Gas industry insights in South America
The case of Argentina

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Secretario de Gobierno de Energía

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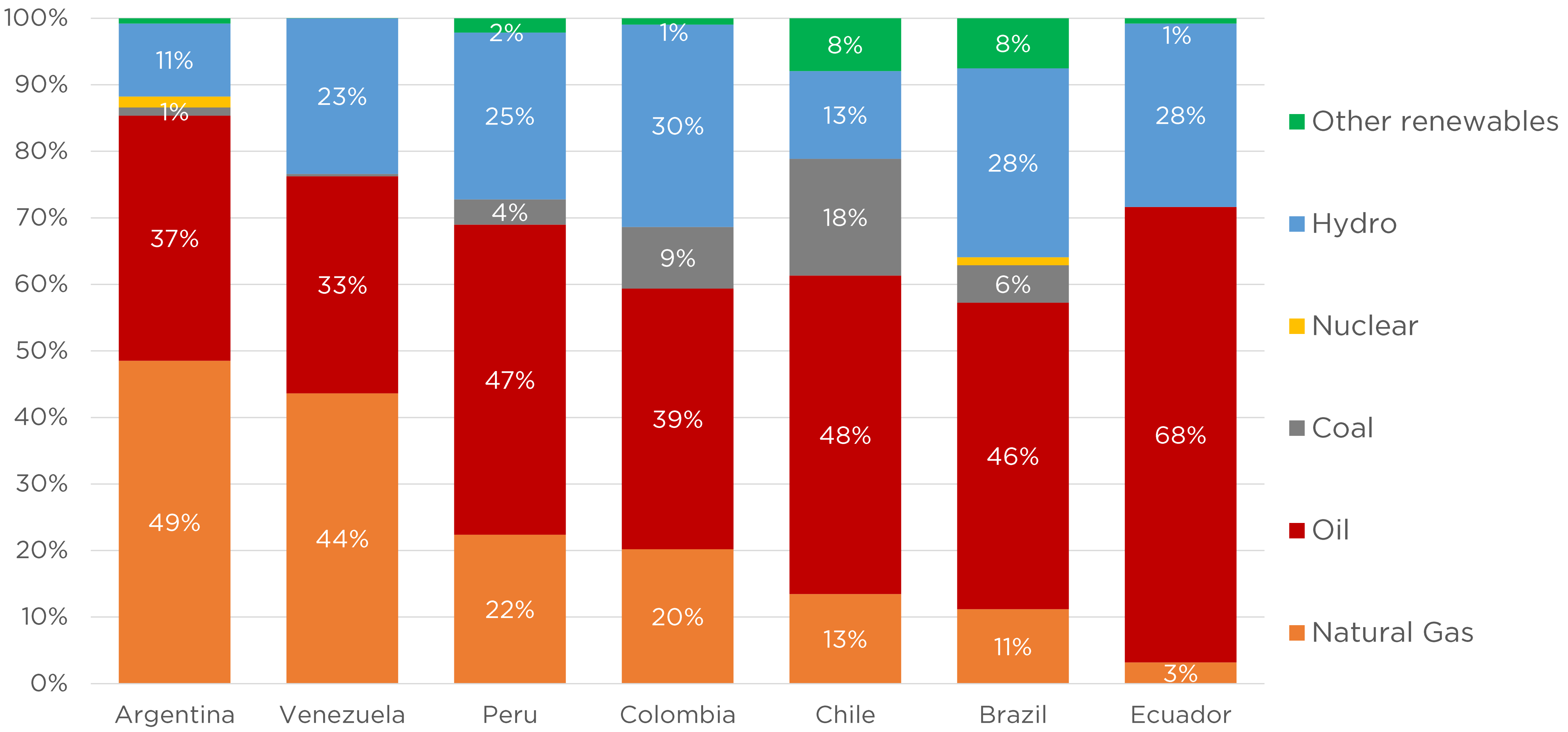
Primary energy requirements by source in South America



Plus Bolivia, a major producer mostly focused on exports.
Source: BP Statistical Review of World Energy 2018 (Primary Energy Consumption), data as at 2017.

Evolution of natural gas reserves and production

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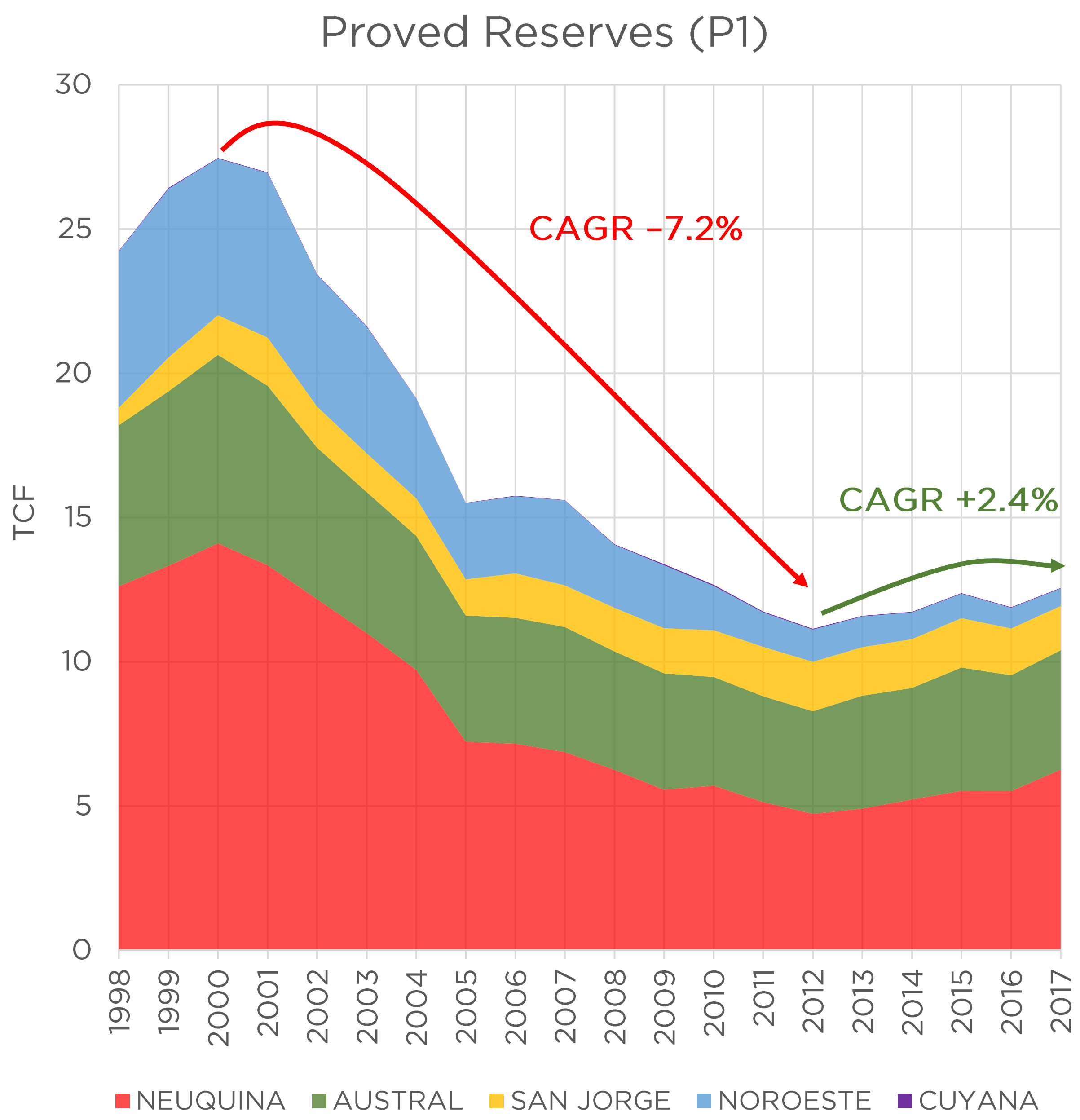

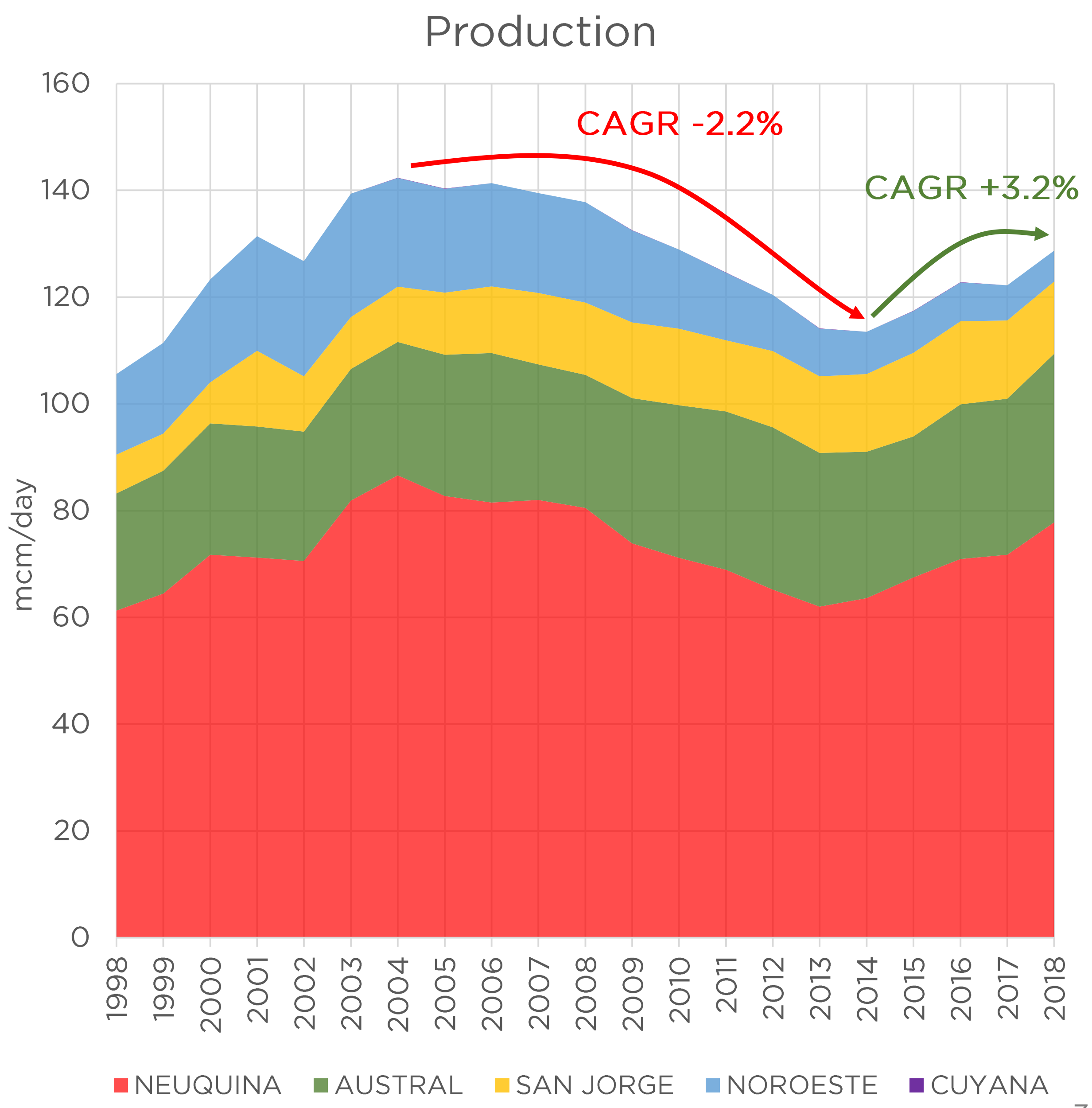

Technically recoverable unconventional natural gas resources

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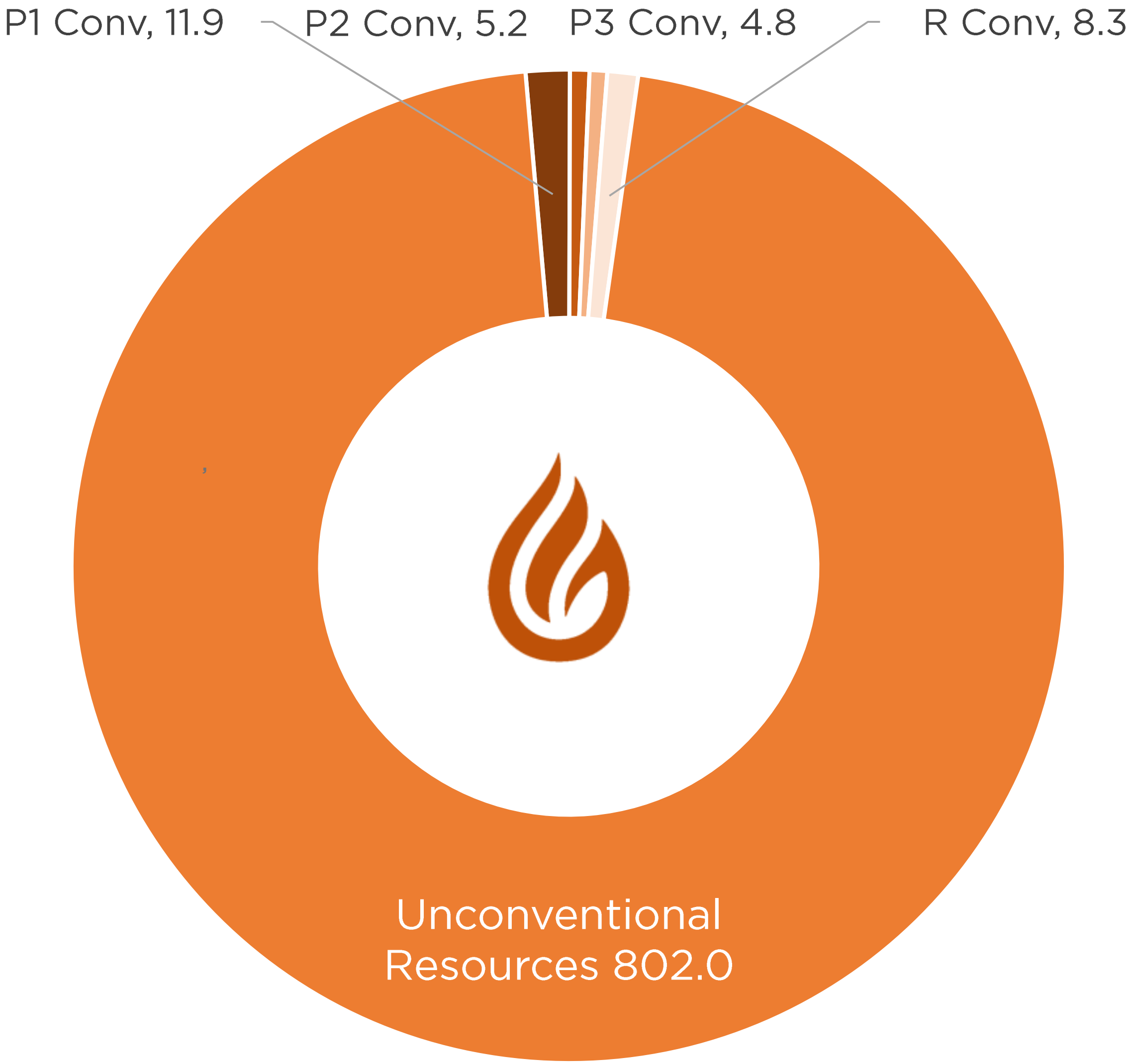
Argentina's technically recoverable unconventional gas and oil resources rank among the largest in the world

Source: EIA 2013.

Natural Gas Reserves and Resources (TCF)



Unconventional natural gas production

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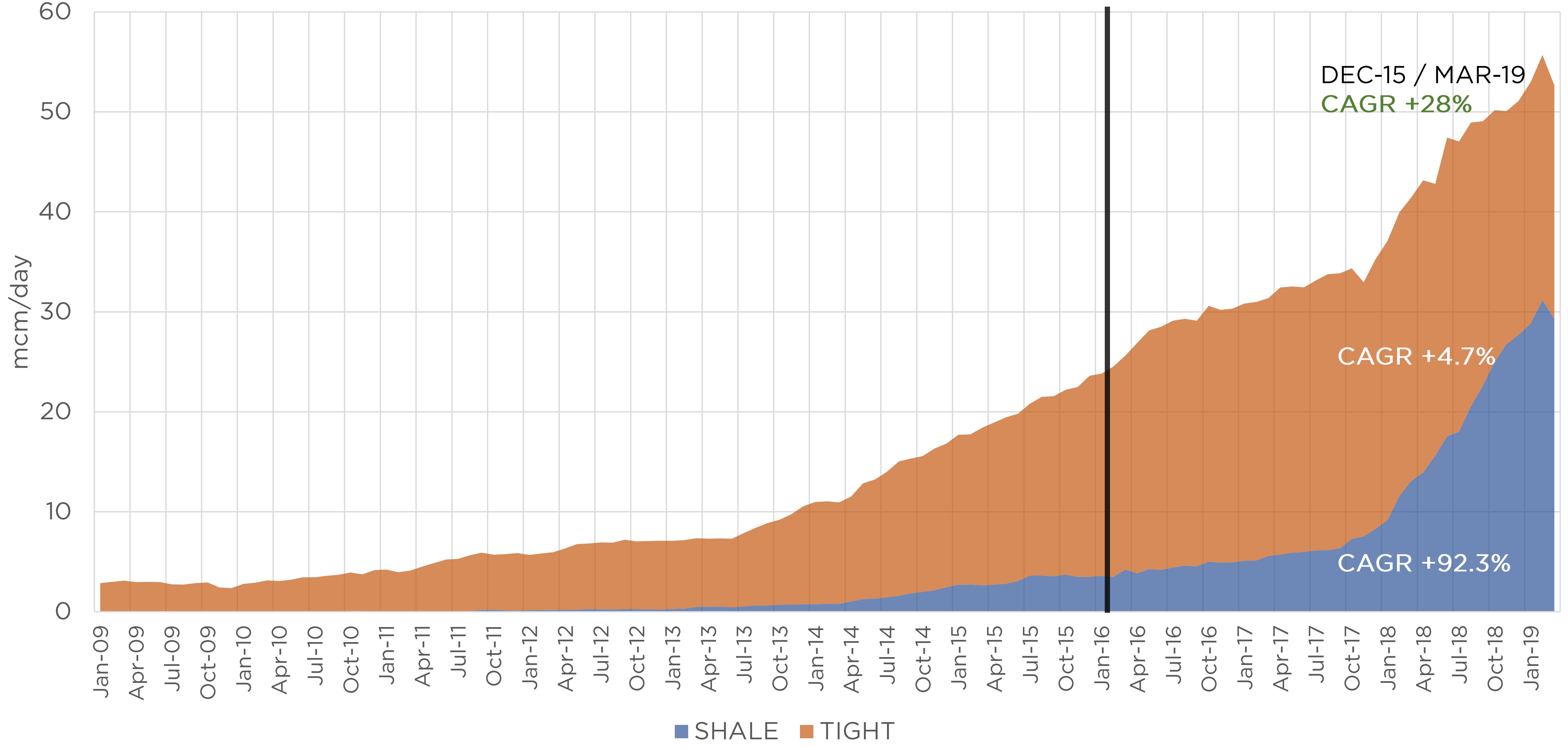

2018 investments in unconventional Oil and Gas E&P: 4.2 Billion USD, mostly in Vaca Muerta fm.

Natural gas imports by source

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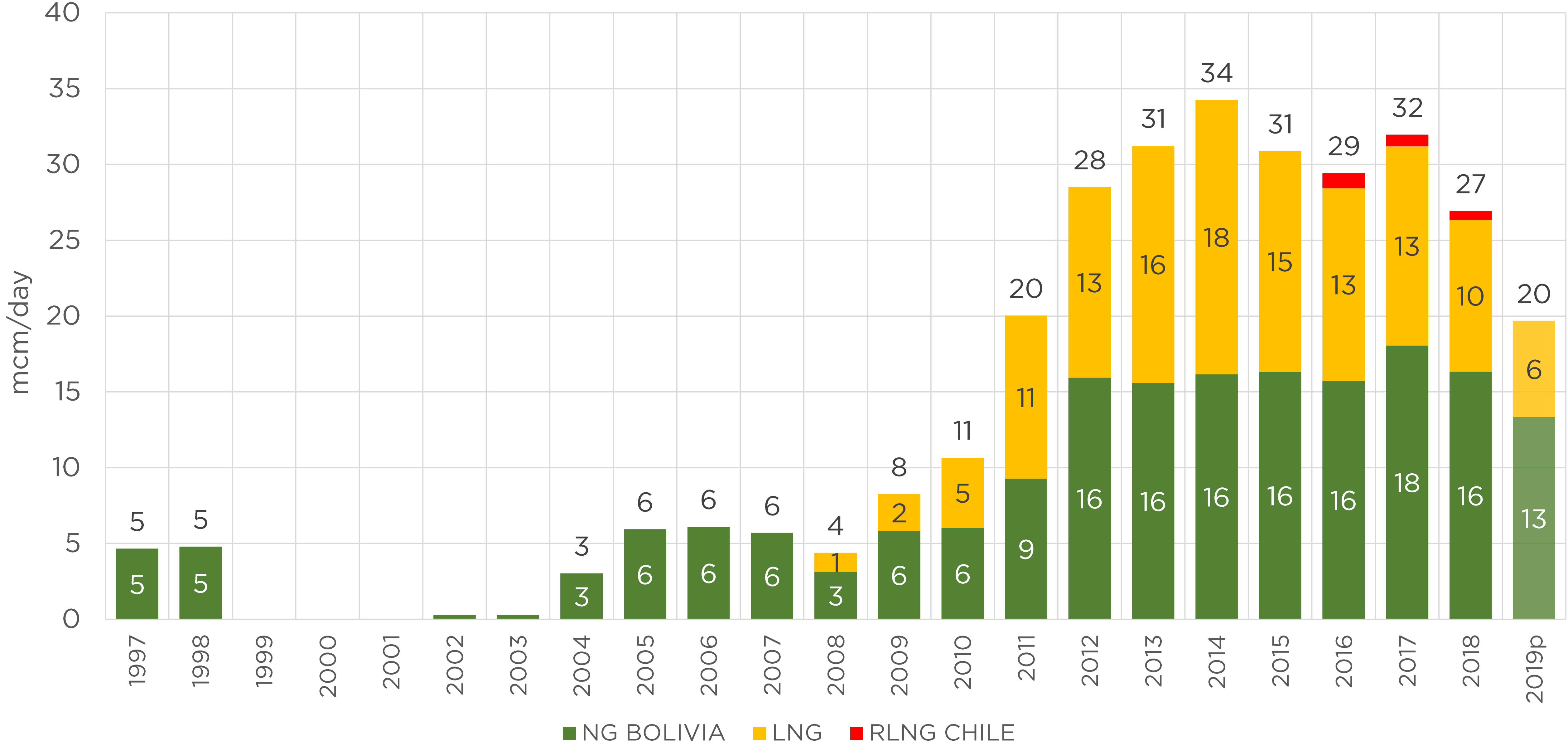
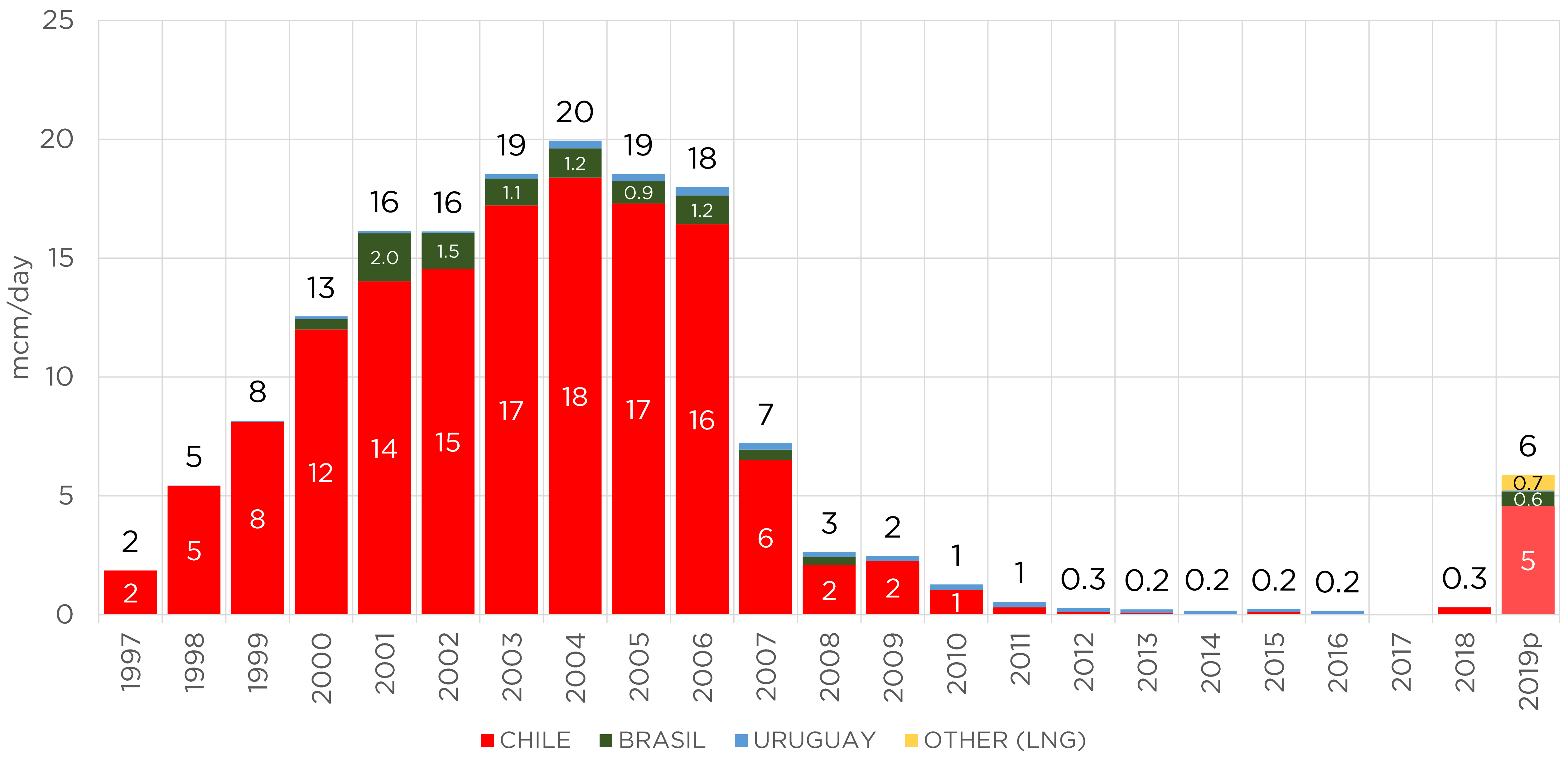


Natural gas exports by country of destination



Monthly natural gas exports 2018 — April 2019

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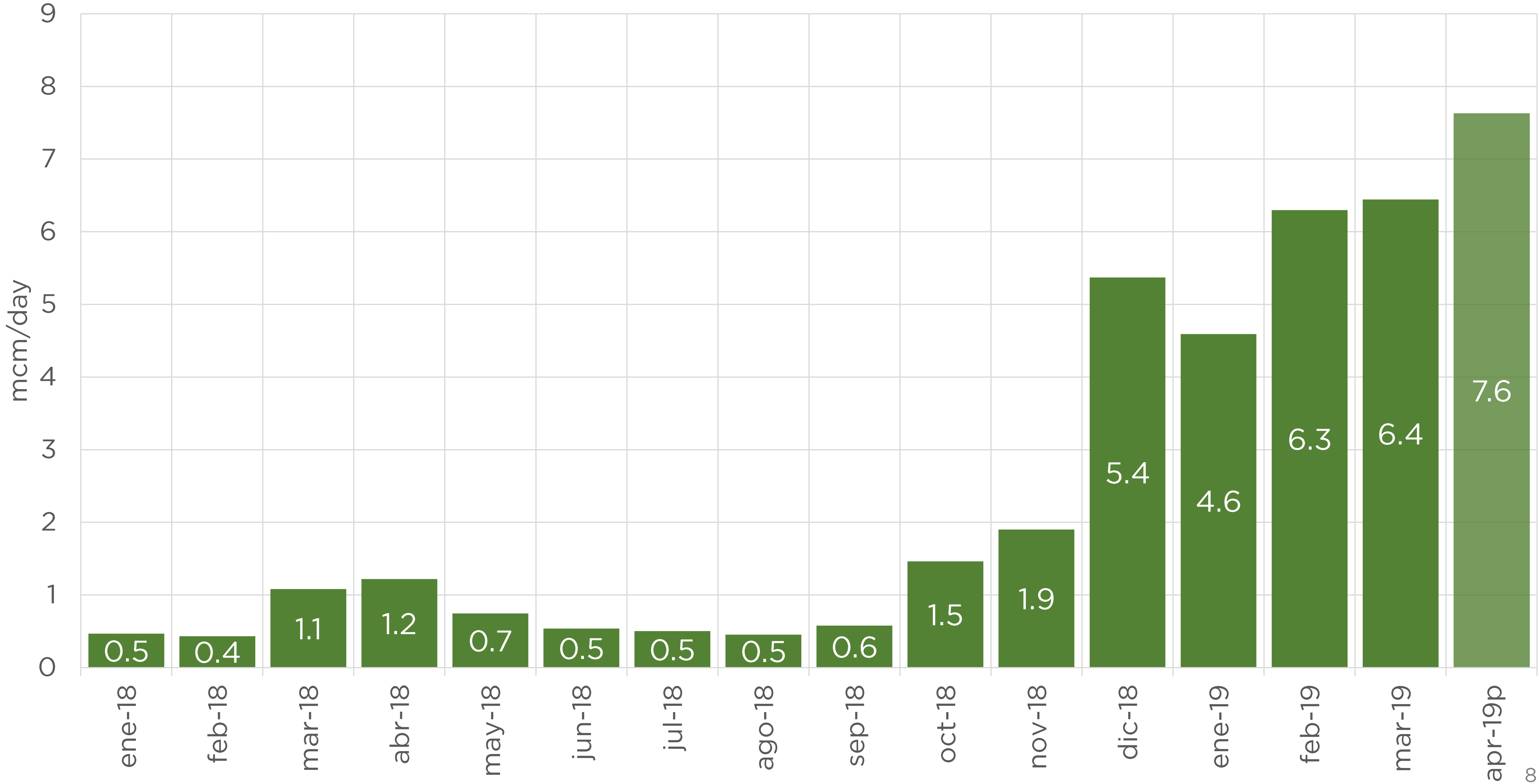

Energy trade balance

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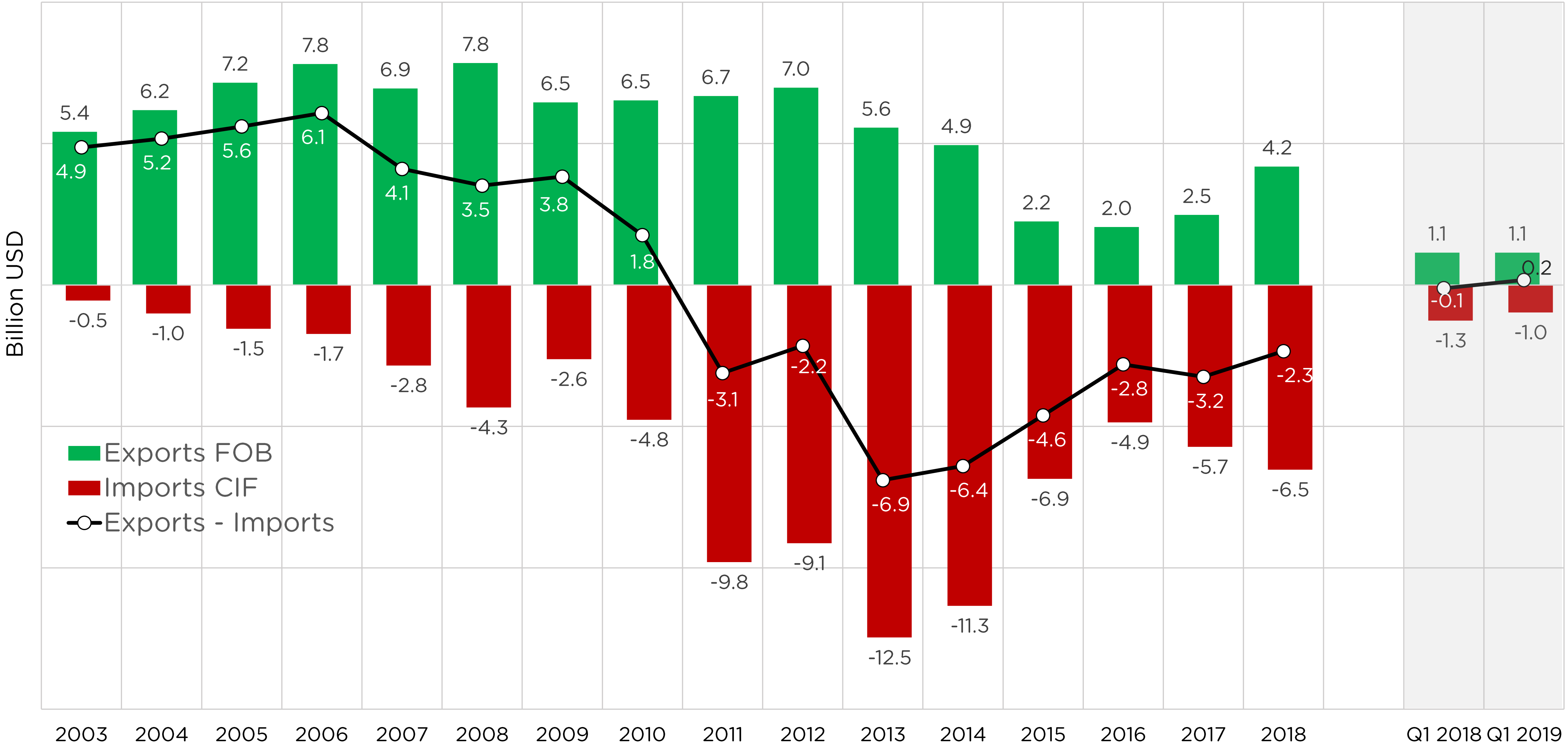
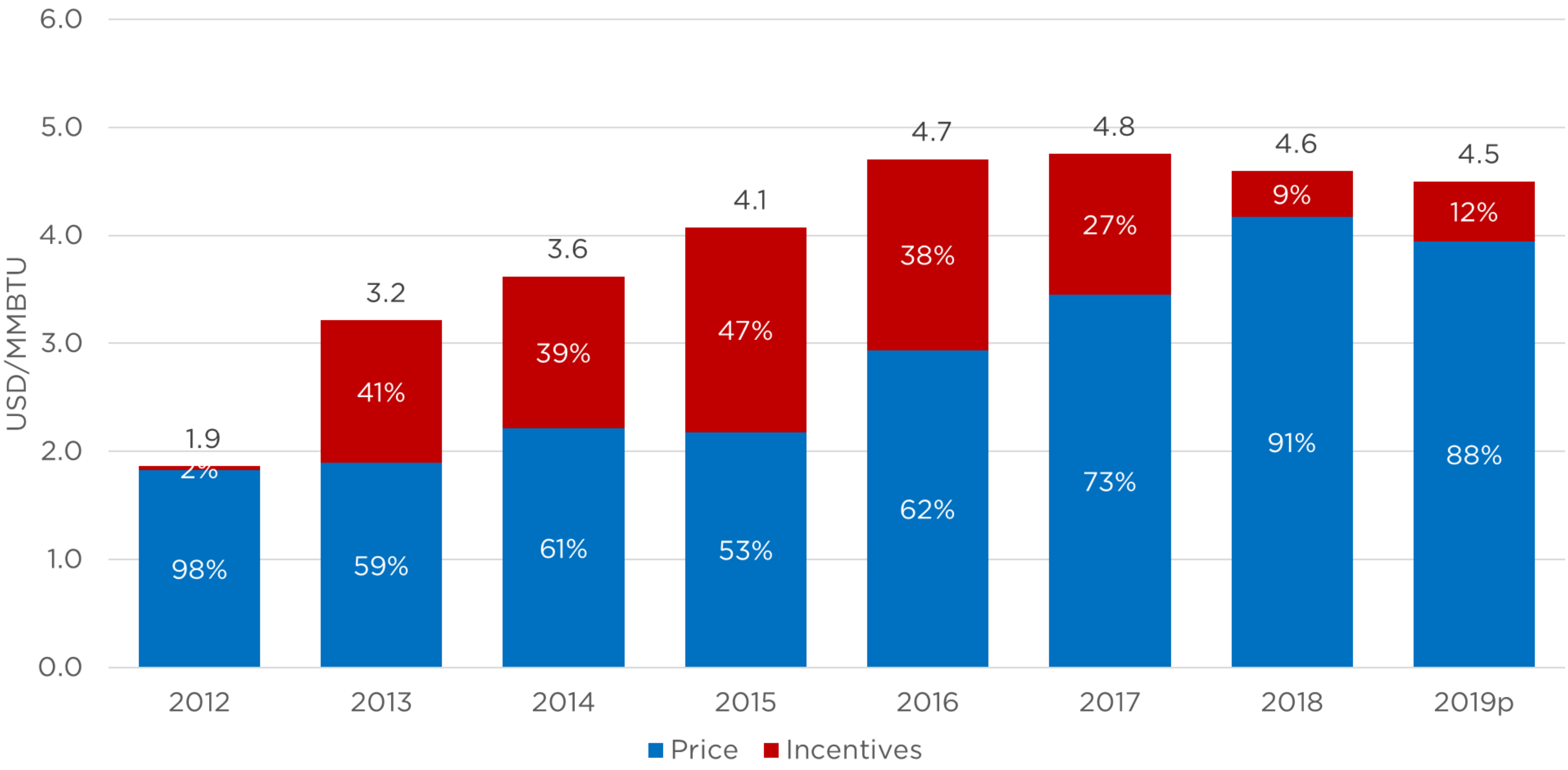


Natural gas policy since 2015: Highlights

- Gradual and foreseeable increases in wholesale market prices: adjustments of wellhead gas prices, covering economic production costs.
- Reduction of widespread subsidies: Creation of the *Tarifa Social Federal* program to focus energy subsidies on the most vulnerable population.
- End of political intervention to the gas and electricity regulatory commissions, and appointment of the Boards of Directors through public and open processes.
- Integral tariff review processes for the T&D segments conducted by the new regulatory commissions: tariff normalization, investment plans and quality standards.
- Transition from regulated pricing to market pricing: electronic auctions via MEGSA.
    - Power generation: CAMMESA bids (September 2018 and December 2019).
    - Full service users through distribution companies, nationwide (February 2019).
- Regulatory and market changes in order to boost investments in key segments:
    - Incentives to unconventional gas production.
    - New call for expressions of interest for the construction of a new natural gas pipeline or increase of current capacity (via Resolución 82/19).

Natural gas policy since 2015

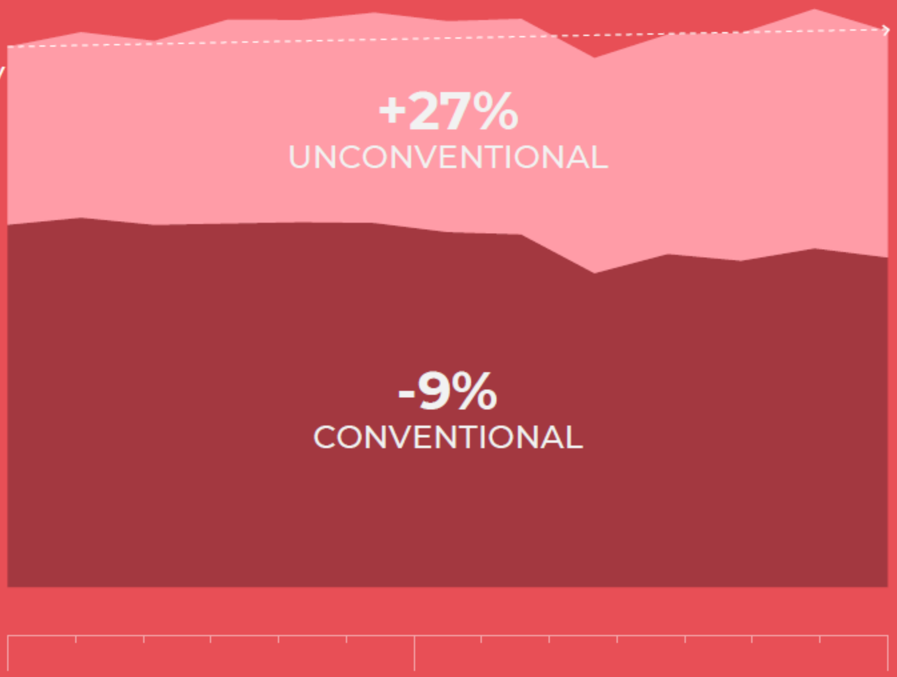


Natural gas production March 2018—March 2019

NATURAL GAS *

Production Increased +3% YOY

126 mcm /day



129 mcm /day

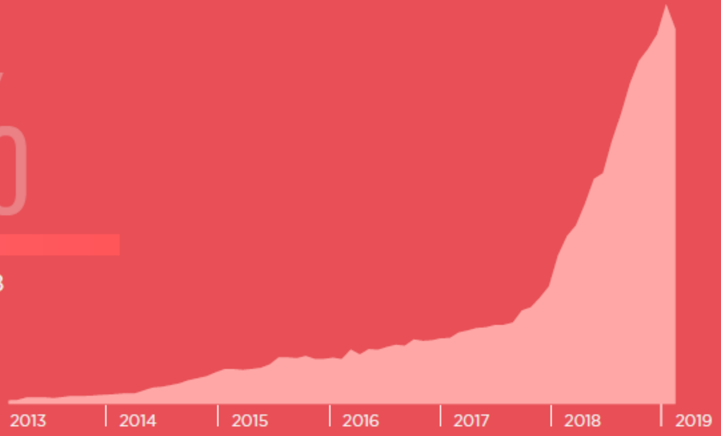
* Data for March 2019 is provisional

SHALE GAS

+124%

MARCH 2019 vs MARCH 2018

29 mcm /day



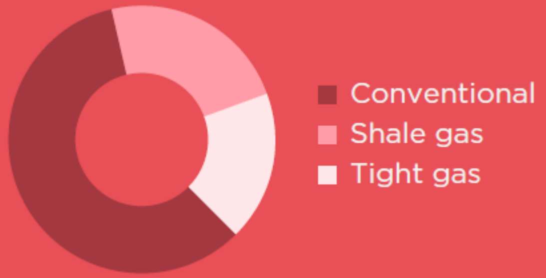
UNCONVENTIONAL GAS

SHALE + TIGHT

REPRESENTS

41%

OF TOTAL PRODUCTION



Argentina's natural gas interconnection with neighboring countries

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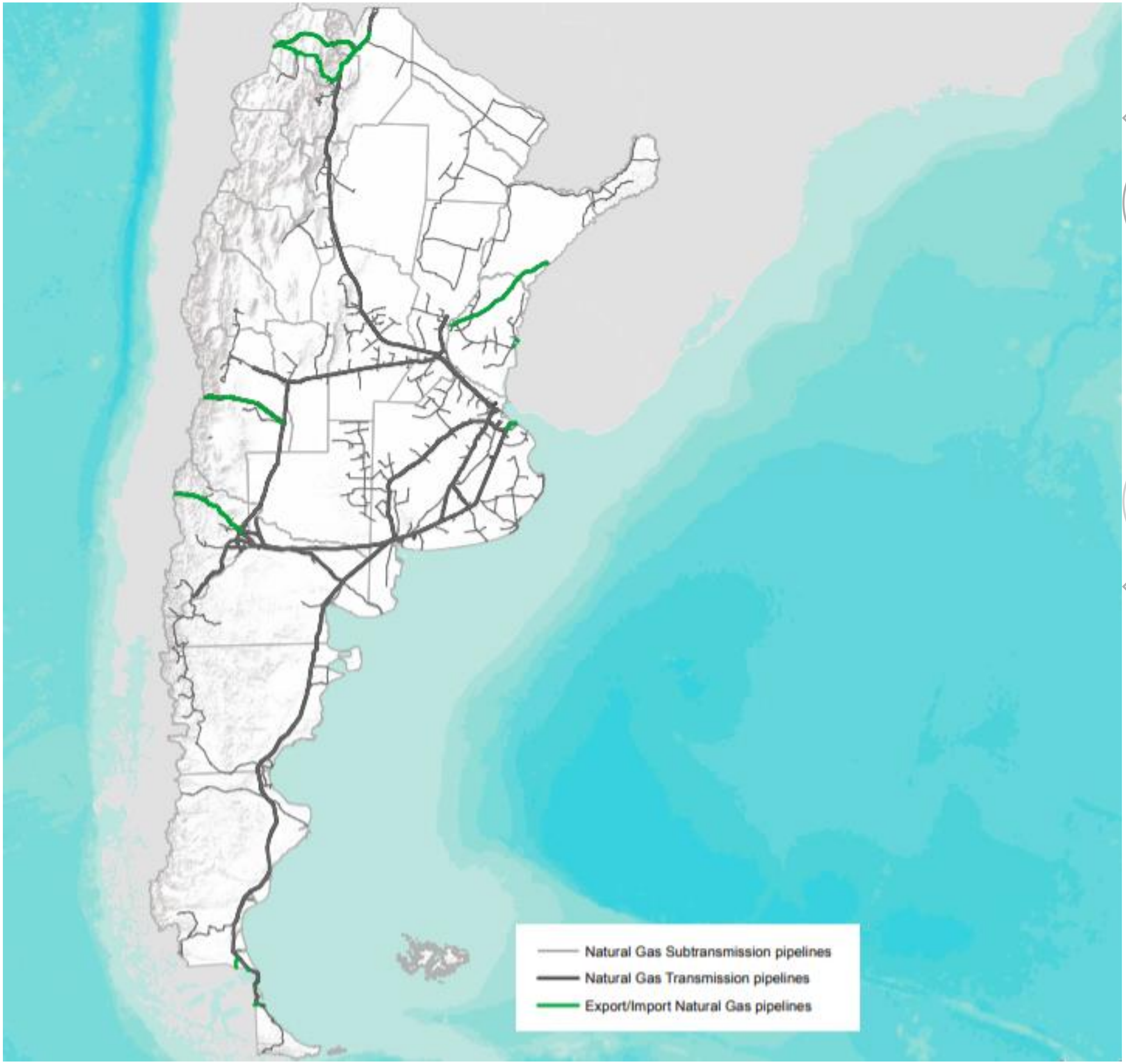

- 9,935 miles of domestic gas pipelines
- 1,240 miles of export/import gas pipelines
- 9.1 Million household users (61%)

Country	# Interconnections
Chile	8
Uruguay	3
Brazil	1

O&G Exports Resumed

Following their interruption in 2007, the success of Vaca Muerta enabled Argentina to resume gas exports to neighboring countries. In early 2019, Argentina also resumed light oil exports from the Neuquén Basin, for the first time since 2009.

They are increasing

In the first fourth months of 2019 gas exports averaged 6.2 mcm/day, reaching a peak of 9.6 mcm/day. These exports will increase in the short term, subject to local production and demand.

And will soon include LNG

YPF signed a ten-year contract to commission a floating liquefaction unit with 0.5 MTPA capacity, equivalent to 2.5 mcm/day of natural gas.