

ARGENTINA LNG



YPF



VITAL SOURCE OF ENERGY SUPPLY

The global growth in the natural gas demand is supported by its advantages over other fossil fuels in reducing emissions, its cost competitiveness, and the possibility of balancing the intermittent supply of renewables.

Its efficiency, storage capacity, abundant availability and economic viability explain its key role in the energy transition.

Geopolitical conflicts have highlighted the interdependence and vulnerability of energy supply chains.

In the current global context, Liquefied Natural Gas has further strengthened its position as a vital source of reliable, clean, and flexible energy supply.

The LNG demand accounts for more than one-third of world's Natural Gas trade.

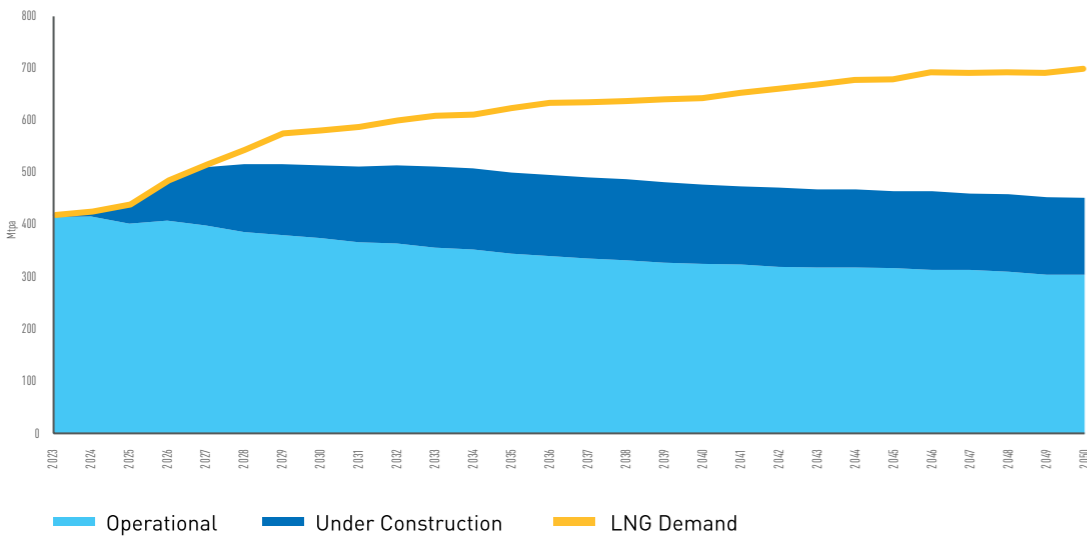
| Exports 2023 by country | MTPA | Share | Accumulated share |
|-------------------------|--------------|-------------|-------------------|
| United States | 85,9 | 21% | 21% |
| Qatar | 79,8 | 19% | 40% |
| Australia | 79,7 | 19% | 60% |
| Russia | 31,3 | 8% | 67% |
| Malaysia | 26,8 | 7% | 74% |
| Indonesia | 15,6 | 4% | 78% |
| Algeria | 13,2 | 3% | 81% |
| Nigeria | 13,1 | 3% | 84% |
| Oman | 11,4 | 3% | 87% |
| Papua New Guinea | 8,2 | 2% | 89% |
| Trinidad | 8,1 | 2% | 91% |
| United Arab Emirates | 5,0 | 1% | 92% |
| Brunei | 4,5 | 1% | 93% |
| Norway | 4,3 | 1% | 94% |
| Angola | 3,8 | 1% | 95% |
| Peru | 3,7 | 1% | 96% |
| Egypt | 3,6 | 1% | 97% |
| Equatorial Guinea | 2,7 | 1% | 98% |
| Mozambique | 2,6 | 1% | 98% |
| Others | 7,1 | 2% | 100% |
| Total | 410,5 | 100% | |

| Imports 2023 by country | MTPA | Share | Accumulated share |
|-------------------------|--------------|-------------|-------------------|
| China | 72,0 | 18% | 18% |
| Japan | 66,1 | 16% | 34% |
| South Korea | 45,1 | 11% | 45% |
| India | 22,6 | 6% | 51% |
| France | 22,0 | 5% | 56% |
| Taiwan | 20,4 | 5% | 61% |
| Spain | 18,5 | 5% | 66% |
| Netherlands | 16,5 | 4% | 70% |
| United Kingdom | 15,0 | 4% | 74% |
| Italy | 12,1 | 3% | 77% |
| Thailand | 11,6 | 3% | 80% |
| Turkey | 10,4 | 3% | 83% |
| Belgium | 9,4 | 2% | 85% |
| Pakistan | 7,3 | 2% | 87% |
| Kuwait | 6,5 | 2% | 89% |
| Singapore | 5,3 | 1% | 90% |
| Indonesia | 5,1 | 1% | 91% |
| Germany | 5,1 | 1% | 92% |
| Bangladesh | 5,0 | 1% | 93% |
| Others | 34,8 | 7% | 100% |
| Total | 410,5 | 100% | |



OPPORTUNITY

SUPPLY-DEMAND GAP



Since the beginning of 2022, FIDs for LNG projects have accelerated like never before. Even so, from 2028 onwards, expected demand will exceed production capacity and new sources of LNG supply will be required.

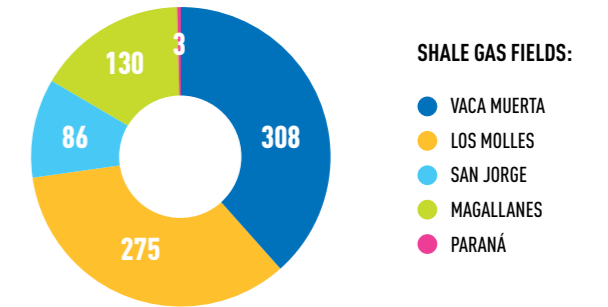
Towards 2050, the gap between projected demand and supply (including existing, under construction and projects with FID) will reach around 250 MTPA.

ARGENTINA'S POTENTIAL

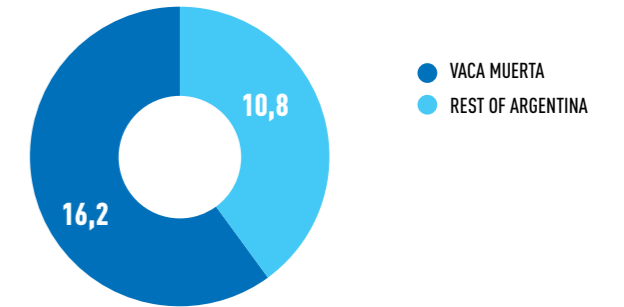
Argentina is the country with the second largest Shale Gas resources in the world: 802 Tcf.



ARGENTINA: 2nd TOTAL SHALE GAS RESOURCES IN THE WORLD (802 Tcf)



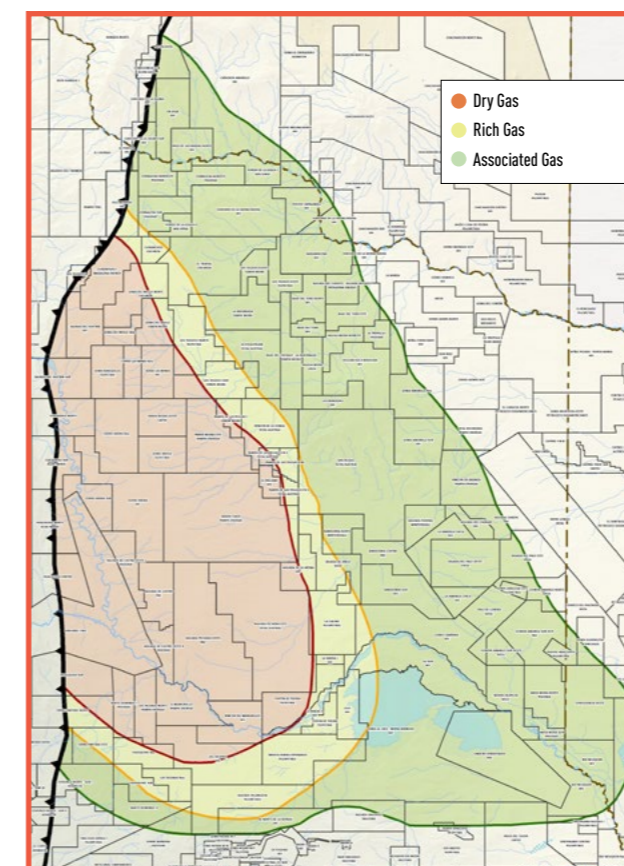
ARGENTINA: 4th TOTAL SHALE OIL RESOURCES IN THE WORLD (27.3 Bbbl)



Vaca Muerta Field:

Located in the Neuquina Basin, it is the world's second largest Shale Gas Field.

Shale Gas Resources: **308 Tcf**
 Surface: **5.6 MM acres**
 TOC(%): **2 - 15**
 Thickness (m): **30 - 450**
 Reservoir pressure (kpsi): **7.0 - 9.5**

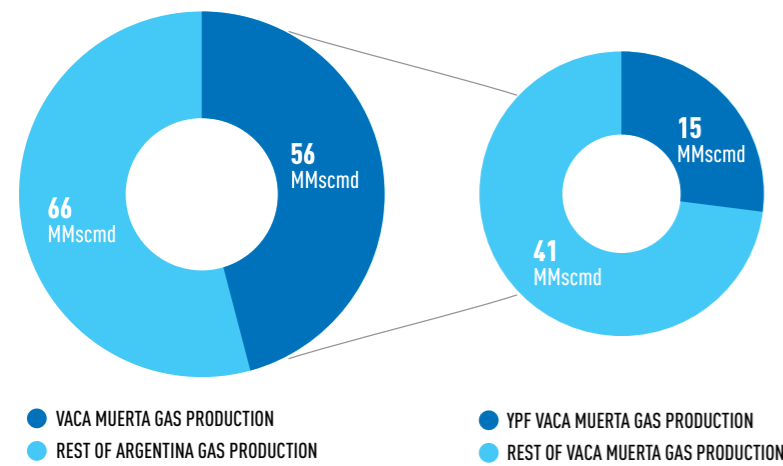


FROM PIONEERS TO LEADERS IN VACA MUERTA

YPF, Argentina's leading integrated company in the local Oil&Gas industry, has been a pioneer in exploiting Vaca Muerta Field since 2011.

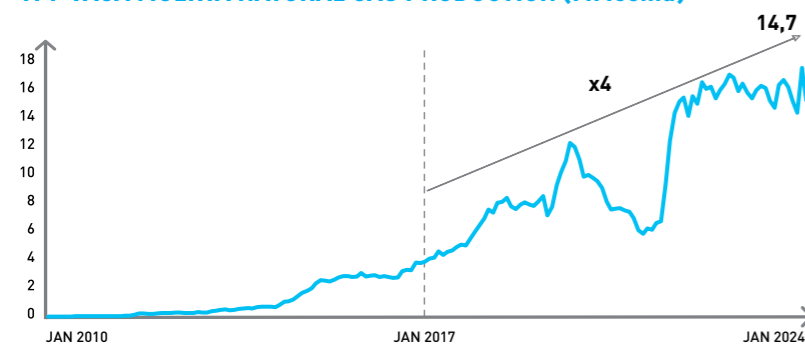
In a 12 years lapse, Vaca Muerta has reached more than 40% of the Natural Gas domestic production 56 MMscmd at 4Q2023.

ARGENTINA NATURAL GAS PRODUCTION 4Q2023

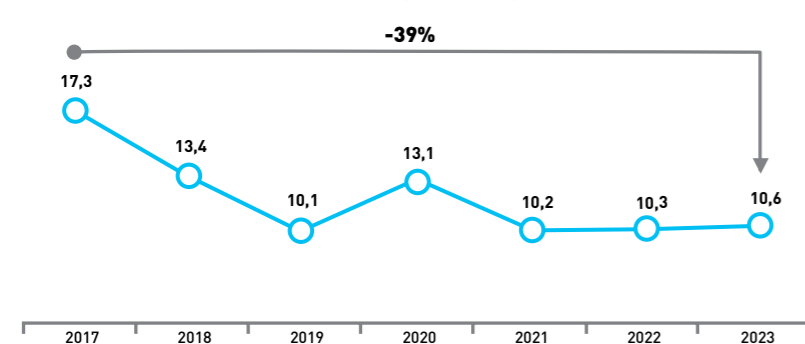


Vaca Muerta's biggest player: YPF's has a stake in 42% of gas acres (1,1MM) at 4Q2023.

YPF VACA MUERTA NATURAL GAS PRODUCTION (MMscmd)



CORE HUB - DEVELOPMENT COST (USD/boe)



In the last 7 years, the Shale Oil&Gas Development Cost (USD/boe) has been reduced around 40%.





ARGENTINA LNG

Within this context, YPF has launched Argentina LNG, one of the most important and ambitious projects in the country's industrial history.

Argentina LNG is an integrated Project that comprehends the whole LNG value chain from Vaca Muerta's Natural Gas production, to its liquefaction and trade.



STRATEGIC PARTNERS

YPF & PETRONAS FOUNDING PARTNERS

Since 2014, and focused on the development of La Amarga Chica in Vaca Muerta, YPF has maintained a strategic alliance with the Malaysian national energy company PETRONAS: one of the most important players in the global LNG business with more than 40 years of experience, a total capacity of 40 Mtpa, supplying LNG to more than 55 terminals in 25 different countries, and also the pioneer company in floating LNG liquefaction plants.

INCORPORATION OF NEW PARTNERS

The incorporation of new partners who can add value to the development of the project is expected.

On September 2022 we have expanded our strategic alliance with an agreement to develop a large scale and competitive natural gas liquefaction project in Argentina.

AN INTEGRATED PROJECT

Natural gas extracted from Vaca Muerta will be transported through a dedicated pipeline to the LNG plant to be located in Sierra Grande Norte, province of Río Negro.

PROJECT PHASES

To meet as soon as possible the world's increasing demand for reliable LNG, during its first phase, Argentina LNG will have 2 floating liquefaction units with a production capacity of around 9 million tonnes per year.

The following phases of the project entail the construction of an onshore modular plant which will progressively expand to achieve a final capacity up to 30 MTPA, placing Argentina among the major LNG exporting countries in the world.

Argentina LNG, a large-scale liquefaction Project that will exploit the vast Natural Gas competitive resources of Vaca Muerta Field to provide the world with a new source of reliable LNG supply.

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