Vaca Muerta's Path from Resource Potential to Export Platform



Shale en ARGENTINA | Houston, TX Sep 03, 2026

IAPG INSTITUTO ARGENTINO DEL PETROLEO Y DEL GAS | IAPG Houston

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Global Context

Market forces are converging in Argentina’s favor

- Demand Expansion
- Security Reset
- Supply Maturity

Argentina sits at the intersection of these big market forces

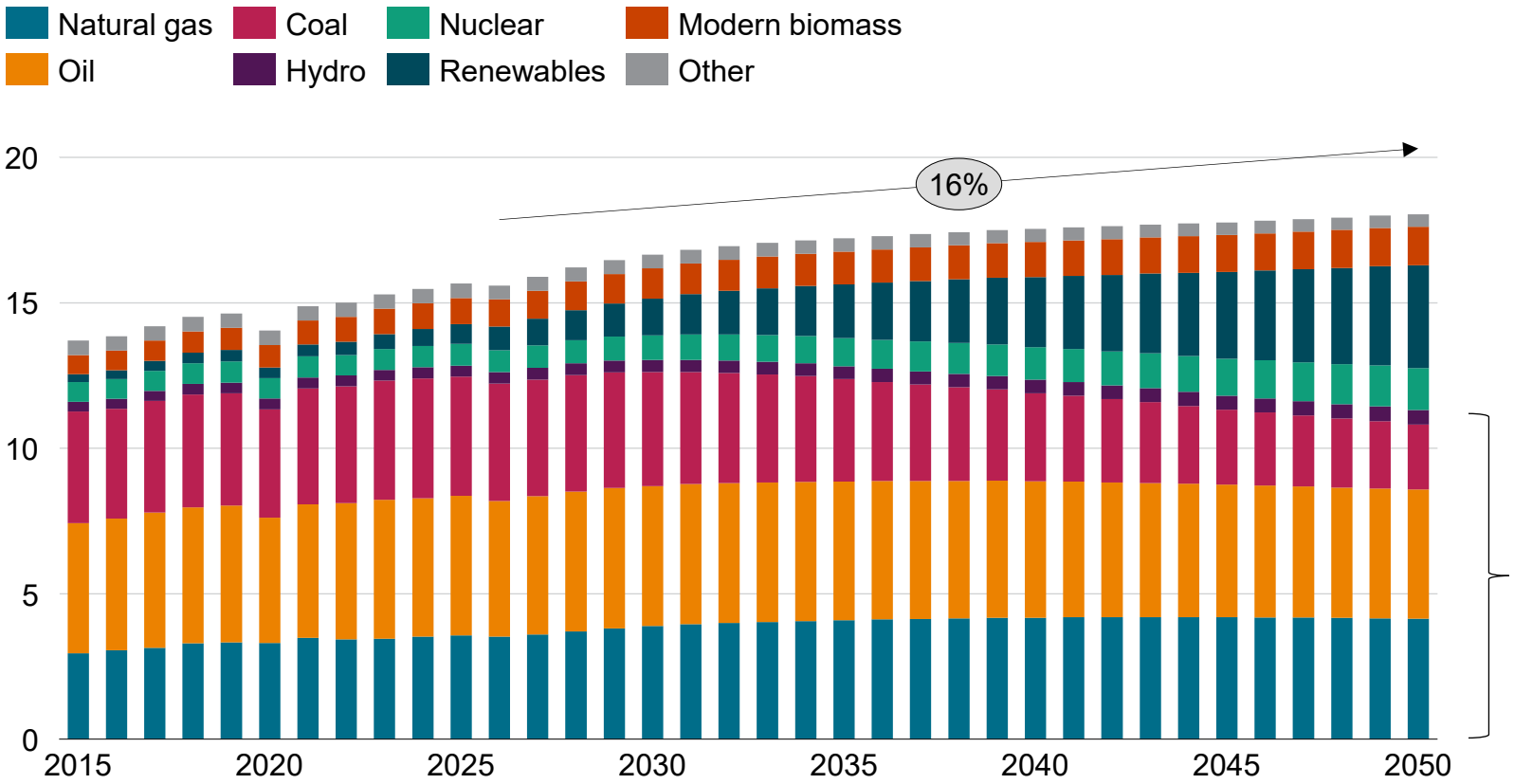
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Global energy demand will continue expanding, O&G to supply ~50% of total demand

Global Primary Energy Demand by Fuel

Billion toe



Source: S&P Global Energy

Key Themes

- Demand from emerging markets
- Electrification and AI
- Petrochemical demand

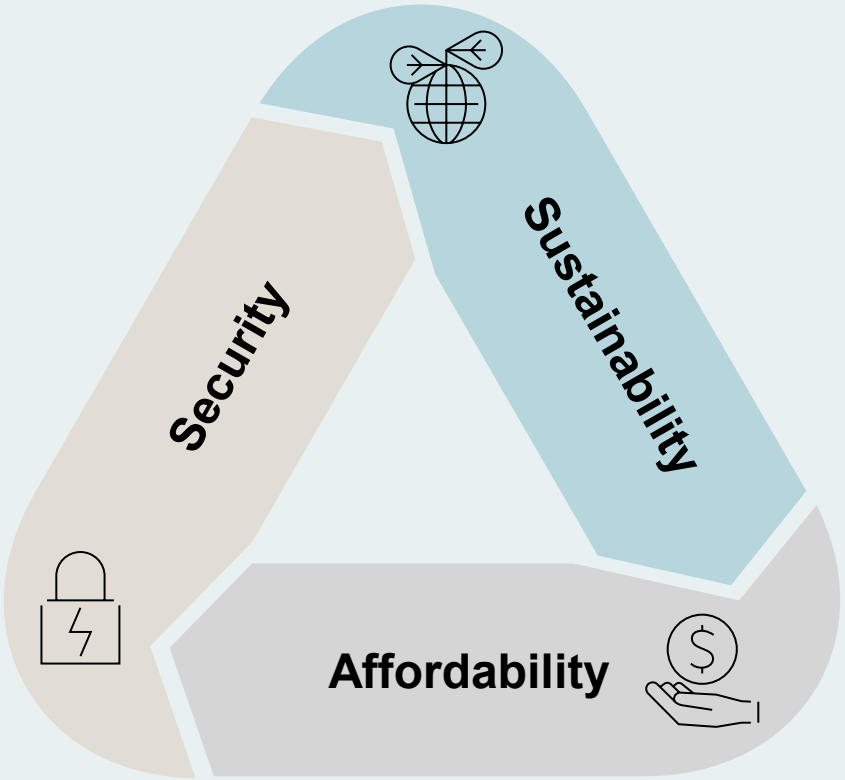
Oil and Natural Gas

- +5% by 2050 (vs. 2026)
- 48% of demand (vs. 52% in 2026)

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Recent geopolitical conflicts are changing energy priorities and policies



Consequences of conflicts (Ukraine / Middle East)

- Supply disruption: Crude Oil, LNG, Refined Products, Fertilizer
- Trade bans (import / export)
- Gas disruption in Europe
- Refinery outages
- Volatility

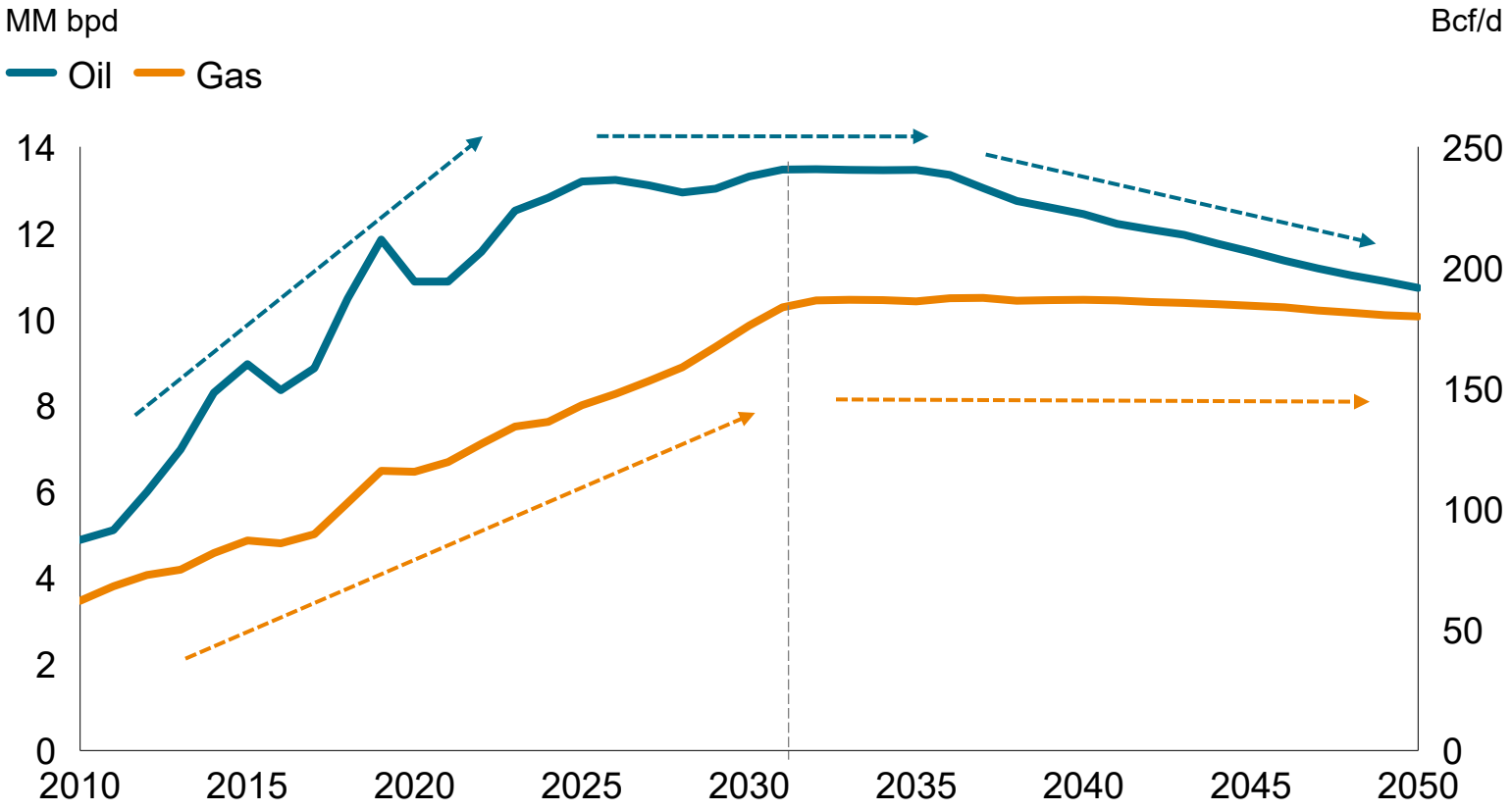
Market reactions

- Resource diversification
- Demand curtailment
- Renewables development
- Strategic Reserves

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US has been the global growth engine and is now reaching maturity. New sources will be needed to support future demand growth

Crude Oil and Natural Gas Production – US L48



Gas production includes associated gas
Source: S&P Global Energy



- Sweet spots are being depleted
- Where will the next growth molecules come from?

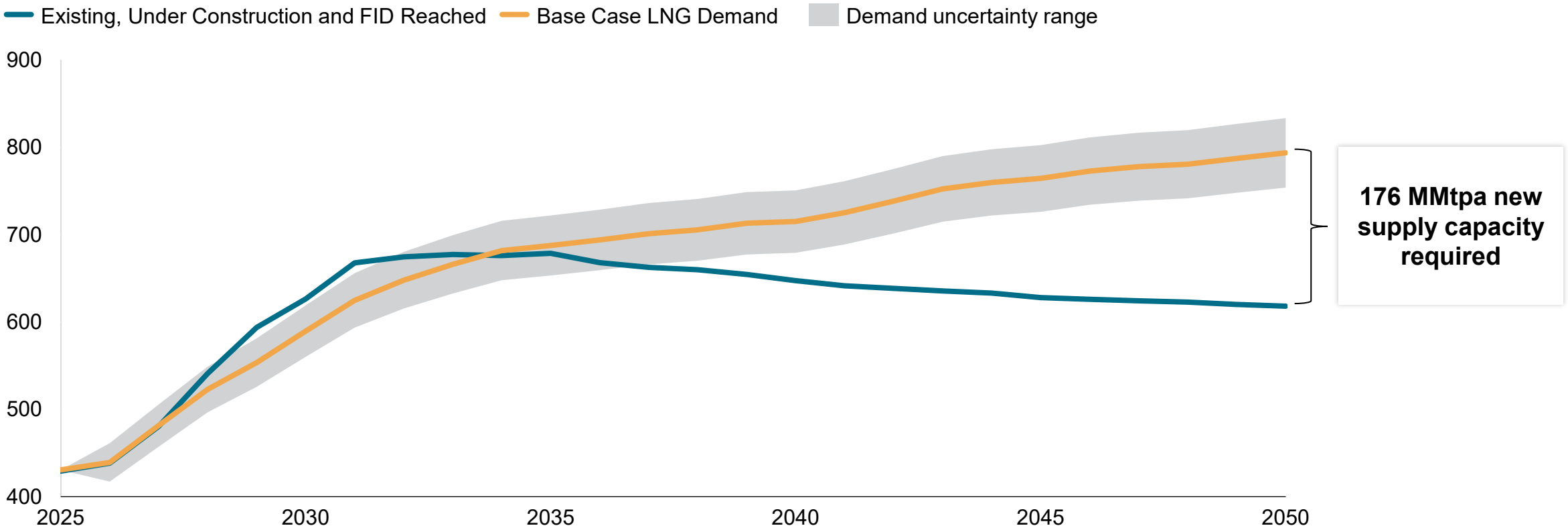
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A new wave of LNG supply will need to come online in the early 2030s to meet demand

Global LNG Demand vs. Supply

MMtpa



Source: S&P Global Energy

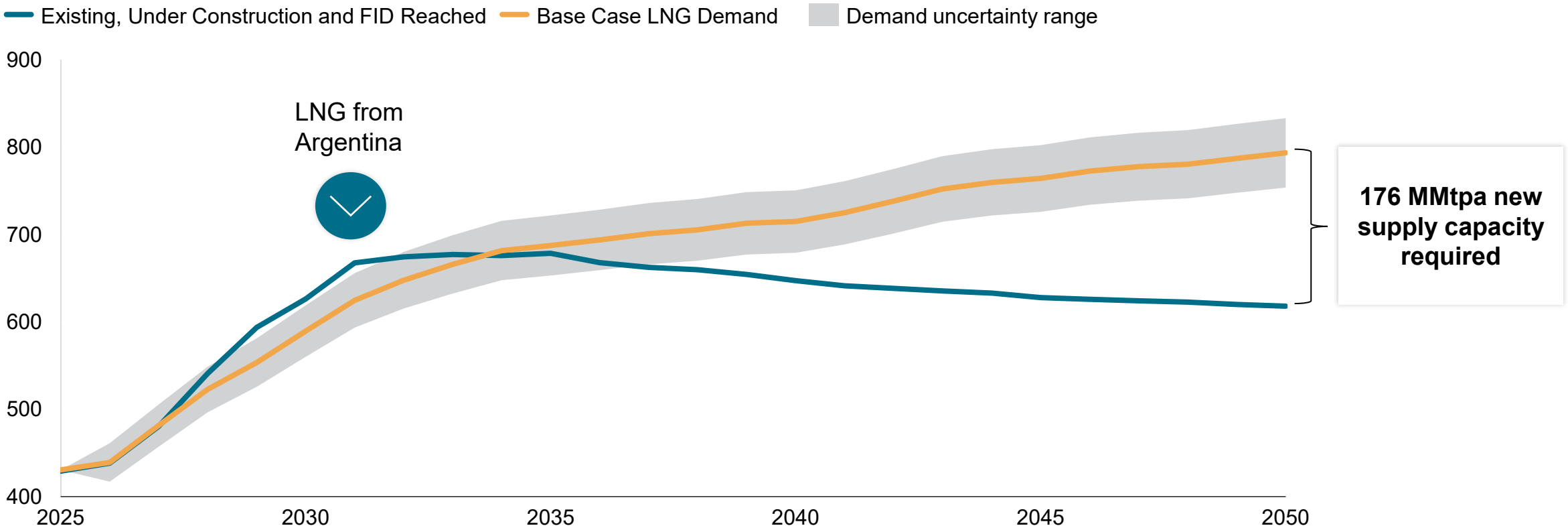
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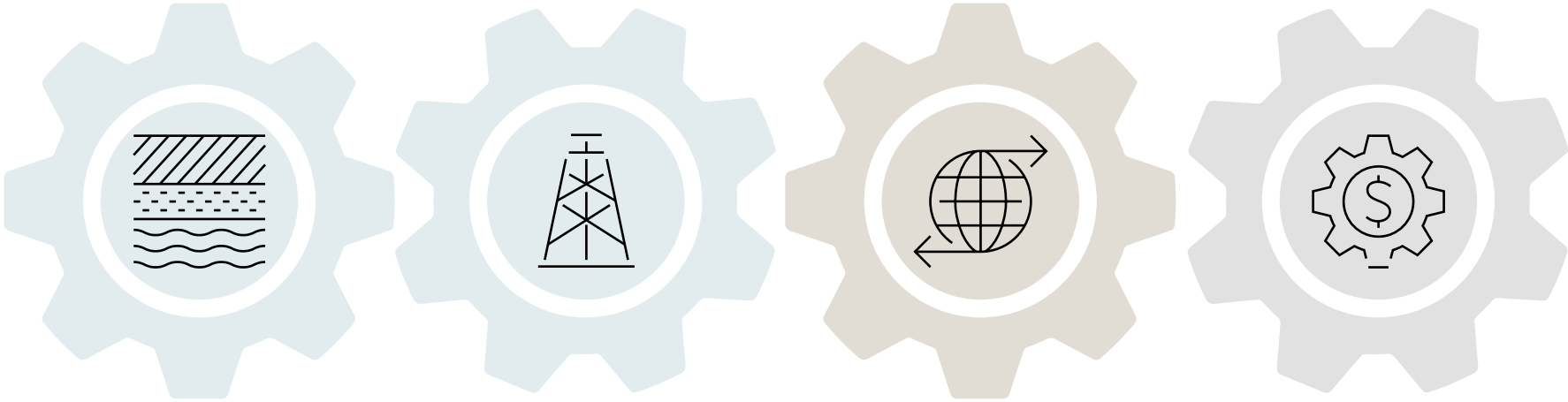
Source: S&P Global Energy

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Vaca Muerta:
From promise to proof

Vaca Muerta: a story of de-risking milestones



Geology

Is the rock world-class?

Production

Can output be repeated commercially and at scale?

Market Access

Can volumes reach global markets?

Capital

Can investor rely on durable rules?

Proven | **Building** | **Testing**

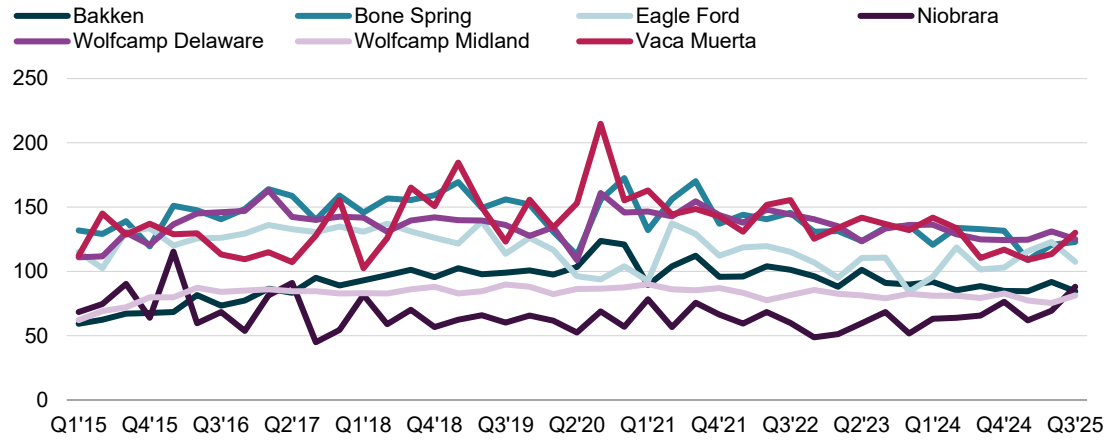
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Vaca Muerta productivity now rivals premier US oil and gas plays

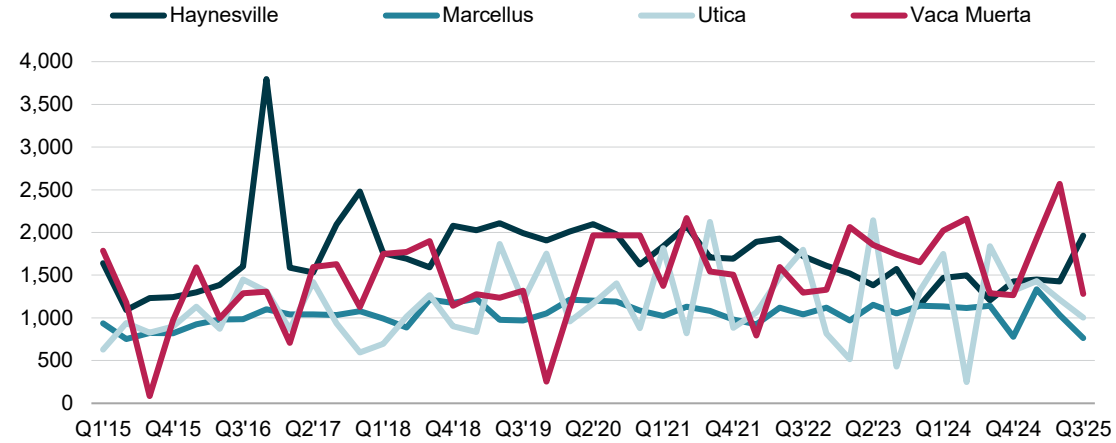
Oil Productivity

peak b/d per 1,000 lateral feet



Gas Productivity

peak mcf/d per 1,000 lateral feet



Vaca Muerta belongs in the global first tier of unconventional plays

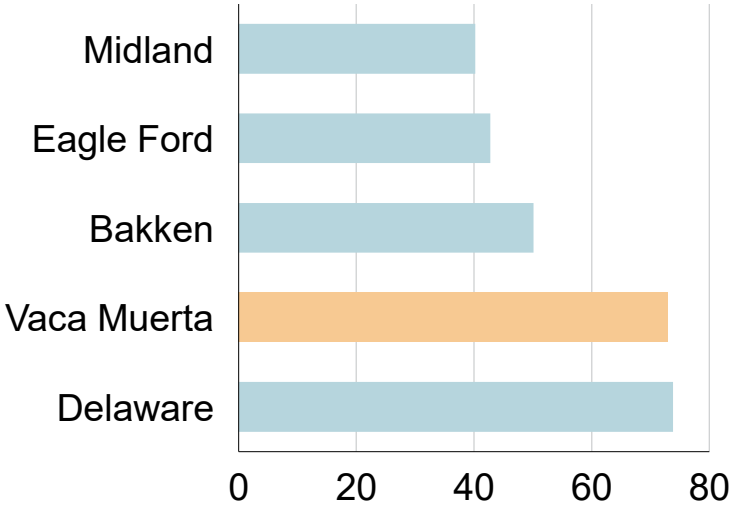
Source: S&P Global Energy

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Competitive wells have translated into competitive economics

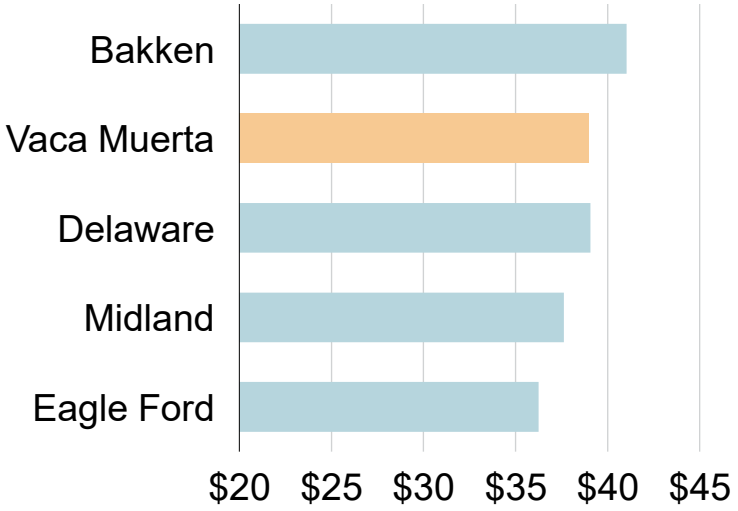
Oil Recovery

Oil EUR per feet



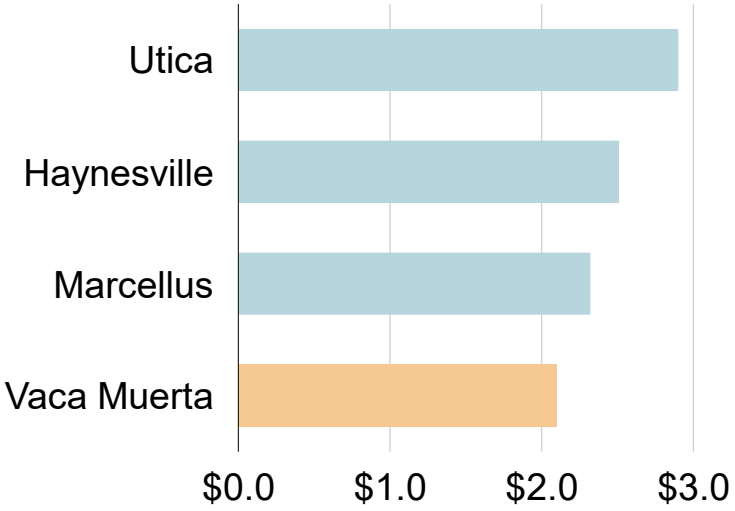
Oil wellhead breakeven price

$/b



Gas wellhead breakeven price

$/Mcf



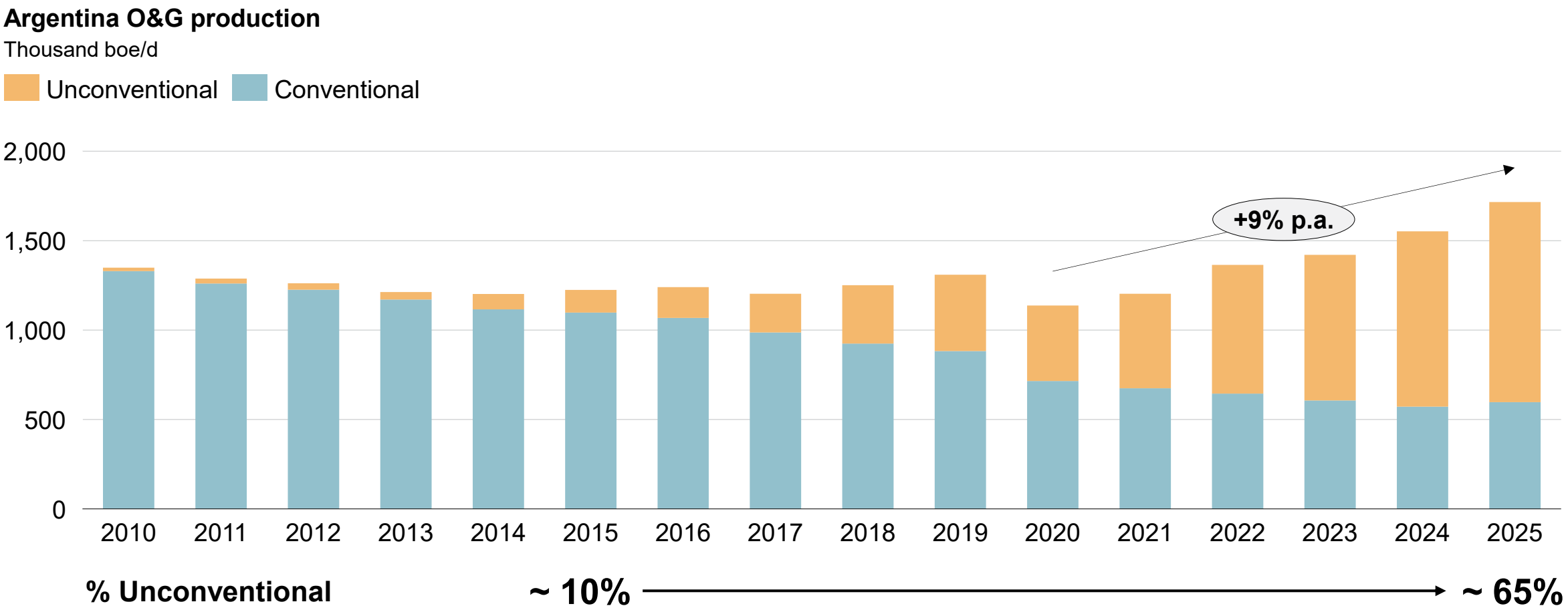
The remaining discount is increasingly above ground and midstream, not geological

Data compiled May 2026.
EUR = estimated ultimate recovery.
Break-even prices at asset well level
Source: S&P Global Energy

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Unconventional production has moved from marginal to dominant in one decade



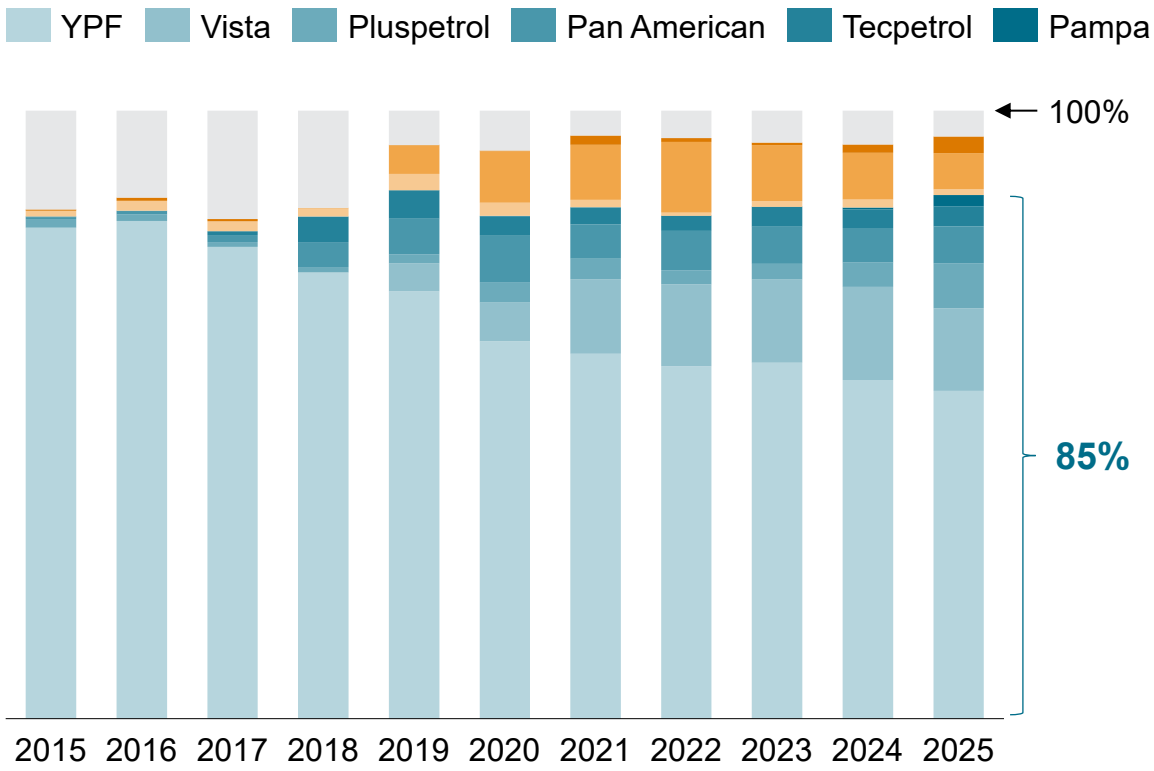
Source: S&P Global Energy

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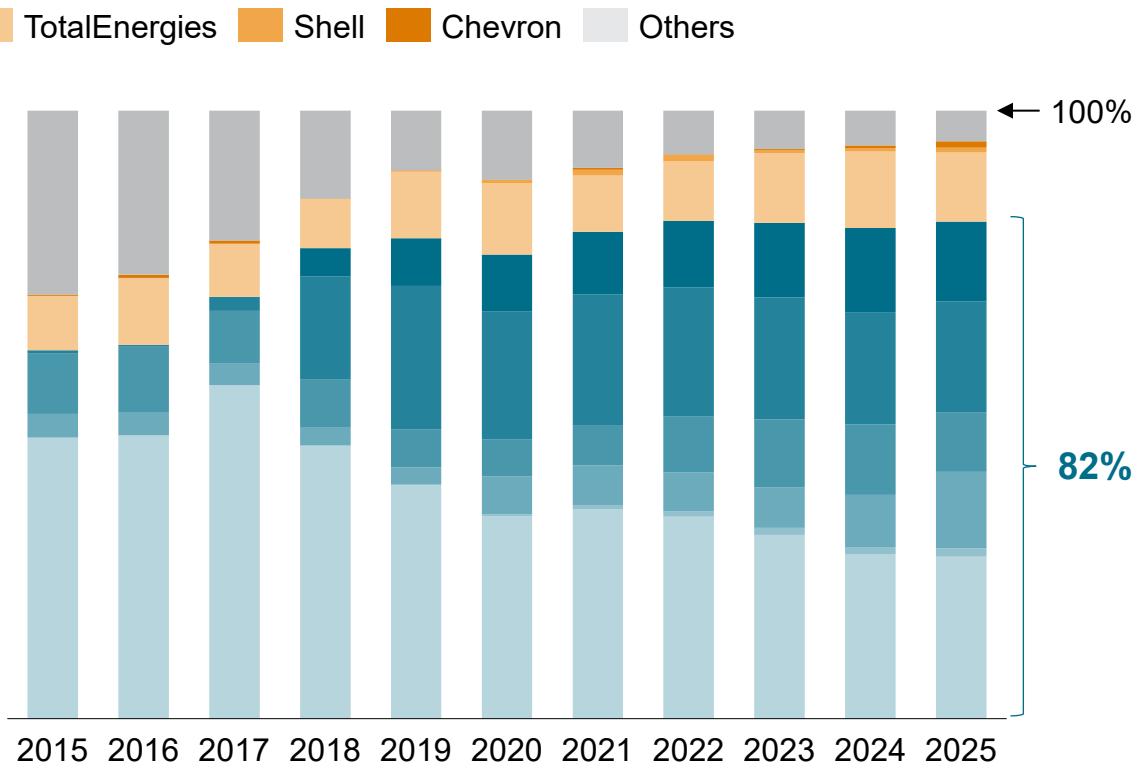
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YPF and regional independents have become the backbone of Vaca Muerta's growth

Unconventional Oil production by player



Unconventional Gas production by player



Source: Ministerio de Energia

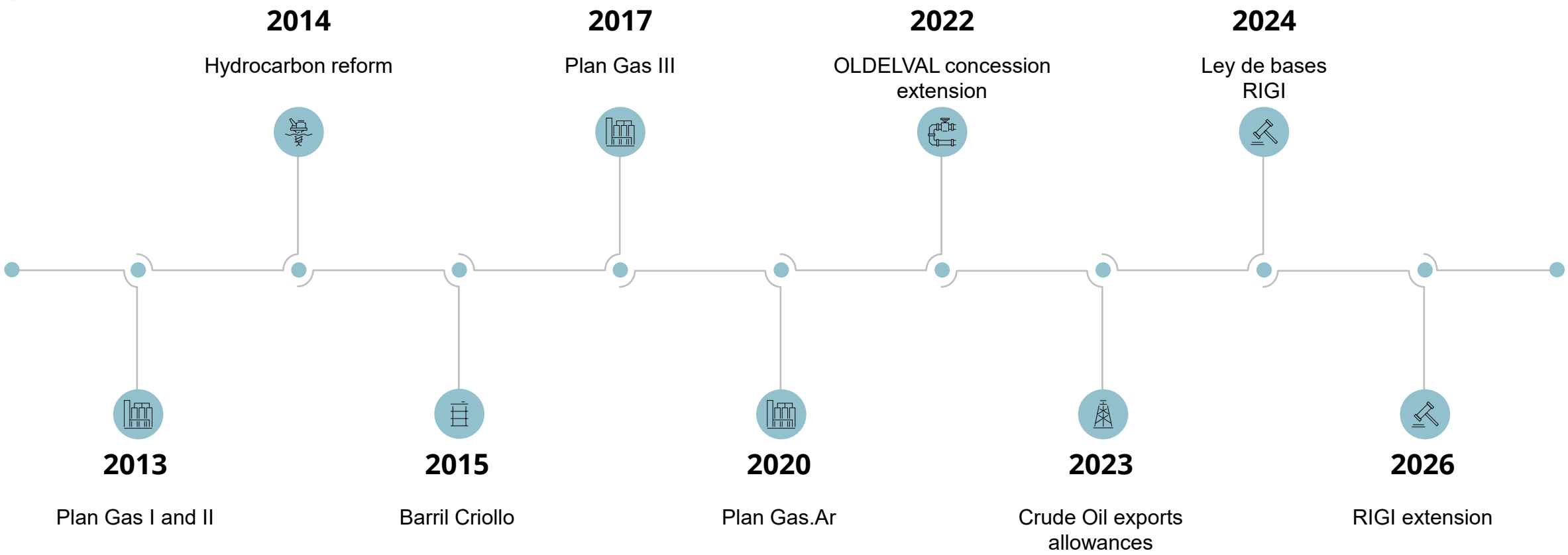
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The path forward

Argentina has moved from piecemeal incentives toward a long-term investment architecture

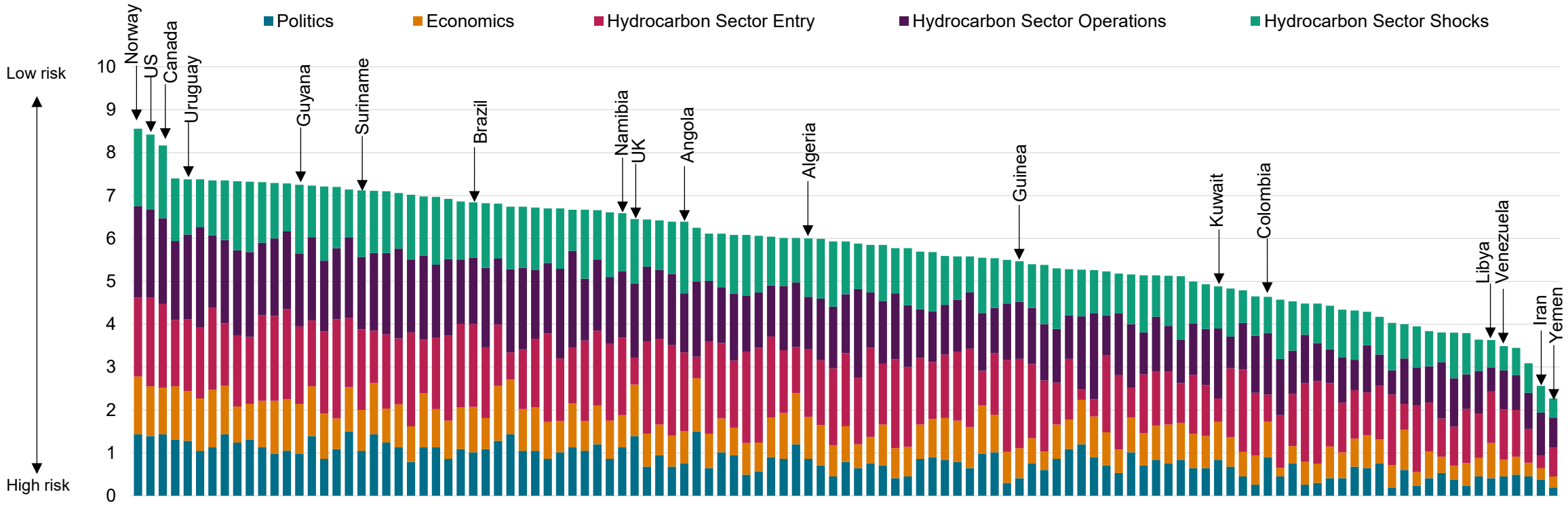
Key O&G Reforms



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Argentina’s investment profile is improving, and could improve even further

O&G Risk Ranking: Above-ground risk for 113 countries and territories



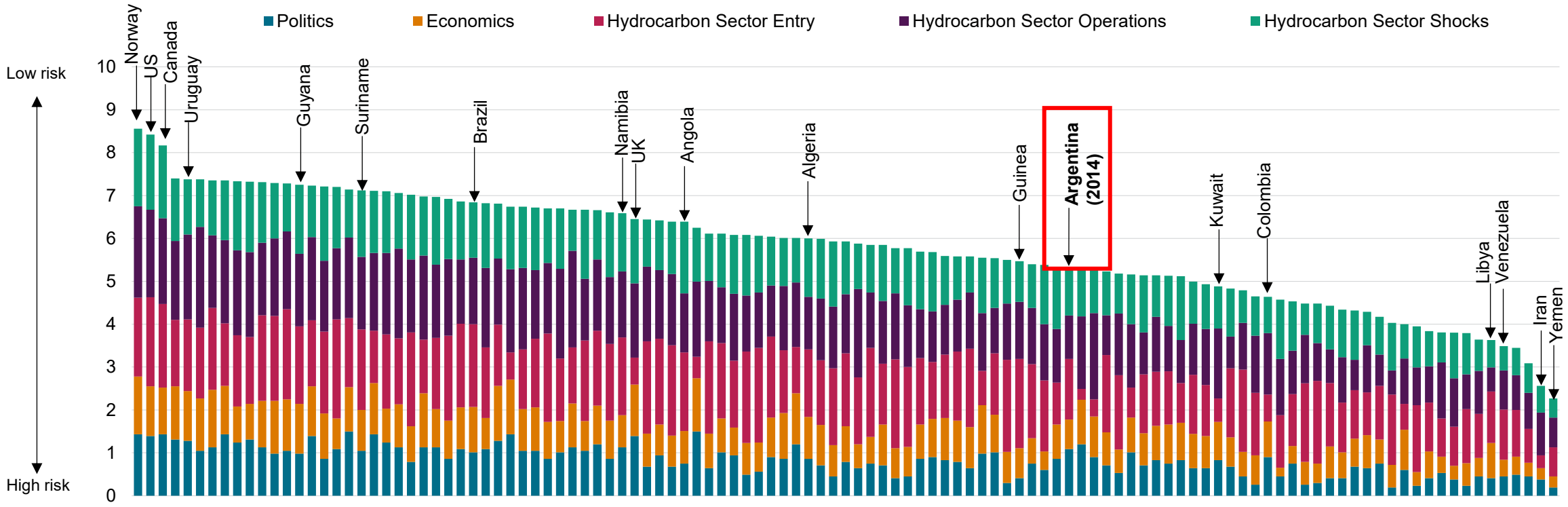
As of August 2026
Data from CERA Upstream Solutions
Scores range from 1 (least favorable to investors) to 10 (most favorable).
Source: S&P Global Energy
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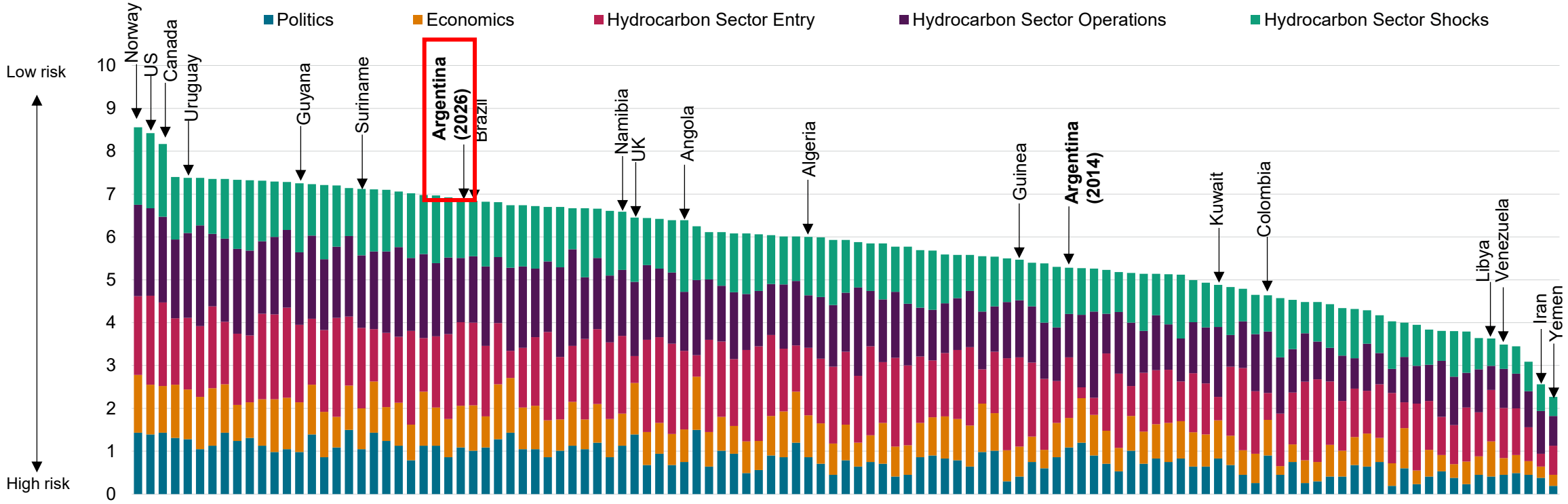
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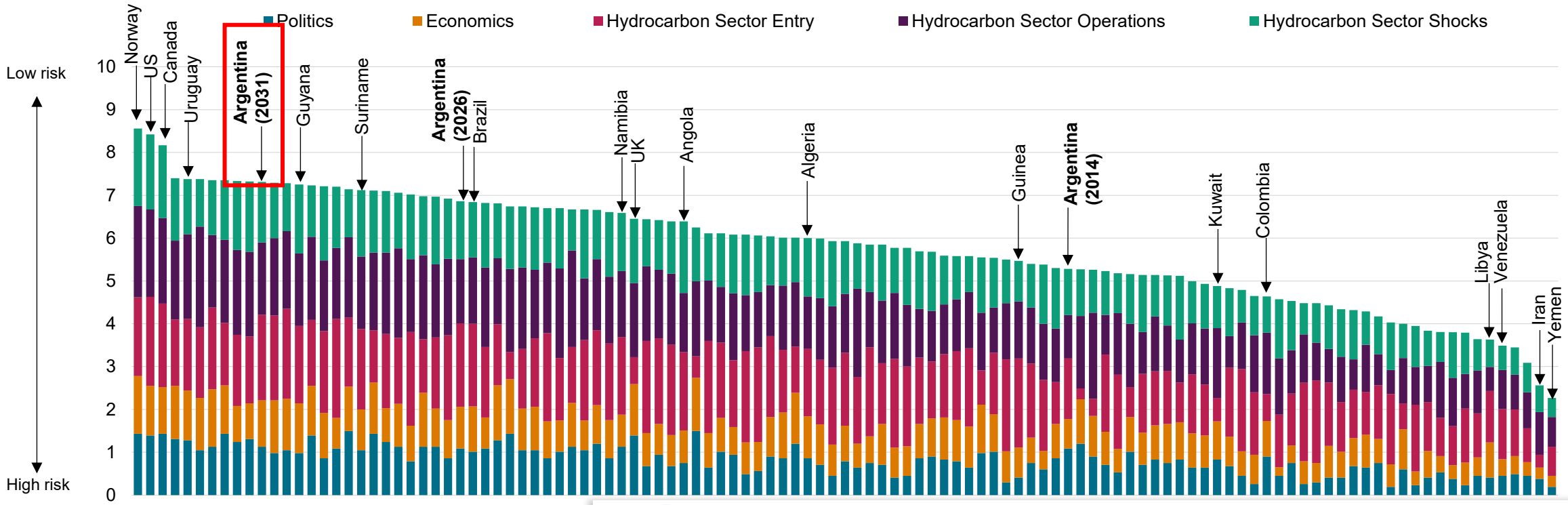
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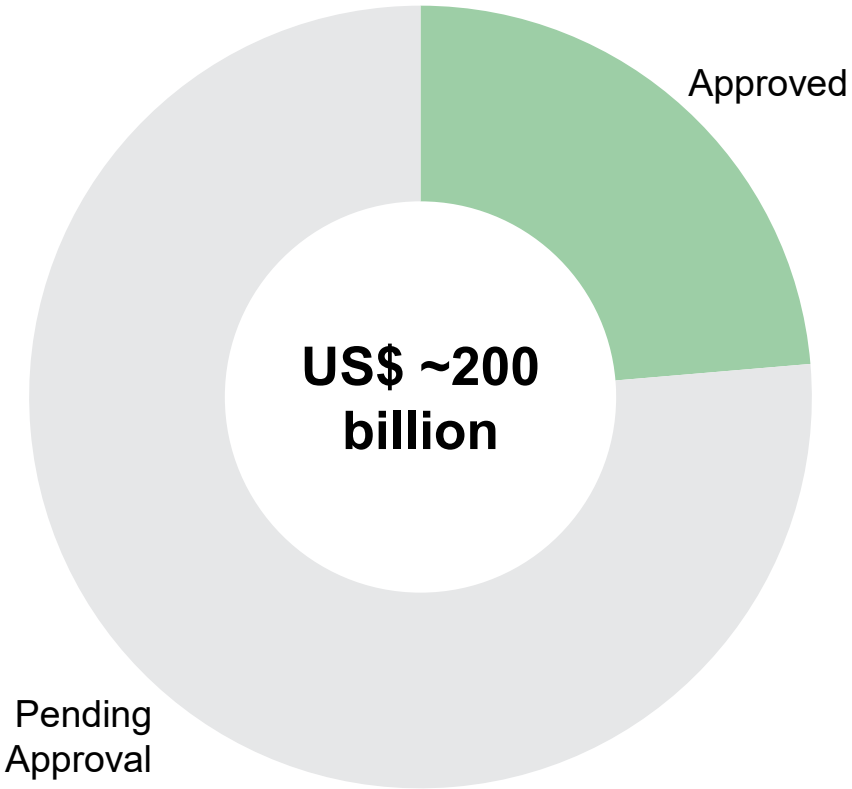
Argentina has steadily climbed the rankings since 2014. By 2031, Argentina is expected to rank in the top 10%

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RIGI is already attracting billion-dollar investments across multiple industries

RIGI project status



As of Aug 30, 2026
Source: Ministerio de Economia

Approved

21 projects / US$ 47 billion

- **VMOS**
- **Southern Energy LNG**
- **Rincon de Aranda**
- **Perito Moreno expansion**

Pending Approval

22 projects / US$ 152 billion

- **Argentina LNG**
- **TGS NGLs**
- **LLL Oil Cluster**
- **Bandurria Norte**

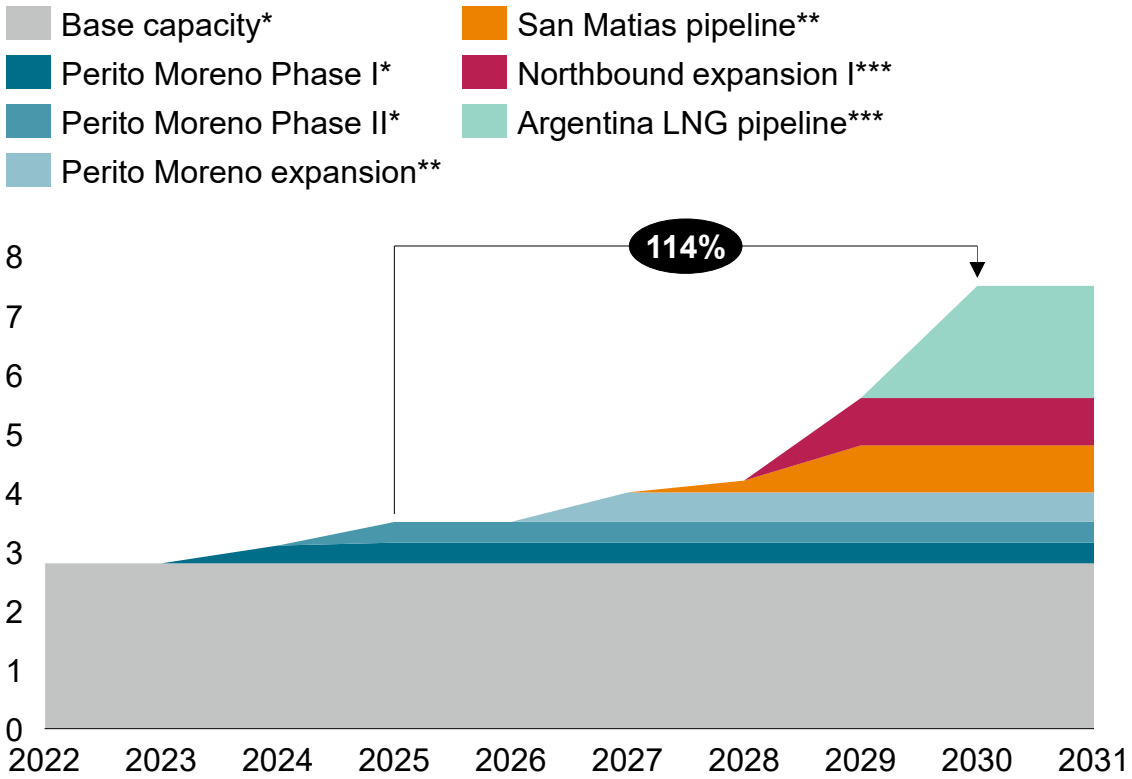
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Upstream investments supported by midstream projects set more than double egress capacity

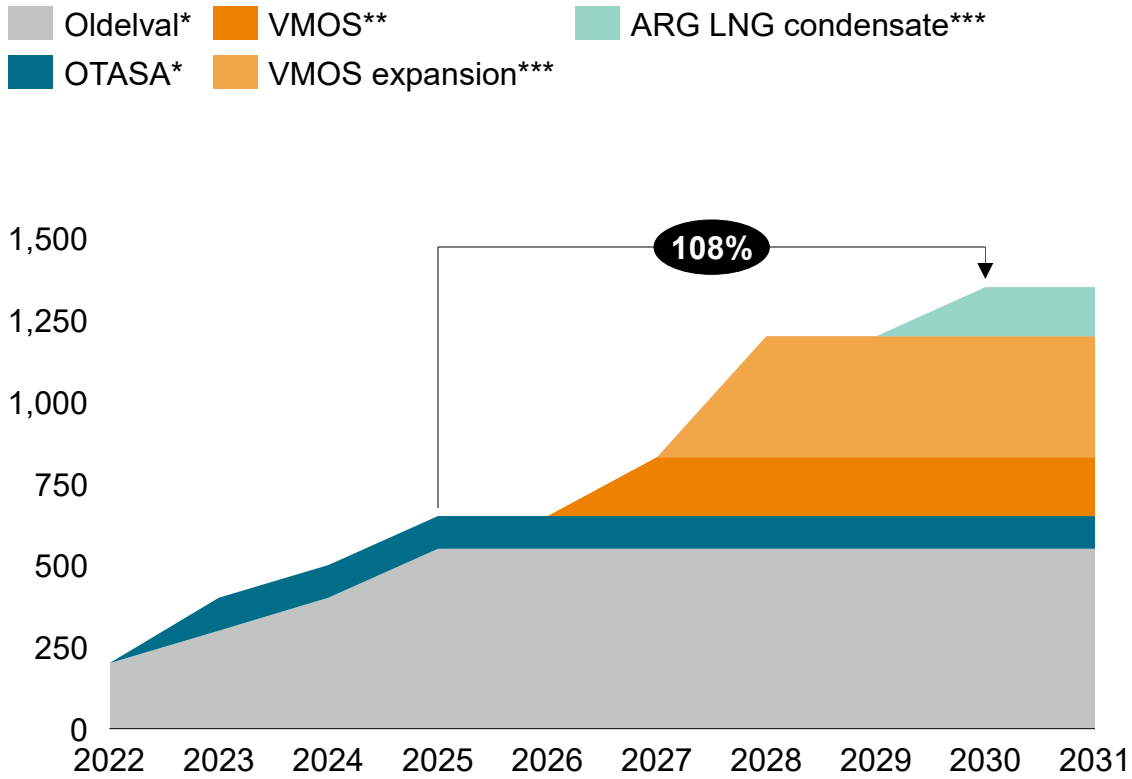
Neuquen Gas Pipeline Expansion Outlook

Bcf/d



Neuquen Oil Pipeline Expansion Outlook

Thousand bbl/d



Data compiled April 24, 2026.
Status of the projects: * Operating. ** Under construction. ***Planned.
Source: Argentina Secretary of Energy; S&P Global Energy

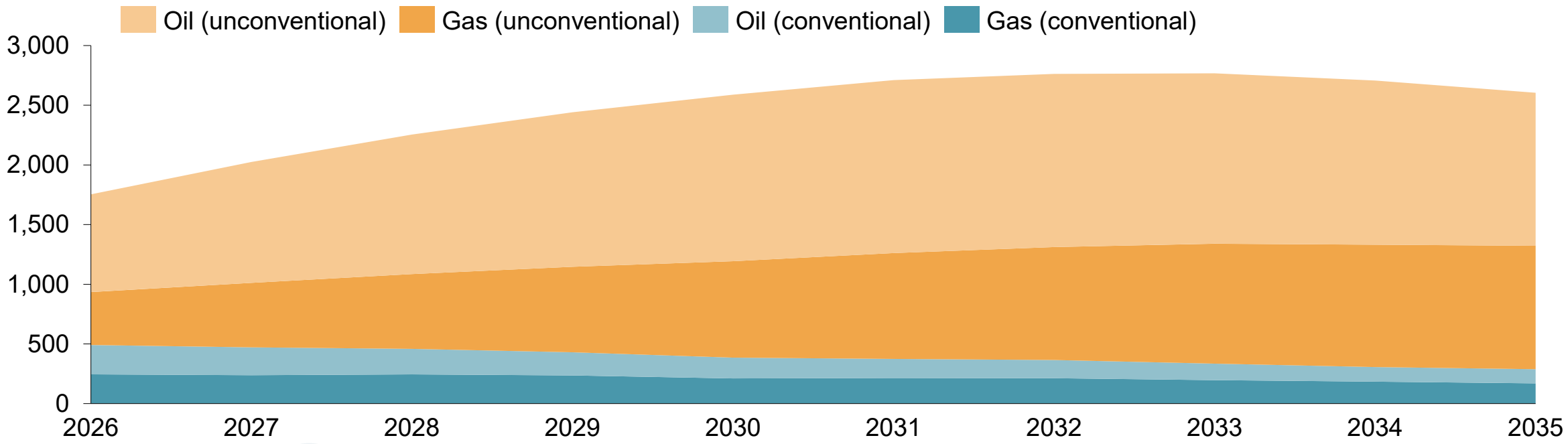
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Argentina could approach 2.7 million boe/d in the early 2030s

Argentina: Oil and Gas production outlook

Thousand boe/d



Unconventional O&G production expected to more than double 2025 volumes by 2030

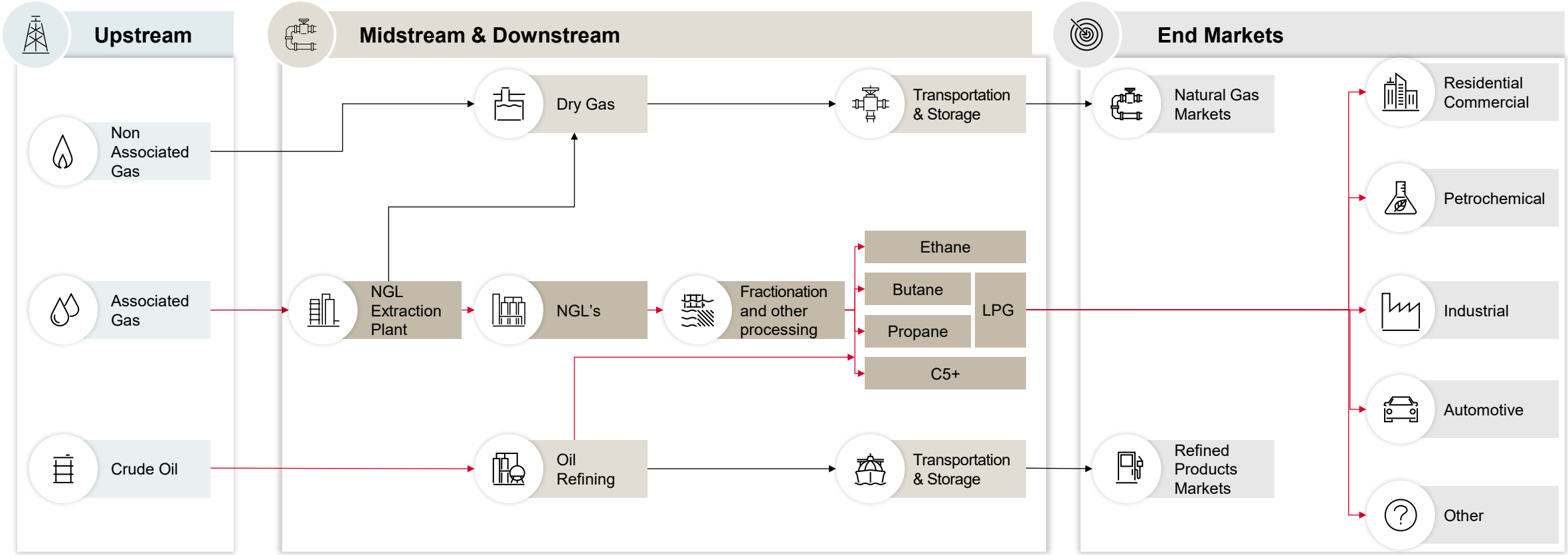
Data compiled: June 6, 2026.
Data from CERA Upstream Solutions
Source S&P Global Energy
This chart is derived from a bottom-up assessment of key unconventional projects that are currently in the pilot or development phase. Future prospective potential is not included in the dataset and, therefore, the chart does not represent a complete country-level outlook. Unconventional resources are estimated based on acreage and well spacing. For more information on each project, please refer to S&P Global Vantage.

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NGLs will not only be a by product, but can provide high economic value and a strategic diversification platform

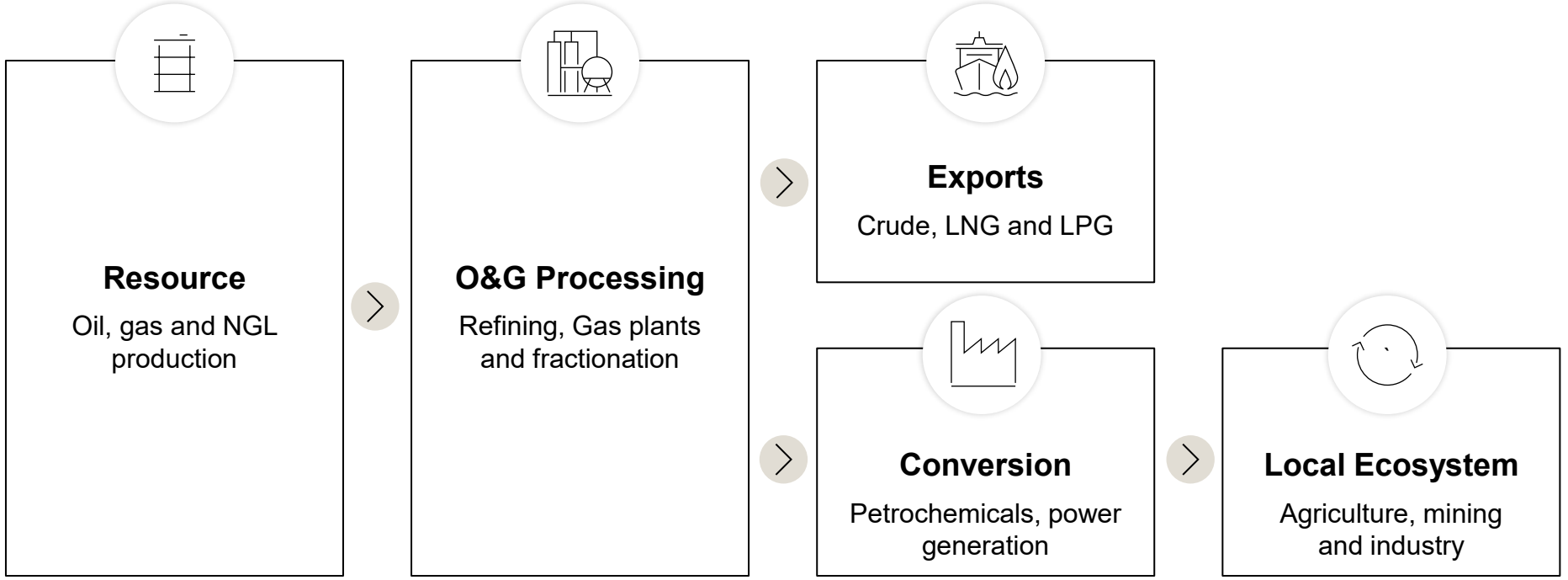
High-level NGLs value chain



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Furthermore, a competitive energy market can support domestic industrial development



Export and domestic value-add can co-exist and complement each other

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Key Takeaways

1. The global energy system needs new, diversified sources of supply
2. Vaca Muerta has moved from promise to proof
3. RIGI creates a credible pathway to scale
4. Next 24 months will be critical to unleash Vaca Muerta to the world

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