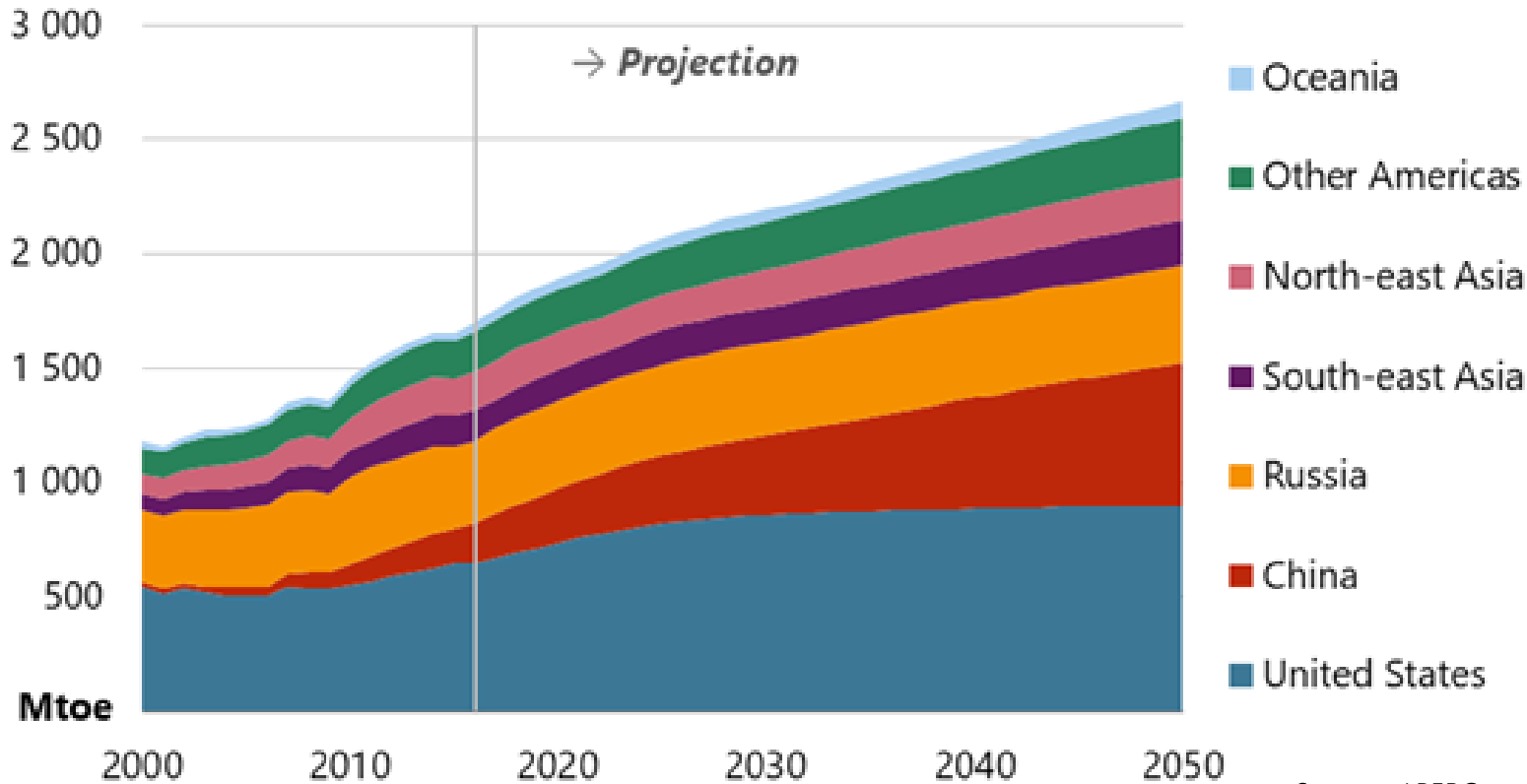


Sources: APERC analysis and IEA (2018).

Power generation share grows to 43% of the total by 2050, while all sectors increase consumption.

The US and China keep leading growth

Total primary gas supply by sub-region, 2000-50

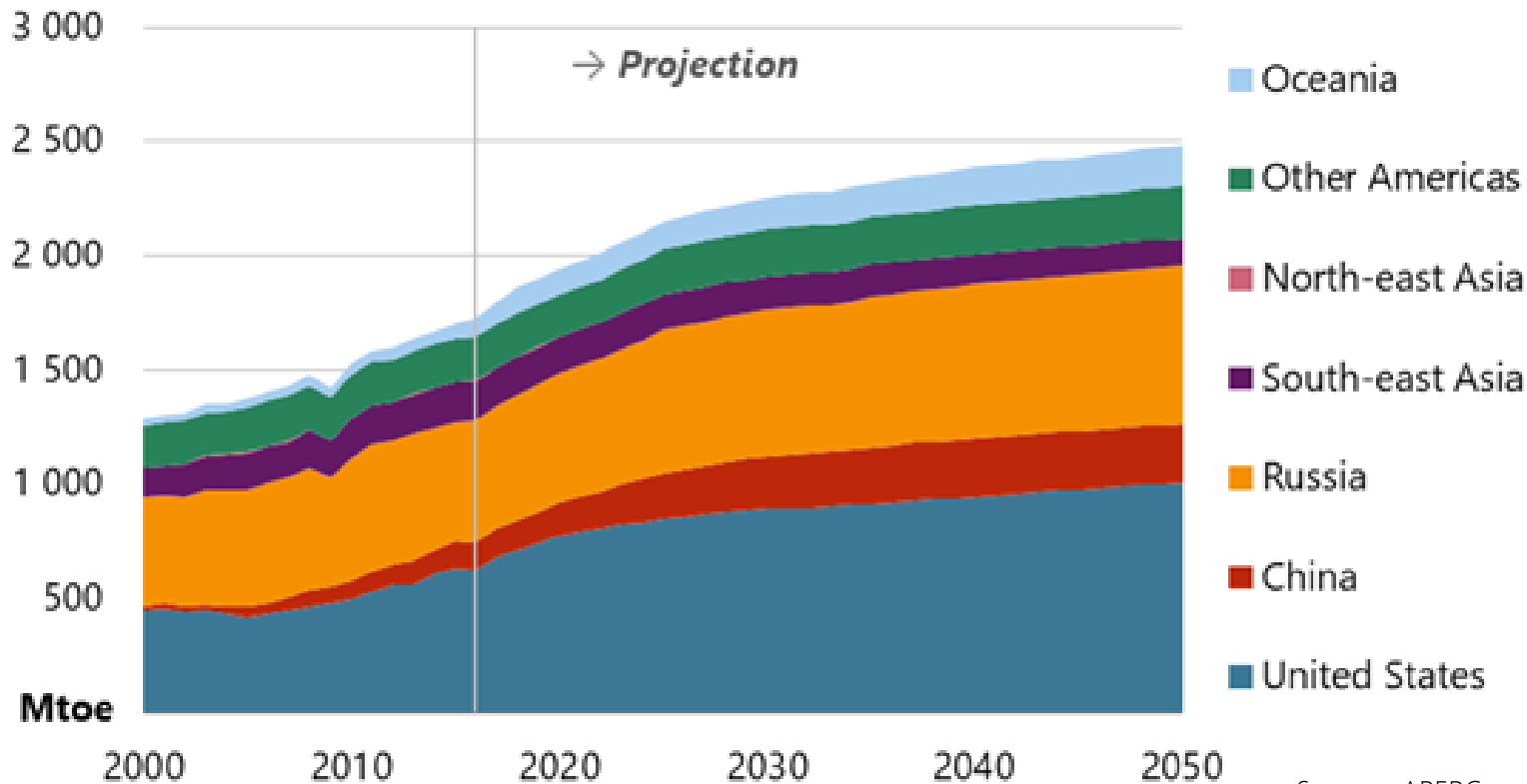


Sources: APERC analysis and IEA (2018).

Total gas supply grows in all APEC economies and gas represents at least 10% of TPES in every APEC economy by 2050.*

Gas production grows 44% by 2050.

Natural gas production by subregion, 2000-50

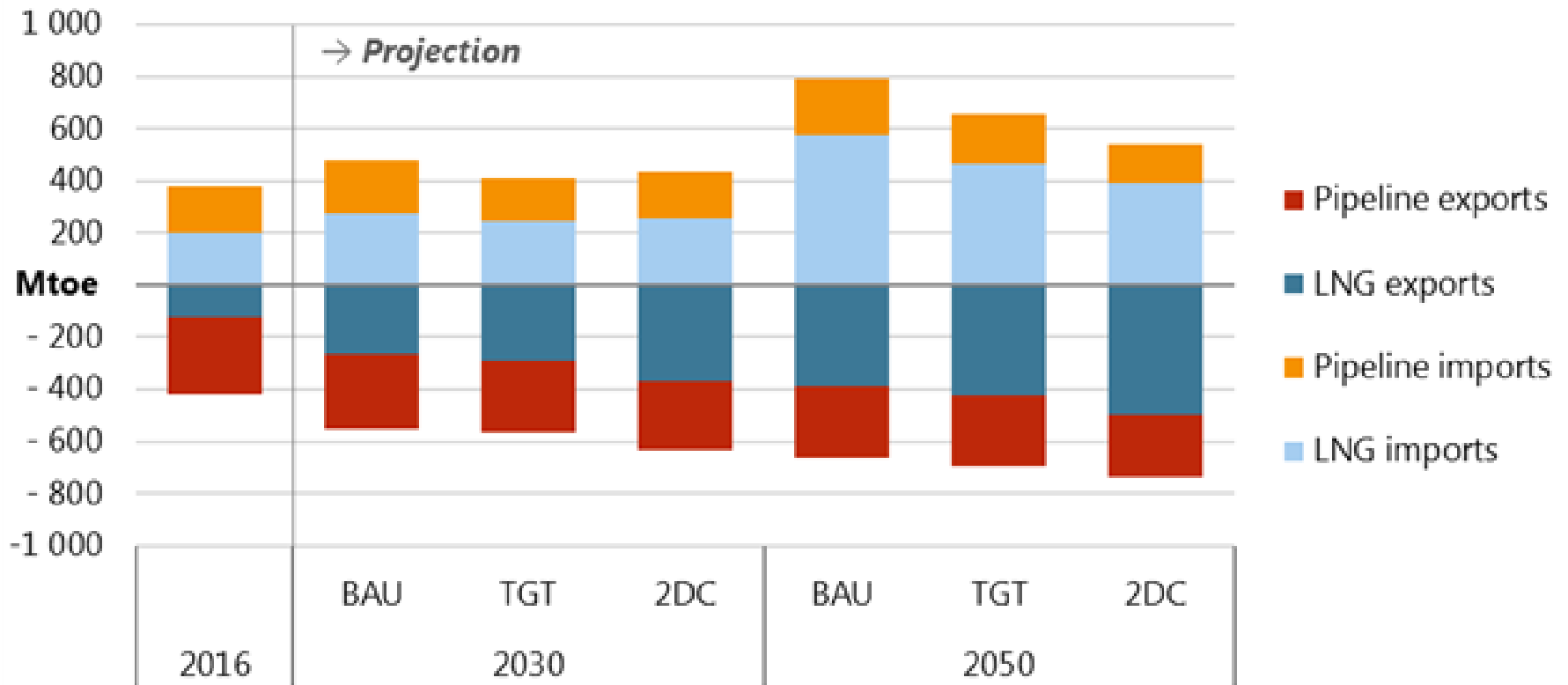


Sources: APERC analysis and IEA (2018).

Gas production grows in all sub-regions, except SEA, and is led by the US, Russia and China, where it almost doubles.

Gas trade in APEC increases in all scenarios

APEC pipeline and LNG imports and exports in the BAU, TGT and 2DC, 2016-50

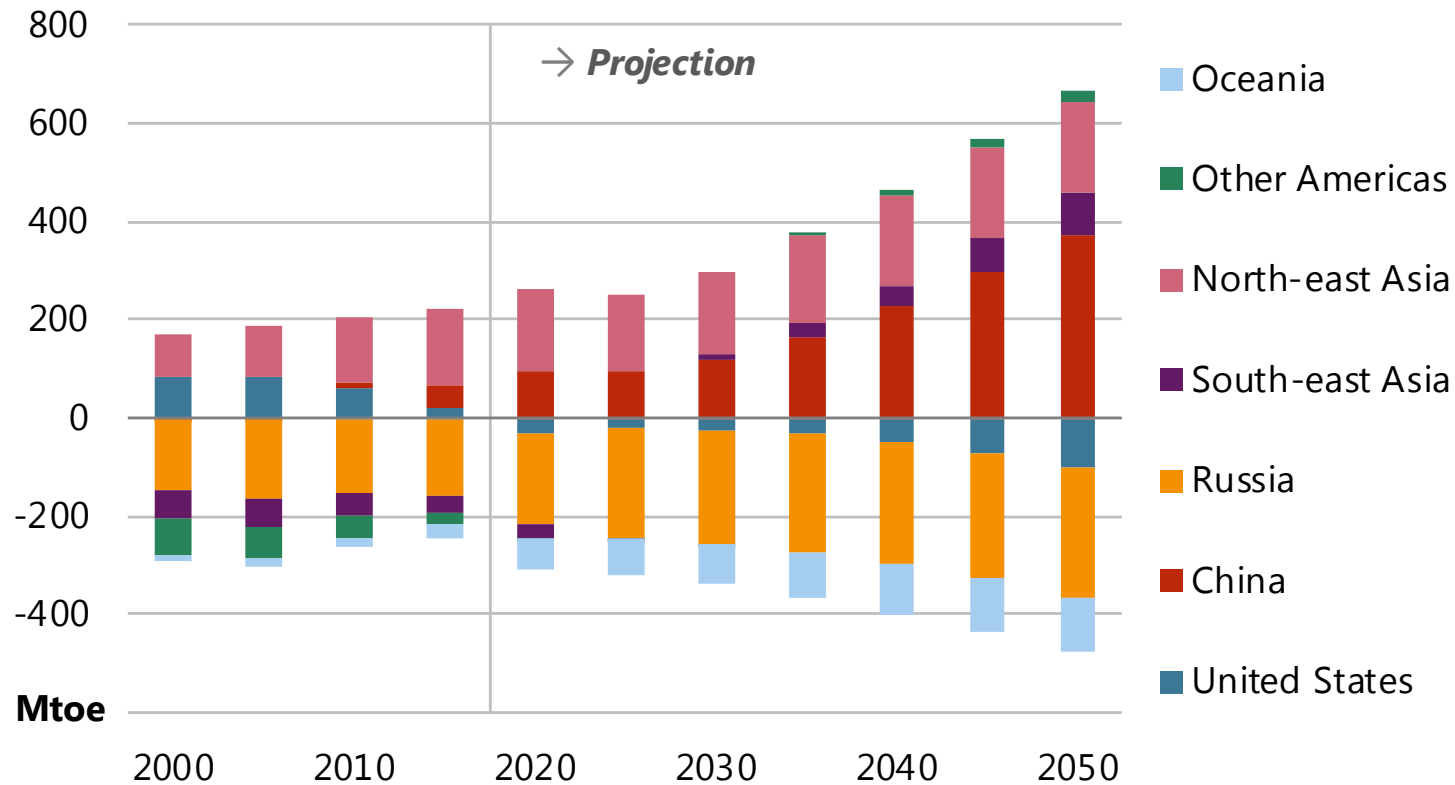


Sources: APERC analysis and IEA (2018).

With 3 of the top-5 world gas exporters and importers, APEC becomes a net gas importer driven by increasing LNG imports.

Gas exports rise by 60% and imports by 126%

APEC net imports of gas in the BAU, by region, 2000-2050

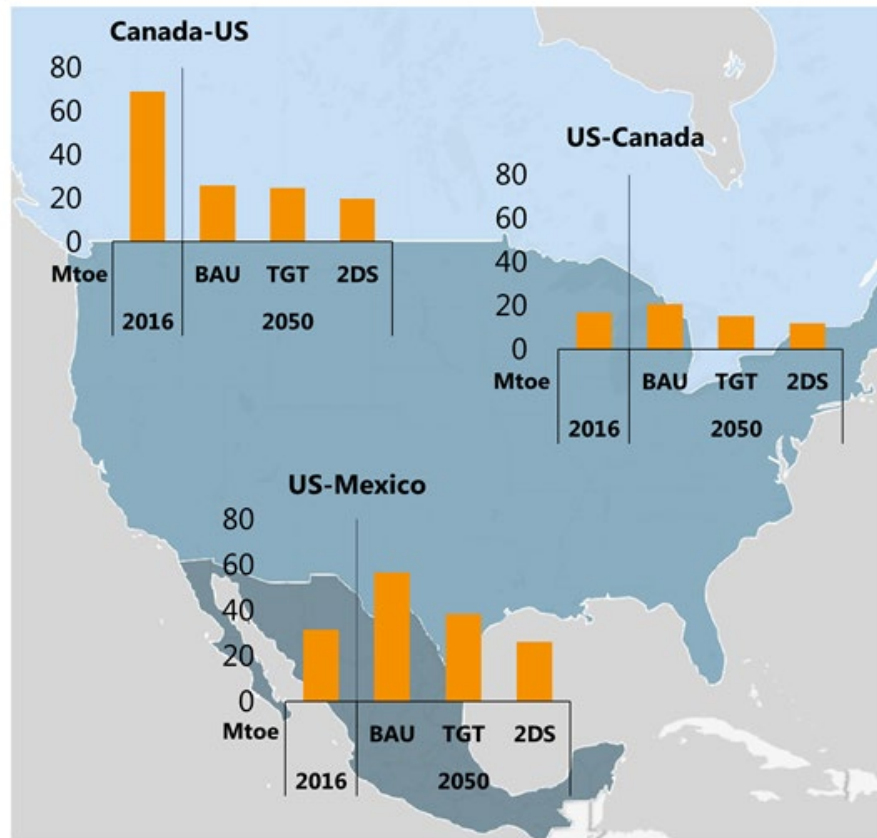


Sources: APERC analysis and IEA (2018).

Russia remains the world's main gas exporter, while China drives growth in APEC net gas imports. SEA becomes a net importer.

Piped gas trade remains robust in North America

North American pipeline natural gas trade in the BAU, TGT and 2DS, 2016-50

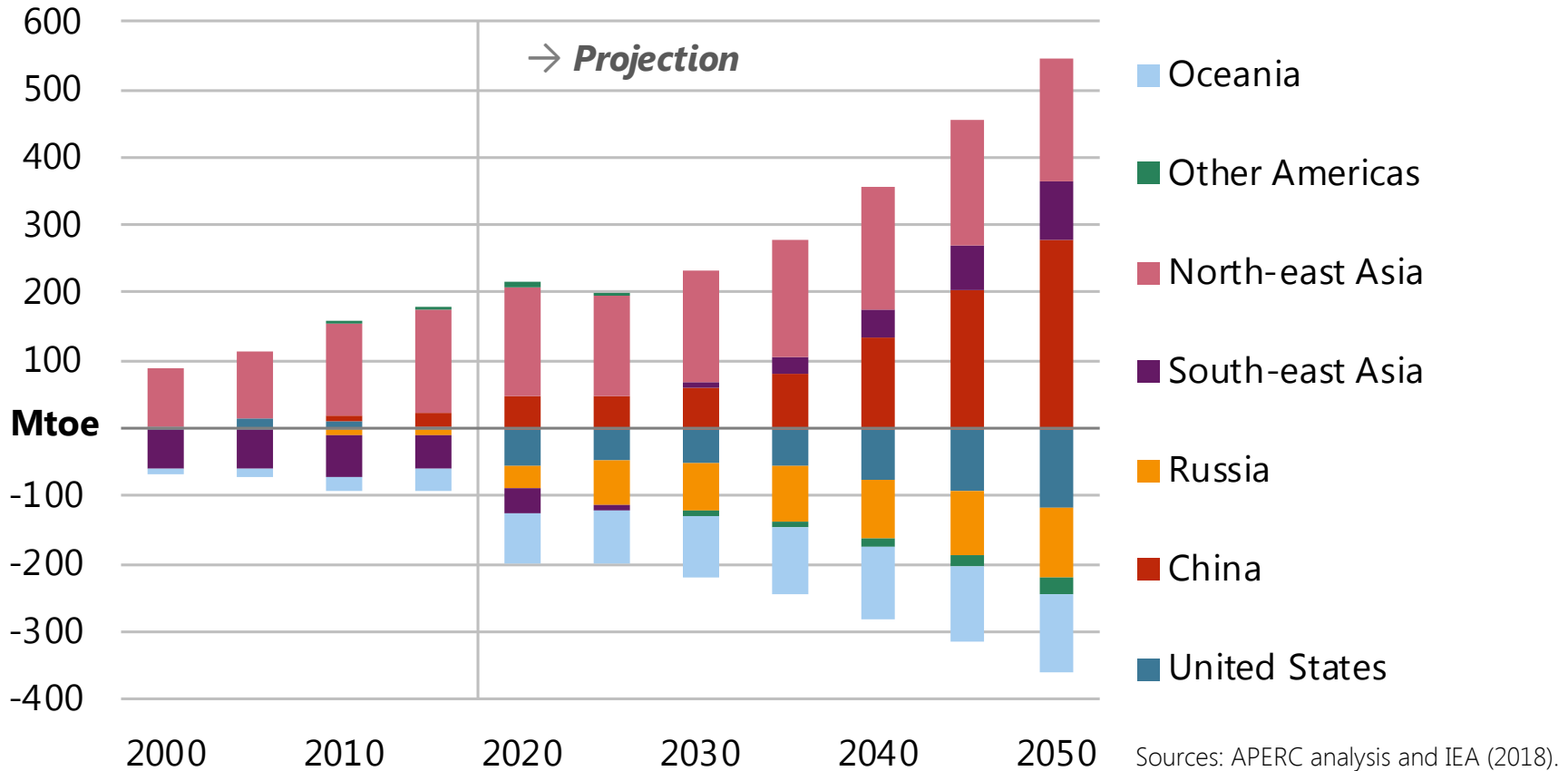


Sources: APERC analysis and IEA (2018).

US net pipeline gas exports account for 51 Mtoe in 2050, driven by decreasing Canadian imports and growing demand in Mexico.

APEC LNG trade expands and diversifies drastically

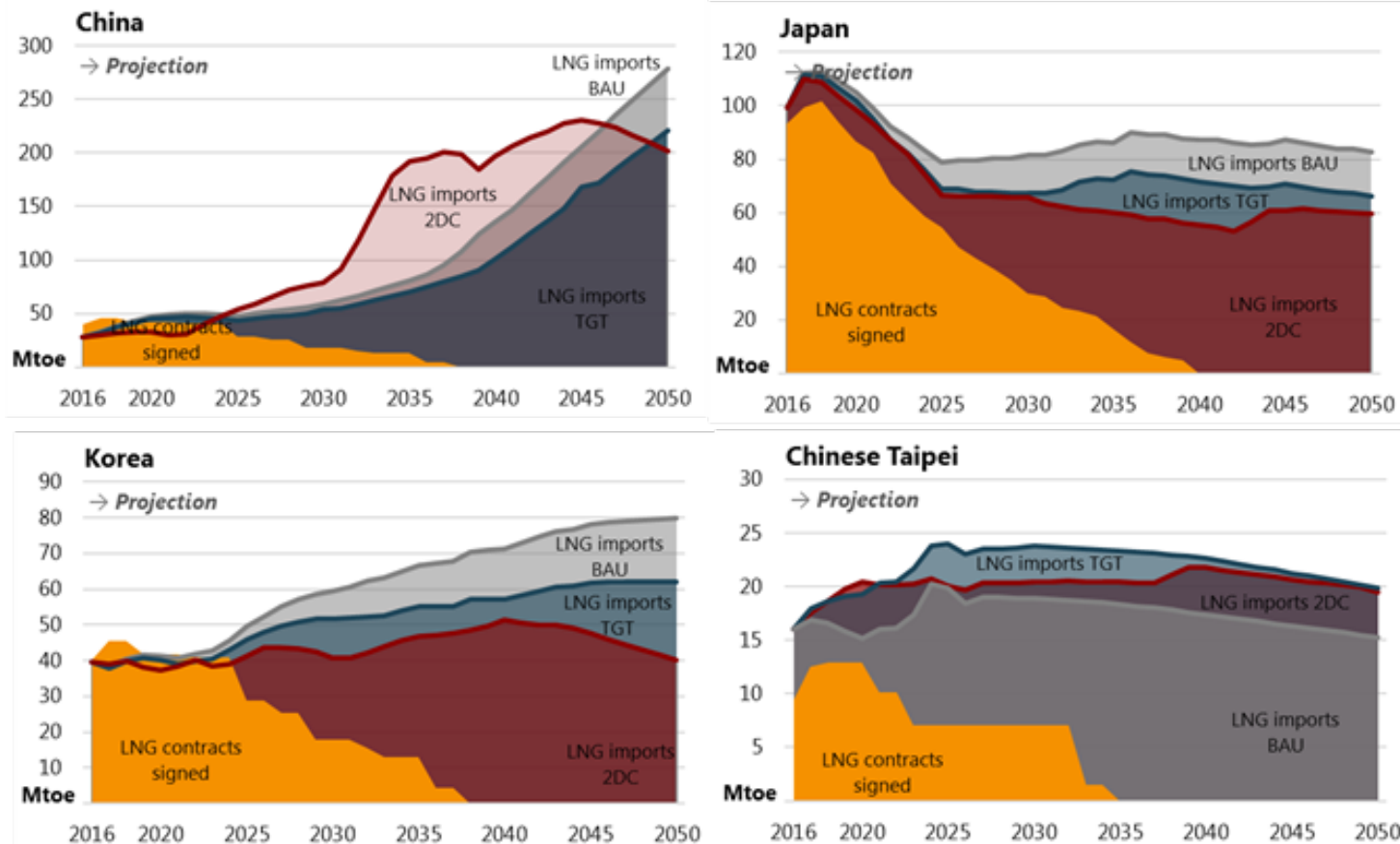
APEC LNG import and export capacity by region in the BAU, TGT and 2DC, 2016-50



The US, Australia and Russia emerge as dominant LNG exporters while booming Chinese LNG imports drive APEC LNG import growth.

Medium-and long-term LNG contract expiration provides an opportunity for increased flexibility

LNG contracts and import gaps for major LNG importers in the BAU, TGT and 2DC, 2016-50



Demand from major LNG importers surpasses current contracts; creating opportunities for new suppliers, contract conditions and pricing mechanisms.

Additional factors may create opportunities and challenges for gas trade in APEC

- Infrastructure development, particularly in South-East Asia
- Trade routes and chokepoints
- Floating units and technology innovation
- Small-scale LNG
- Competitive LNG prices in Asia
- The emergence of new LNG exporters and importers

Summary

- APEC economies remain central to global natural gas trade.
- Natural gas TPES grows by 57% from 2016 to 2050, driven by power generation.
- Natural gas trade in APEC continues to grow in the BAU, with exports rising by 60% and imports by 126%.
- Trade of both piped gas and LNG increases robustly.
- LNG imports account for 67% of total gas imports by 2050.
- Pipeline trade remains dominant in the Americas and grows quickly in China.



Thank you for your attention!

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