Deloitte.

Econosignal

The Economic Impact of Argentina's Oil & Gas Sector

August 2026

Argentina has one of the world's greatest energy growth opportunities driven by the development of **Vaca Muerta**.

Through expanding oil and gas production, new infrastructure investments, and a more investment-friendly regulatory framework, the sector could create 107,000 new jobs, increase its contribution to GDP to 5.5%, and boost hydrocarbon exports to as much as USD 46.7 billion annually by 2035, consolidating its position as one of the country's main sources of foreign exchange earnings.

By **2035**

107,000
new
jobs

Up to
5.5%
of GDP

As much as
USD 46.7 billion
annual exports

This report contains sections translated into English using AI assisted translation tools. While efforts were made to preserve the intended meaning and maintain overall textual consistency, some portions may not fully capture the exact nuances of the original Spanish content.

Table of Contents

1. Executive Summary 05
2. Recent history 07
   - 2.1. Privatization and deregulation of the 1990s 07
   - 2.2. Loss of Energy Self-Sufficiency 08
   - 2.3. Renationalization of YPF 08
   - 2.4. Development of Vaca Muerta 09
3. Oil Market Assessment 12
   - 3.1. Global supply and demand 12
   - 3.2. Oil production in Argentina 14
4. Gas Market Assessment 16
   - 4.1. Global supply and demand 16
   - 4.2. Gas production in Argentina 17
5. Infrastructure development 20
   - 5.1. Oil Infrastructure Development 20
   - 5.2. Natural Gas Infrastructure and Market Development 22
   - 5.3. Infrastructure for Natural Gas Liquids (NGLs) 25
6. Impact on investment, employment, value added and exports 26
   - 6.1. Investment 26
   - 6.2. Employment 29
   - 6.3. Exports 31
   - 6.4. Economic activity 32
7. Legal context 34
8. Conclusions 36

Annex 1. Deloitte Computational General Equilibrium Model 37

Annex 2. A brief history of export duties on a barrel of oil 38

Customized economic intelligence for informed decision-making

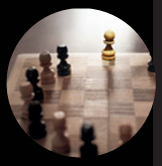
We deliver **tailored economic studies and presentations** focused on the issues that matter most to your organization, providing forward-looking analysis, forecasts, and scenario assessments to help anticipate potential business impacts and support informed decision-making.

We cover the following areas:

Forecasts for Decision-Making
Make better decisions based on our economic forecasts.

Economic impact studies
Quantifying the impact of a business initiative on the economy and society, and demonstrate its economic value.

Public Policies
Design, planning and evaluation of public policies, seeking maximize their economic and social impact.



Competition economics
Exhaustive analysis of potential situations of dumping, unfair competition and mergers, among others, and their impact on consumers.

Cost-Benefit Analysis
A decision-making tool.

Please email
econosignal.conosur@deloitte.com
to make your request.

Authors of the report

Daniel Zaga
Chief Economist
Deloitte Spanish Latin America
dzaga@deloittemx.com

Federico Di Yenno
Manager of Economic Analysis
Southern Cone Marketplace
fdiyenno@deloitte.com

Bautista Martina
Economic Analyst
Southern Cone Marketplace
bmartina@deloitte.com

Partners

Erick Calvillo
Leading Market Growth Partner
Deloitte Spanish Latin America
ecalvillo@deloittemx.com

Gastón Quignon
Leading Market Growth Partner
Southern Cone Marketplace
Deloitte Spanish Latin America
gquignon@deloitte.com

1. Executive Summary

This report presents a perspective on the future of the Argentine economy based on the expected development of the hydrocarbons sector.

According to estimates from **Deloitte's Computational General Equilibrium (DCGE) model** (Annex 1), the expansion of oil and gas production could **contribute an additional 0.14 percentage points to annual GDP growth between 2026 and 2035**, generate **107,000 new jobs**, raise the sectoral contribution from **3.4% to 5.5% of GDP**, and increase hydrocarbon exports from **2026 to 2035.USD 16,300 million in 2025 to USD 46,700 million in 2035**. If this scenario materializes, **the hydrocarbon sector would become Argentina's largest source of foreign exchange earnings, surpassing the current export revenues generated by the country's leading agro-industrial complexes**. The findings also suggest that the expansion of the energy sector would reshape the composition of economic activity and employment. Higher hydrocarbon production would foster a gradual reallocation of resources toward energy-related activities, construction, transportation, and supporting services, supported by rising wages and investment.

The transformation of the sector finds its main foundation in the development of **Vaca Muerta**, one of the most important unconventional hydrocarbon formations in the world. Argentina has the **second largest unconventional natural gas resources and the fourth largest oil resources globally**, an endowment that allows it to project several decades of domestic supply and a sustained expansion of its energy exports. The improvement in productivity observed in recent years, together with the reduction of operating costs and the entry of new operators and investments, **consolidated the Neuquén Basin as the main pole of energy growth in the country**.

The international context is also favorable. As global oil demand continues to grow and natural gas consolidates its role as a transition fuel, Argentina is moving forward with projects to expand its export capacity. The construction of oil and gas pipelines, port terminals and LNG projects will transform Vaca Muerta's resources into large-scale exports and expand access to international markets. **If the announced projects materialize, the sector could mobilize investments of more than USD 160,000 million over the next ten years, with annual disbursements of more than USD 20,000 million by 2030, a scale rarely observed in the Argentine economy**. Under this scenario of continued investment and infrastructure expansion, domestic production could reach **1.5 million barrels per day by 2030** and approach **1.7 million by 2035**.

This would make Argentina the **second largest oil producer in Latin America** and allow it to rise from **19th to 14th place among the world's largest producers**. At the same time, the growth of natural gas production and the advancement of liquefaction projects position the country to join the global LNG market over the next decade.

The approval of the **Bases Law**, the implementation of the **Incentive Regime for Large Investments (RIGI)** and the greater export openness are key factors in materializing this potential. Together, these regulatory changes seek to provide predictability to large-scale and long-term investments, favoring the development of strategic infrastructure and accelerating Argentina's integration into international energy markets.

In this context, the document analyzes the historical evolution of the Argentine hydrocarbons sector, the current regulatory framework, the prospects for global oil and gas markets, the main infrastructure projects under development, and estimates of the impact on investment, employment, value added, and exports. It also examines the role of Vaca Muerta as a platform for the consolidation of a new stage of energy-driven economic growth.

Figure 1. Productive sedimentary basins in Argentina and the formation of Vaca Muerta

Source: Econosignal, based on IGN data. Note: Argentina has 19 sedimentary basins, of which only 5 (Northwest, Cuyana, Neuquén, Golfo San Jorge and Austral) are in production.

2. Recent History

The recent history of the argentine hydrocarbons sector can be read as a transition from the privatization and deregulation of the 1990s to a stage marked by the loss of self-sufficiency, the recovery of the state role through YPF, the development of Vaca Muerta and the construction of a new export platform. The unconventional resources of the Neuquén Basin structurally modified the historical logic of the sector, because they made it possible to overcome the traditional tension between supplying the domestic market or exporting surpluses. **In our optimistic scenario, these resources would have the potential to supply local demand and oil and gas exports for more than 70 years**[i].

2.1. Privatization and deregulation of the 1990s

During the 1990s, Argentina's hydrocarbon sector underwent a profound transformation driven by regulatory reforms, price and trade liberalization, the conversion of operating contracts into concessions, the federalization of hydrocarbon resources, and the privatization of YPF and Gas del Estado. The latter was restructured into two transmission companies and eight regional distribution companies, fundamentally reshaping the organization of the natural gas market and establishing a clear separation between transmission and distribution activities. At the same time, the privatization of YPF took place in two stages. The first involved a partial opening of the company's share capital through public listings while retaining state participation. The second culminated in its full privatization, completed in 1999 when Repsol acquired **97.5% of the company's share capital**. By that time, YPF had already established operations in more than a dozen countries and had embarked on a process of regional expansion. **Following the acquisition, however, the company's strategy shifted toward maximizing cash generation from a mature asset base.** Investment levels declined, several international assets were divested, and capital allocation became increasingly focused on the exploitation of existing fields rather than the development of new production opportunities[ii].

In the short term, deregulation, market liberalization, and the inflow of private capital led to a significant increase in hydrocarbon production, culminating in a record level of crude oil output in 1998. This performance was driven by stronger production incentives, improvements in operational efficiency, and the more intensive exploitation of existing fields. However, much of this growth relied on reserves that had already been discovered, assessed, and delineated by YPF during its period as a state-owned company. Private investment was largely directed toward accelerating the extraction of known resources rather than sustainably expanding the exploration frontier. As a result, the initial increase in production coincided with a gradual decline in reserves, particularly as conventional fields began to exhibit signs of maturity and depletion.

2.2. Loss of Energy Self-Sufficiency

The collapse of convertibility marked a new breaking point. **Following the enactment of the 2002 Public Emergency and Exchange Rate Regime Reform Law (Law No. 25,561), contracts were converted into pesos, relative prices were significantly altered, and the operating framework of the sector underwent substantial changes. Hydrocarbon policy increasingly prioritized domestic supply and the maintenance of local prices below international levels through export duties, trade restrictions (see Annex 2) and the freezing or regulation of tariffs, particularly for natural gas.** Although these measures were initially adopted as emergency responses, they remained in place for much of the decade.

In this context, **the lower investment was not only due to business decisions, but also to a pricing and incentive scheme that reduced the expected profitability of new projects.** The economic recovery since 2003 boosted energy demand, but local production did not keep up with that growth. **The persistent decoupling between domestic and international prices reduced investment levels** and could not be compensated by fiscal stimulus programs or promotional regimes. **From 1999 to 2011, proven oil reserves fell by 19% and natural gas reserves by 55%.**[iii]

The case of natural gas was particularly relevant. **Between 2004 and 2014, the average price received by producers at the wellhead did not exceed USD 1.6 per MMBTU**[iv]**, while the international price exceeded USD 7 per MMBTU.** In that period, gas production fell at a cumulative annual rate of 2.3%, while domestic consumption grew 2.4% annually. Residential demand increased 54% between 2002 and 2014 and that for electricity generation grew 87%, driven by improved revenues, expansion of coverage and low relative prices.

The consequence was a growing dependence on energy imports. In 2004, gas purchases from Bolivia were resumed and, given its insufficiency, in 2008 the country's first LNG regasification terminal was installed in Bahía Blanca, operated by ENARSA (now Energía Argentina S.A.) and YPF through a floating storage and regasification unit provided by Excelerate Energy**. In 2011, a second terminal was incorporated in Escobar to reinforce the supply of the Metropolitan Area of Buenos Aires. In the years of greatest external dependence, the terminals received more than 40 LNG cargoes per year. While the Bahía Blanca facility operated until 2018, when it was deactivated following the growth of Vaca Muerta production, Escobar continued to operate and consolidated itself as the main gateway for LNG to enter the country.** During the winter of 2023, Bahía Blanca temporarily returned to using a regasification unit to cover seasonal supply needs; however, once that campaign ended, Escobar was once again the only operational regasification terminal in Argentina[v].

This process transformed the energy sector into a macroeconomic problem. **The deterioration of the energy trade balance has deepened since 2011, with higher imports of natural gas and LNG and lower oil exports.** The energy deficit reached USD 6,902 million in 2013, reinforcing the external restriction of the argentine economy. At the same time**, energy subsidies grew from 0.2% of GDP in 2004 to 2.8% of GDP in 2014**, explained by the cost of electricity generation, the gap between import and domestic prices, and production stimulus programs.

2.3. Renationalization of YPF

The partial restoration of state control over YPF in April 2012 marked another major turning point. Through Hydrocarbon Sovereignty Law No. 26,741, the government declared the achievement of energy self-sufficiency a matter of public interest and expropriated 51% of YPF's shares. While the company retained its status as a publicly traded corporation, the state regained strategic control over its operations and direction.

Following the partial renationalization, both the government and YPF significantly revised their strategic approach. The company substantially increased its investment levels, supported by three key pillars: higher domestic energy prices, access to international debt markets, and the reinvestment of earnings. YPF's investments went from an annual average of USD 2,300 million between 2008 and 2011 to USD 5,700 million between 2012 and 2015. This allowed the production decline to be partially reversed: the company's production increased from 485,000 barrels equivalent per day in 2012 to 577,000 in 2015, a growth of close to 19% in three years, while the country's total production continued to decrease, due to the fall in production of the rest of the private companies.

At the same time, **the Gas Plan was implemented at the beginning of 2013, with the aim of recomposing the price received by producers and stimulating investment in exploration and development of conventional and unconventional deposits**. The program compensated producers for the difference between USD 7.5 per MMBtu and the price effectively received from sales to the domestic market, applying the subsidy to incremental production volumes based on benchmarks established for each company. Subsequent promotion schemes introduced additional incentives, most notably those established under **Resolution 46/2017**, which sought to accelerate the development of Vaca Muerta's unconventional resources through guaranteed incentive prices for incremental output. **These policies helped reverse the production decline observed during the previous decade and supported a sustained recovery in natural gas output**. Between 2014 and 2019, natural gas production grew at a compound annual rate of 3.5%, driven primarily by the expansion of unconventional developments[vi].

The development of Vaca Muerta is part of this change of stage. Although the formation had been discovered decades ago, it was only **in 2011 that proven reserves began to be estimated from the availability of technologies that allowed oil and gas contained in the bedrock to be extracted**. In the early 2010s, the economic viability of unconventional production in Argentina was unclear, especially in a context of declining conventional fields.

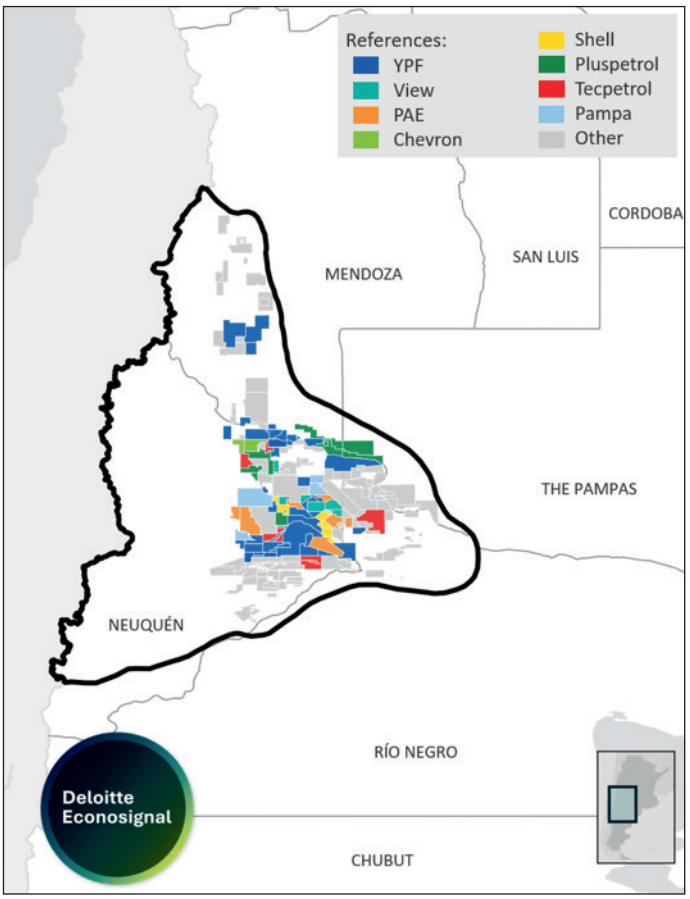
2.4. Development of Vaca Muerta

The massive development of Vaca Muerta had a turning point with the definitive agreement signed between YPF and Chevron on July 16, 2013[vii]. The agreement allowed the **development of Loma Campana and Loma Lata Norte** to begin, with an initial investment of USD 1,240 million by Chevron and a total pilot of approximately USD 1,500 million, **becoming the first scale project for unconventional exploitation in the Neuquén Basin**[viii]. The initial phase envisioned the drilling of more than 100 wells to validate the productivity of the formation and support the project's scale-up. In a subsequent phase, full-field development was expected to exceed 1,500 wells, with a production target of 50,000 barrels of oil per day by 2017[ix]. The scheme was structured as a partnership in which YPF provided concession rights and local expertise, while Chevron contributed capital, technology, and unconventional development know-how. This arrangement enabled both parties to share costs and risks, accelerate the industry learning curve, and advance the derisking of Vaca Muerta at a stage when the economic viability of Argentina's shale resources had not yet been fully proven[x].

The agreement was accompanied by Decree 929/2013, published on July 15, 2013, which created the Investment Promotion Regime for the Exploitation of Hydrocarbons. The regulation sought to make the conditions for large conventional and unconventional investments more flexible, within the framework of Laws 17,319, 26,197 and 26,741. Among its incentives, it established that companies with investment plans of no less than USD 1,000 million in five years could export 20% of their incremental production without paying export duties and have 100% of the foreign exchange generated. In addition, if local supply proved insufficient, they could sell the hydrocarbons originally intended for export on the domestic market at international prices. In practice, the decree sought to improve the predictability of the YPF-Chevron project and facilitate the arrival of foreign capital in a context of external restrictions and growing need for investment in hydrocarbons[xi].

Since hydrocarbon resources belong to the provinces, the agreement required the intervention of Neuquén. After the signing between YPF and Chevron, the Province and YPF signed on July 24 2013, an Agreement for Loma Campana, approved by Provincial Law 2,867 on August 29, 2013. This ratification granted institutional viability to the project and included aspects related to the concession, the resizing of the area to be exploited, the tax regime, environmental conditions and the extension of YPF's concession[xii].

Figure 2. Vaca Muerta Formation. Top companies and operating areas in 2026



Source: Econosignal based on National Energy Secretariat.

Building on the initial momentum generated by Loma Campana, following the YPF-Chevron agreement signed in 2013, Vaca Muerta gradually evolved into an increasingly diversified portfolio of unconventional developments. Among the most significant projects are:

Shale oil

- **La Amarga Chica:** agreement between YPF and Petronas signed in 2014 and start of the pilot project in 2015[xiii].
- **Bandurria Sur:** development driven by the pilot agreed between YPF and Schlumberger in 2017, with the subsequent incorporation of Shell and Equinor in 2020.

Shale gas

- **El Orejano:** started by YPF in 2013 and later developed together with Dow.
- **Fortín de Piedra:** operated by Tecpetrol since 2017.
- **Aguada Pichana Este:** first well drilled by TotalEnergies in 2012 and approval of shale gas development in 2017.
- **Rincón del Mangrullo:** developed by YPF and Pampa Energía since 2013 in tight gas and expanded in 2017 to new unconventional resources.

In addition, in addition to YPF, Chevron, Petronas, Vista, Tecpetrol, TotalEnergies, Pampa Energía, Shell and Equinor, other companies such as Pan American Energy (PAE), Pluspetrol, CGC and Wintershall Dea expanded their presence in Vaca Muerta through stakes in different unconventional oil and gas blocks[xiv].

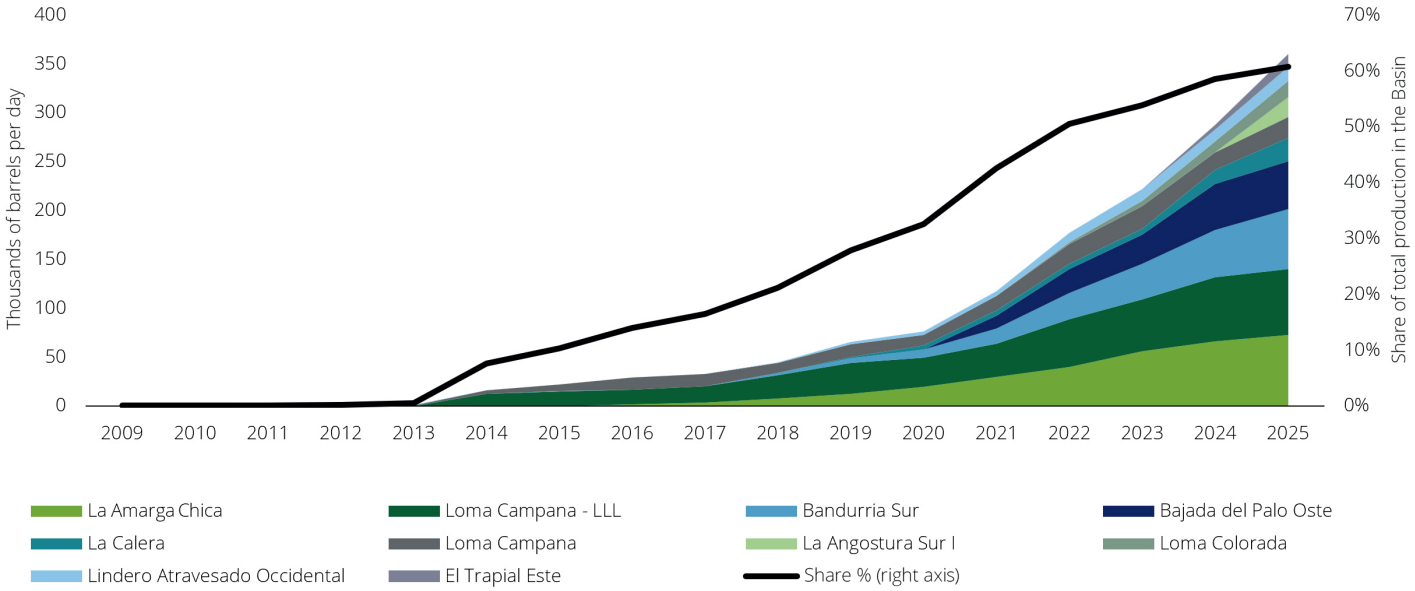
Between 2012 and 2019, investments linked to unconventional production, including drilling of wells, treatment plants, facilities and transportation infrastructure, exceeded USD 24,000 million. In the first stage, development was more oil-oriented, although since 2017 shale gas production has gained momentum. Infrastructure improvement and the learning curve significantly reduced costs: at Loma Campana, *development costs* went from USD 27 per barrel equivalent in 2015 to an average of USD 9-10 per barrel since 2019.[xv]

During the administration that took office in 2015, the sector underwent a combination of tariff adjustments, subsidy reductions, and changes to incentive schemes. As noted above, in the natural gas segment, Resolution 46/2017 replaced the Gas Plan and concentrated incentives on unconventional production in the Neuquén and Southern Basins, establishing an initial guaranteed price of USD 7.5 per MMBtu in 2018, gradually declining to USD 6.0 per MMBtu by 2021. This framework particularly supported projects such as Fortín de Piedra, which contributed more than 17 million cubic meters per day of additional gas production to the system in 2019.

During this period, YPF lost some of its relative prominence within the sector. The decline in the company's revenues, the elimination of the "barril criollo" pricing scheme, the mechanisms used to decouple domestic prices from international benchmarks, and the allocation of gas production incentives to other operators weighed on its investment capacity. **Between 2016 and 2019, YPF's total hydrocarbon production declined by 10.9%. Its share of national gas production fell from 38% in 2015 to 29% in 2019, while its share of oil production decreased from 47% to 44%.**

The COVID-19 pandemic caused a new shock. Mobility restrictions abruptly reduced fuel demand, compressed refinery processing and affected local production. During 2020, refineries processed an average of 417 thousand barrels per day, 12% less than in 2019. To avoid massive production closures in the face of the international collapse in the price of crude oil, a **new support price of USD 45 per barrel was implemented, known again as "barril criollo", in force until August 2020**. **The subsequent recovery was again explained by the unconventional. In 2021, oil production reached the highest level in the last eight years towards the end of the year. Growth was not homogeneous: conventional production fell 15% between December 2019 and December 2021, while shale oil increased 86% in the same period.** Something similar happened in natural gas: the recovery in 2021 was explained entirely by the expansion of unconventional production. By December 2021, shale oil accounted for 36.4% of total oil production, while shale and tight gas production accounted for 52% of total natural gas production. These data had confirmed that Vaca Muerta was no longer a long-term promise but a central component of Argentina's energy supply and the main basis for a future export strategy.

Figure 3. Vaca Muerta Formation. Oil production in main exploitation areas and its share in the total basin



Source: Deloitte Econosignal based on National Energy Secretariat data.

The post-pandemic recovery ended up confirming the structural change that had been brewing since the beginning of the previous decade. **While conventional production continued to show a declining trend, the unconventional developments of the Neuquén Basin began to explain the totality of the growth of the sector,** modifying the composition of the Argentine energy supply and redefining the main investment poles. **Vaca Muerta ceased to be a project in the development stage to consolidate itself as the country's main hydrocarbon asset, with a growing participation in both oil and natural gas production.**

From this process, the dynamics of the sector began to be increasingly determined by the productivity of unconventional resources, the availability of transport infrastructure and the ability to access external markets. **In this context, the analysis of recent production developments and the prospects of the oil and gas markets is essential to understand the growth potential of the Argentine hydrocarbon industry over the coming years.**

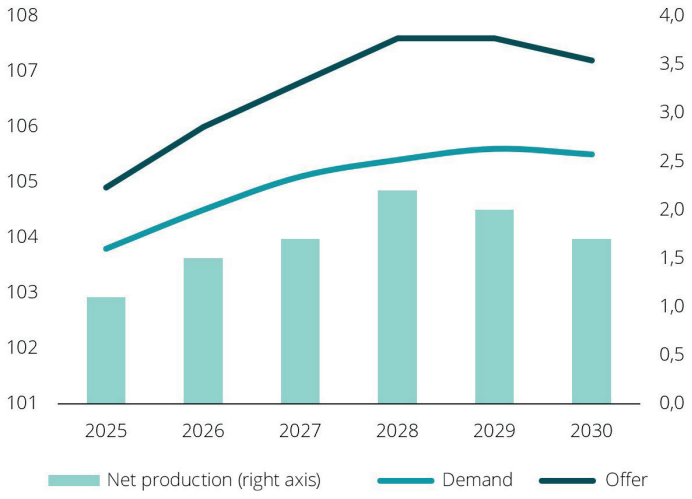
3. **Oil** Market Assessment

3.1. Global supply and demand

The **growing geopolitical and economic uncertainty at the global level** has a significant impact on oil producers and consumers, positioning this market as one of the main focuses of attention on the international agenda.

In its 2025 report, **the International Energy Agency (IEA) projected that global oil production will increase by 2.3 million barrels per day in 5 years, reaching a total of 107.2 million barrels per day by 2030**.

Figure 4. Global oil production



Note: Base production scenario. It comprises of crude oil, condensates, natural gas liquids (NGLs) and oil from unconventional sources.

Source: International Energy Agency (EIA).

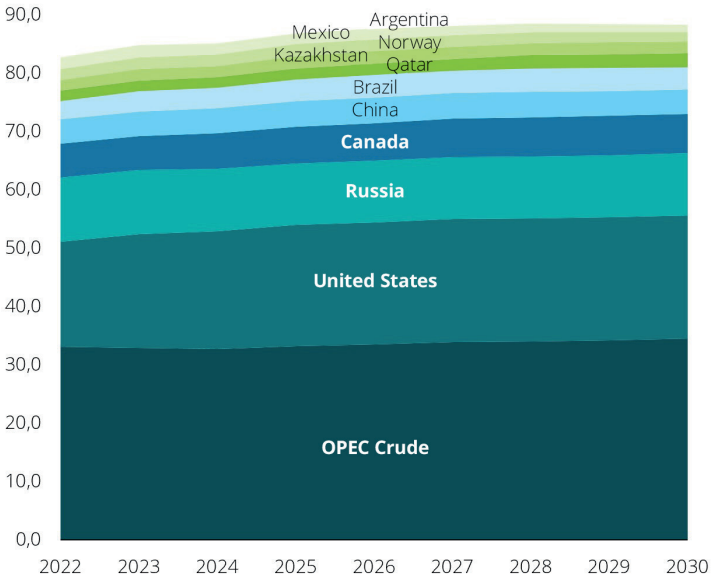
According to the organization, this growth will be driven **mainly by Saudi Arabia and the United States**, which together would explain about 40% of the expected expansion of global productive capacity. In the case of Saudi Arabia, the increase is mainly linked to the availability of idle capacity and the possibility of expanding extraction depending on market conditions, while in the United States growth will continue to be driven by technological advances and the development of unconventional deposits.

The IEA also highlights that global production capacity would grow at a faster rate than demand over the next few years, **setting up a scenario of greater slack in the oil market. The EIA projects an increase in demand of 1.7 million barrels per day, exceeding 105.5 million barrels per day in 2030.** The report establishes that the petrochemical industry will be one of the main drivers of the increase in demand, both due to the **greater need for natural gas liquids (NGLs) and other liquids not derived from crude oil**, inputs highly demanded by the industrial sector.

This context could help to moderate pressures on international crude oil prices, although their evolution will continue to be conditioned by geopolitical factors, OPEC+ production decisions, the performance of the world economy and the pace of the energy transition. As a result, while the outlook points to greater supply availability towards the end of the decade, the market will continue to be exposed to high levels of uncertainty and volatility.

According to the base scenario proposed by the EIA at the global level and by **Deloitte Econosignal for Argentina in an optimistic scenario, by 2030 the country would reach an average production of 1.6 million barrels per day (including NGLs),** which would imply an increase of approximately 70% compared to 2025 and would allow it to surpass Angola, Oman and several OPEC+ countries. Compared to the EIA's projections, **the optimistic scenario for Argentina would position it as the country with the highest production growth over the next five years, above Guyana (61%) and Qatar (31%). In this way, Argentina would go from 19th place in 2025 to 14th place among the world's largest oil producers. Regionally, it is projected to become the second-largest producer in Latin America, behind Brazil and ahead of Mexico, Guyana and Colombia.**

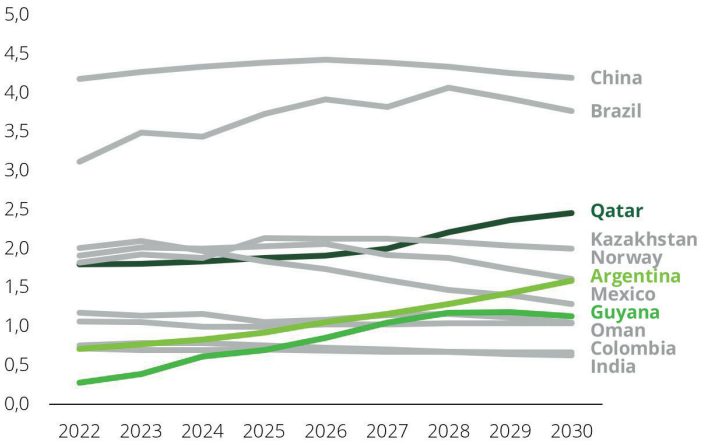
Figure 5. Oil production projection in major countries (millions of barrels per day)



Note: Base production scenario. It comprises of crude oil, condensates, natural gas liquids (NGLs) and oil from unconventional sources.

Source: International Energy Agency (EIA).

Figure 6. Oil production in selected countries (millions of barrels per day



Note: Global and optimistic base production scenario for Argentina. It comprises of crude oil, condensates, natural gas liquids (NGLs) and oil from unconventional sources. Selected countries: global ranking, excluding OPEC+ countries, the United States, Russia and Canada, up to 23rd place.

Source: International Energy Agency (EIA) and Econosignal for Argentina.

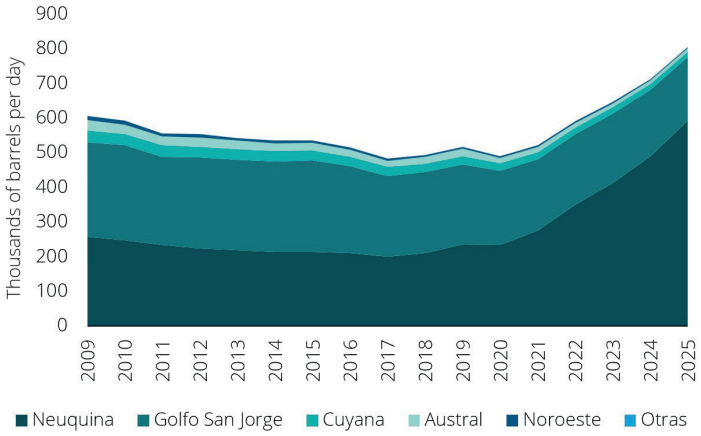
3.2. Oil Production in Argentina

During 2025, oil production in Argentina reached an average of close to **800 thousand barrels per day**, registering a year-on-year growth of **13%** and reaching the **highest level since the late 1990s**. This performance was mainly driven by the development of **Vaca Muerta**, which consolidated its position as the main growth engine of the Argentine hydrocarbon industry. By the end of 2025, the Vaca Muerta formation, **located in the Neuquén basin, already contributed 62% of the national crude oil production and 73% of the basin's total production,** driven by areas such as Loma Campana, La Amarga Chica, Bandurria Sur and Bajada del Palo Oeste. As a result, the participation of traditional basins continued to decline, deepening the concentration of oil activity in Neuquén and strengthening the strategic role of Vaca Muerta within the Argentine energy sector, reflecting a structural change in the country's productive matrix.

The transformation observed over the past decade is particularly evident when analyzing the composition of production. While in 2012 conventional oil accounted for practically all national extraction, **today unconventional oil accounts for about two-thirds of the total produced**. Consequently, the growth of the sector no longer depends on the recovery of traditional mature deposits, but on the expansion of shale developments in the Neuquén Basin, which continue to exhibit improvements in productivity and operational efficiency.

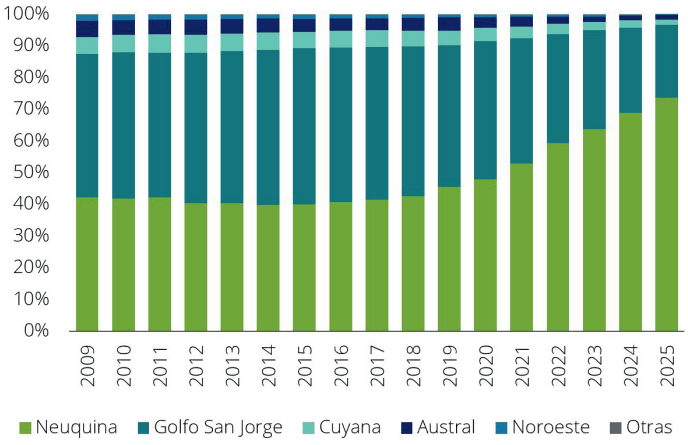
The growth in production also began to be reflected on the external front. Oil exports reached approximately **USD 6,700 million in 2025**, becoming one of the main contributions to the country's foreign exchange generation. Likewise, the energy sector recorded **the highest trade surplus in historical terms of USD 7,800 million**, consolidating itself as one of the main sources of dollar income for the Argentine economy. The growing availability of exportable crude oil made it possible to expand the destination markets and strengthen the export profile of the national hydrocarbon complex.

Figure 7. Oil production in Argentina and projections



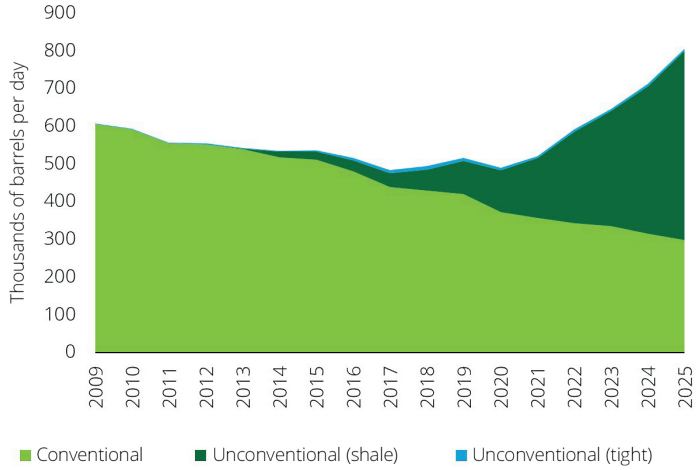
Source: Econosignal based on National Energy Secretariat.

Figure 8. Oil production by basin



Source: Econosignal based on National Energy Secretariat.

Figure 9. Oil Production by type

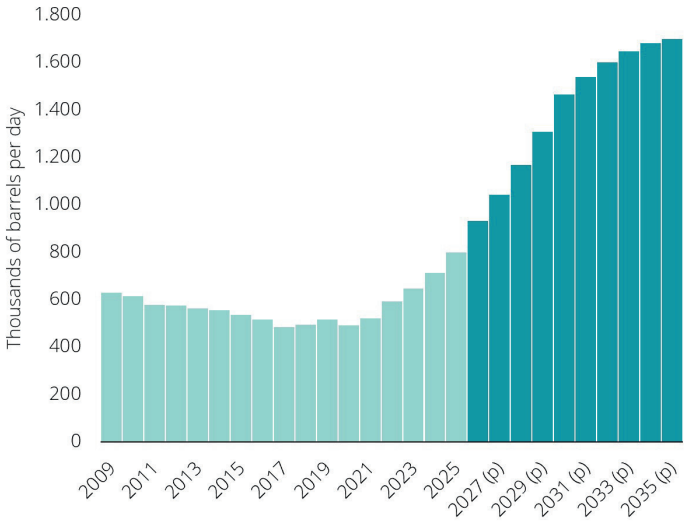


Source: Econosignal based on National Energy Secretariat.

One of the main challenges to sustain **this growth trajectory is the expansion of transport infrastructure**. With the aim of expanding export capacity and reducing logistics costs, the **Vaca Muerta Oil Sur "VMOS" project is advancing (see Infrastructure section).** Once operational, the project will significantly increase the capacity to evacuate crude oil from Vaca Muerta, enabling exports of more than **500 thousand additional barrels per day** and eliminating one of the main bottlenecks currently facing the industry.

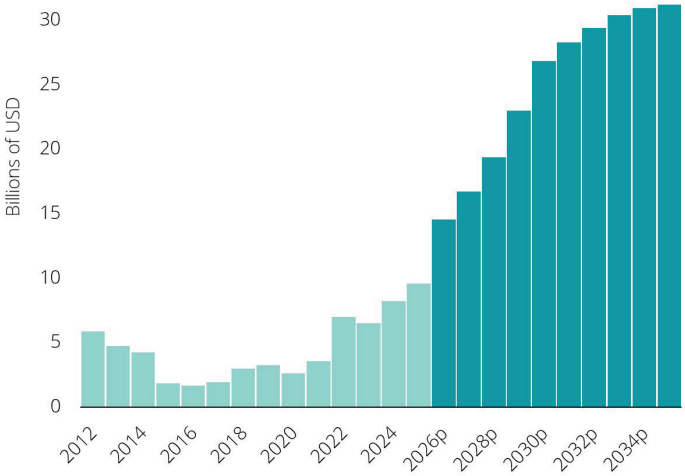
Under a scenario of continued investment, macroeconomic stability, and expansion of energy infrastructure, growth prospects remain strong. Our estimates indicate that Argentina could exceed **1.5 million barrels per day of crude oil and condensate by 2030** and approach **1.7 million barrels per day by 2035**. With this production surplus, exports of oil and derivatives are expected to reach **USD 14,500 million in 2026** and rise to **USD 31,200 million in 2035**.

Figure 10. Oil Production Projection



Source: National Energy Secretariat and projections by Deloitte Econosignal.

Figure 11. Projected Oil Exports



Source: National Energy Secretariat and projections by Deloitte Econosignal.

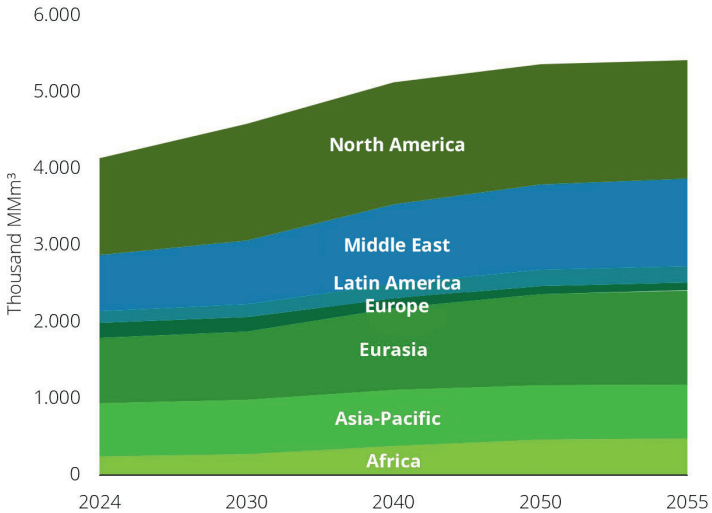
4. **Gas** Market Assessment

4.1. Global supply and demand

Natural gas offers a host of **benefits, including its lower relative emissions compared to other fossil fuels, its cost competitiveness, its operational flexibility, its reliability, and its ability to complement the incorporation of renewable energy into the electricity system**. It is also an important tool for strengthening energy security and guaranteeing supply in the context of increasing electrification. These characteristics, together with the structural transformations that the global energy system is going through, **drive an increase in production and demand projections for the coming decades**.

According to data from the Gas Exporting Countries Forum (GECF), **in 2024 global natural gas production reached 4,136 billion cubic meters (bcm), representing an increase of 1.8% year-on-year**. Going forward, the agency projects a sustained expansion of global supply, which would reach 5,417 billion cubic meters in 2055, equivalent to a **cumulative annual growth rate of approximately 0.9%.** In this scenario, **Latin America would grow at a cumulative annual rate of 1.2%,** going from **149 bcm in 2024 to 217 bcm in 2055**. This increase would be

Figure 12. Global natural gas production



Source: Gas Exporting Countries Forum.

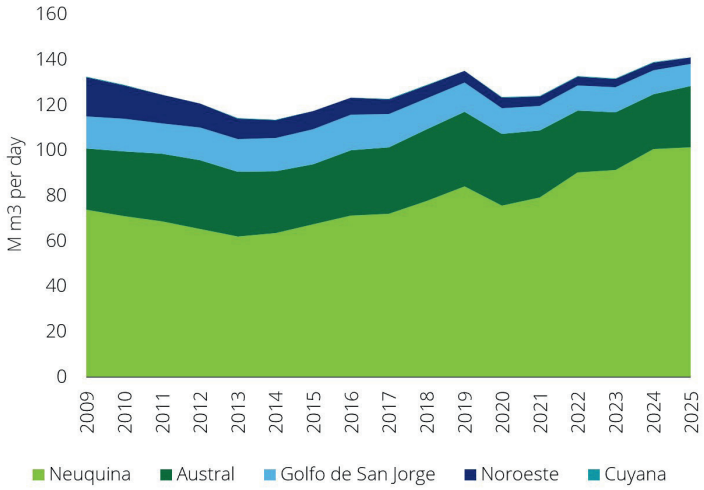
driven mainly by the development of **Vaca Muerta in Argentina** and by the expansion of production associated with the offshore developments of the **Brazilian Pre-Sal**. However, due to the expected strong growth in other producing regions, particularly Africa (2.8% per year), the Middle East (1.2% per year), and Eurasia (0.9% per year), **Latin America's share of world production is expected to remain relatively stable at around 4%.** For the medium term, the Forum projects an average annual growth of close to 1.0% during the 2030s. As new developments reach more stable production levels, this rate would moderate to 0.6% by 2040 and 0.25% by the end of that decade.

At the same time, during 2024 global demand for natural gas reached 4,134 bcm, registering a year-on-year growth of approximately 2.2%. **Global consumption is expected to exceed 5,400 bcm by 2055, growing at an average annual rate of 0.9%, in line with projected supply expansion**. Among the sectors that would show the largest increases in natural gas demand are electricity generation, industry and transportation. In this context, the Gas Exporting Countries Forum (GECF) estimates that more than **50% of the growth in global demand for natural gas by 2055 will come from electricity generation**, **due to its role as a backup source for systems with a growing share of renewable energies**. Industry will be the second main driver of growth, given that **natural gas continues to be one of the most competitive energy sources for processes that are difficult to electrify** and maintains a central role as an input for petrochemicals, fertilizers and the chemical industry. In addition, the expansion of clean-tech manufacturing and other electricity-intensive value chains will bolster demand for reliable and competitive thermal energy, consolidating gas' role as a strategic input for industrial competitiveness. For its part, **the transport sector would register the highest relative growth, particularly in segments that are difficult to electrify such as freight transport and maritime transport**, while **hydrogen** production will also increase the demand for natural gas, especially in the manufacture of fertilizers and in the development of blue hydrogen projects[xvi].

4.2. Gas production in Argentina

During 2025, the Argentine gas industry consolidated a transformation process that began with the massive development of Vaca Muerta and that today redefines the national energy supply. Natural gas production reached record levels, exceeding **141 MMm³/d on average in 2025**, thanks to the sustained growth of unconventional developments and the expansion of transport capacity from the Neuquén Basin. This performance strengthened the country's energy security and significantly reduced dependence on imports during periods of peak demand.

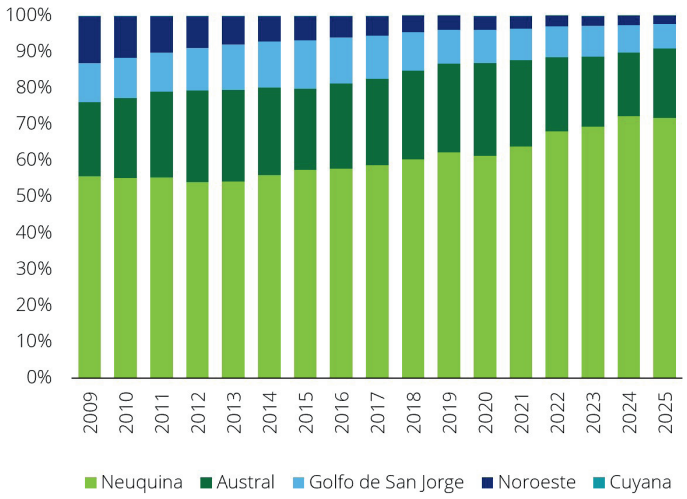
Figure 13. Average natural gas production by basin



Source: Econosignal based on National Energy Secretariat.

The reconfiguration of the Argentine productive map is evident when observing the growing centrality of Neuquén within the national gas system. Currently, the **Neuquén Basin contributes 72% of the gas produced in Argentina**, consolidating itself as the country's main supply hub. Areas such as Fortín de Piedra, La Calera, Aguada Pichana and Sierra Chata have become benchmarks for unconventional development, allowing to compensate for the natural decline observed in several mature conventional deposits.

Figure 14. Natural gas production by basin



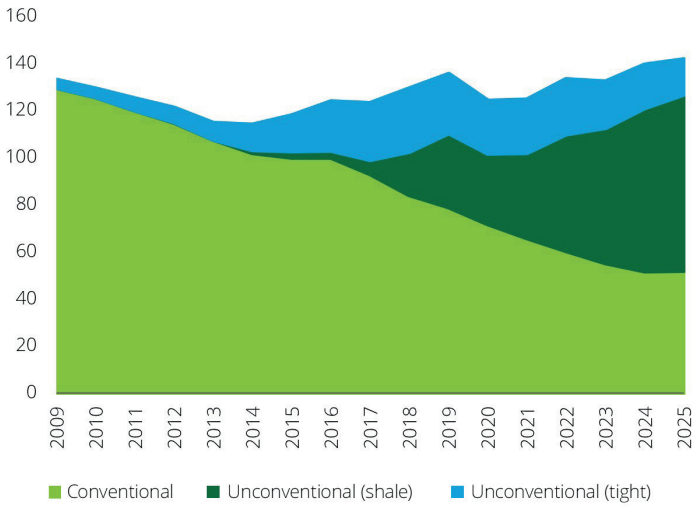
Source: Econosignal based on National Energy Secretariat.

Structural change can also be seen in the composition of supply. **During the last decade, the growth of shale gas has profoundly modified the production matrix, progressively displacing conventional gas as the** main source of supply. While years ago, production depended mostly on traditional reservoirs, today unconventional resources account for a growing proportion of the gas extracted in the country and constitute practically all the expansion recorded in recent years. Technological evolution, higher levels of productivity per well and the continuous improvement of operating costs have allowed this process to be accelerated.

Unlike oil, the economic impact of gas growth is not limited to exports but is also reflected in a lower dependence on energy imports. **The increase in local production made it possible to substitute external purchases of gas and fuels for electricity generation, reducing the vulnerability of the energy system**. At the same time, Argentina expanded its exports to Chile and opened new trade opportunities with Brazil in the face of the fall in Bolivian supply.

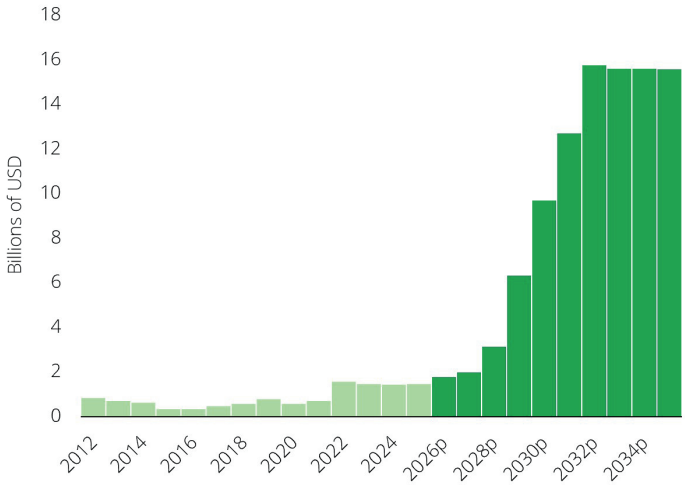
The medium and long-term prospects for the sector are favorable. It is estimated that natural gas production could increase from an average of 141 MMm³/d in 2025 to 227 MMm³/d in 2035, with maximum peaks of 260 MMm³/d driven mainly by the expansion of Vaca Muerta and the execution of new transport and export works. As Liquefied Natural Gas (LNG) liquefaction and export projects progress, Argentina will be able to significantly expand Vaca Muerta's international presence. Thus, natural gas would cease to be mainly oriented to the domestic market to become a strategic vector for export and foreign exchange generation. **In this scenario, exports of gas and its derivatives would go from USD 1,440 million in 2025 to approximately USD 15,500 million in 2035, consolidating gas as one of the main generators of foreign exchange in the Argentine energy sector.**

Figure 15. Gas production by concept



Source: Econosignal based on National Energy Secretariat.

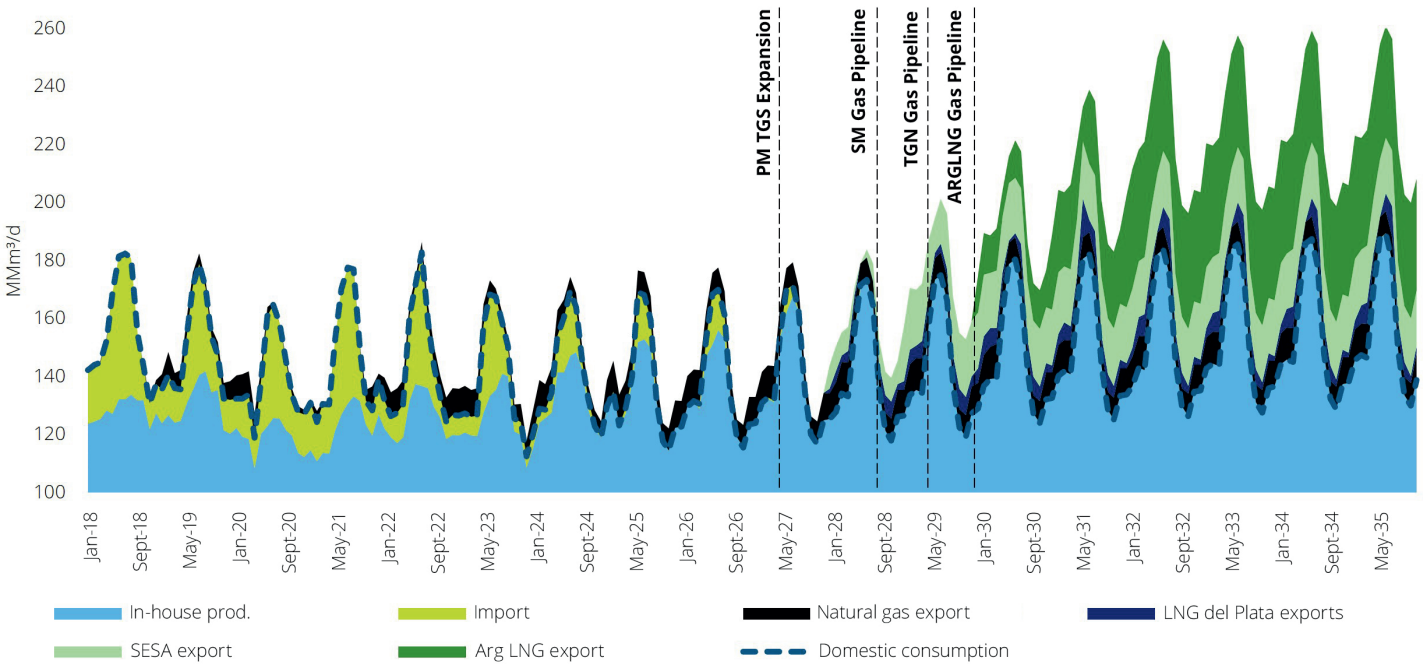
Figure 16. Exports of natural gas and its derivatives



Source: National Energy Secretariat and projections by Deloitte Econosignal.

Under a scenario of continued investment and infrastructure expansion, the country has sufficient resources to consolidate itself as one of Latin America's leading natural gas suppliers for decades to come. The combination of abundant reserves, technological improvements and growing regional integration positions the gas sector as one of the fundamental pillars of Argentina's energy and economic development.

Figure 17. Gas production projection



Source: National Energy Secretariat and projections by Deloitte Econosignal.

Note: PM | Perito Moreno Gas Pipeline. SM | San Matías.

5. Infrastructure Development

As Vaca Muerta's production expanded, export growth increasingly became dependent on the availability of infrastructure to transport output to refineries, consumption centers, and international markets. In this context, the expansion of oil and gas pipelines, port terminals, and LNG projects emerged as a critical prerequisite for translating production growth into higher exports and greater foreign exchange earnings.

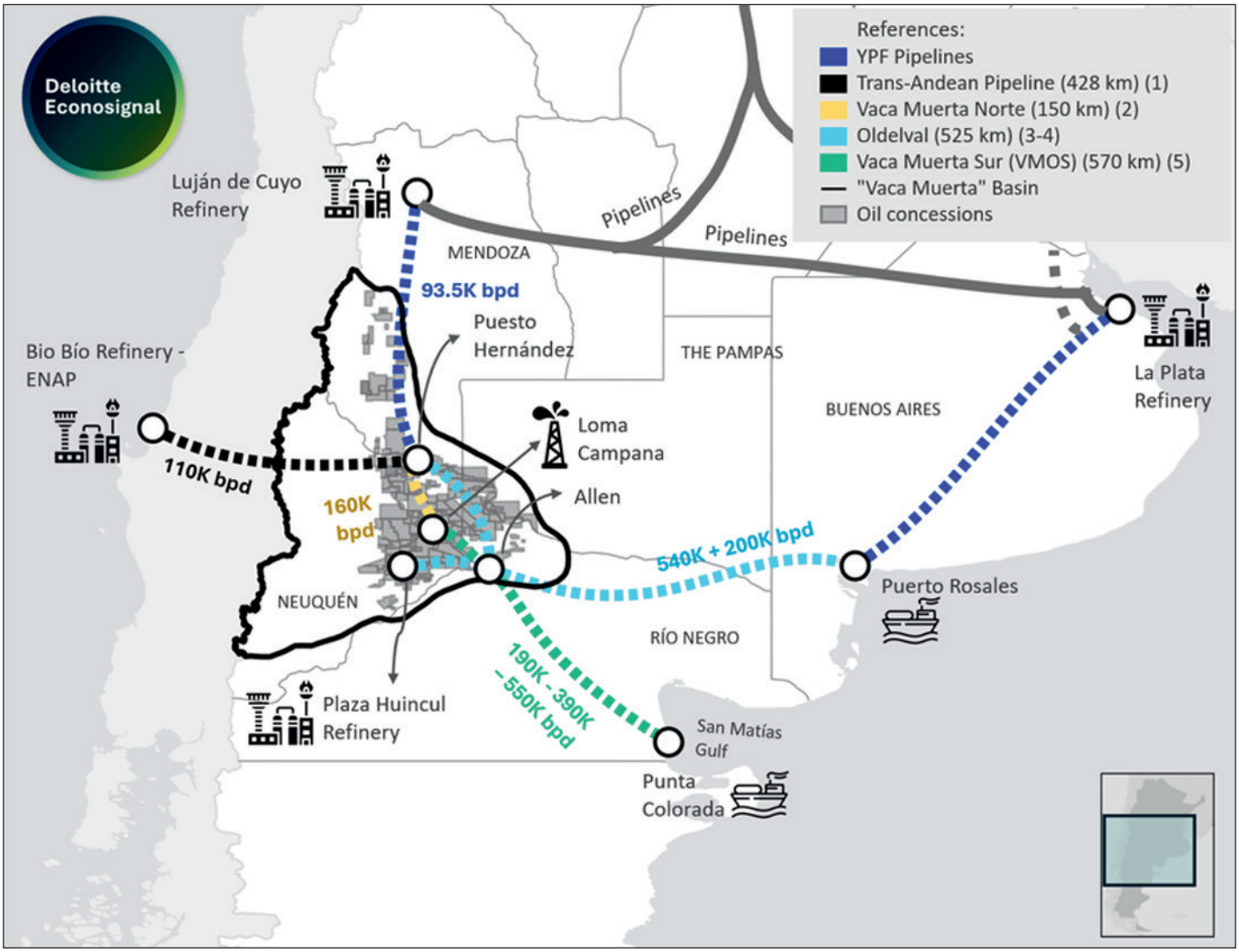
5.1. Oil Infrastructure Development: Pipelines and Export Terminals

1. **Trans-Andean Pipeline (OTASA):** In **May 2023, the Trans-Andean Pipeline (OTASA), which connects Puesto Hernández, in Neuquén, with Chile, was reactivated** after being out of operation since 2006. The infrastructure allowed crude oil exports to the Pacific to resume, initially with a contract of up to 41,000 barrels per day. The pipeline's operational capacity continued to increase after its reactivation and, **according to data from the National Directorate of Hydrocarbon Transport, during the first months of 2026 it used around 66% of its maximum transport capacity of 110,000 barrels per day**[xvii].

2. **Vaca Muerta North Pipeline: In October 2024, YPF completed the Vaca Muerta North Pipeline project, with an investment of approximately USD 250 million**. The work included a 151-kilometer pipeline, a pumping head and a 370,000-barrel tank farm in La Amarga Chica, which enabled the transport of up to **160,000 barrels per day to Chile and to the Luján de Cuyo refining complex**[xviii].

3. **Duplicar Plus: In March 2025, Oldelval inaugurated the Duplicar Plus project, one of the most important expansions for the evacuation of shale oil to the Atlantic**. With an investment of approximately USD 1,400 million, the work increased the capacity of the system that connects the Neuquén Basin with Puerto Rosales, located in

Figure 18. Transportation of oil from the Neuquén Basin. Extensions in progress



Source: Deloitte Econosignal.

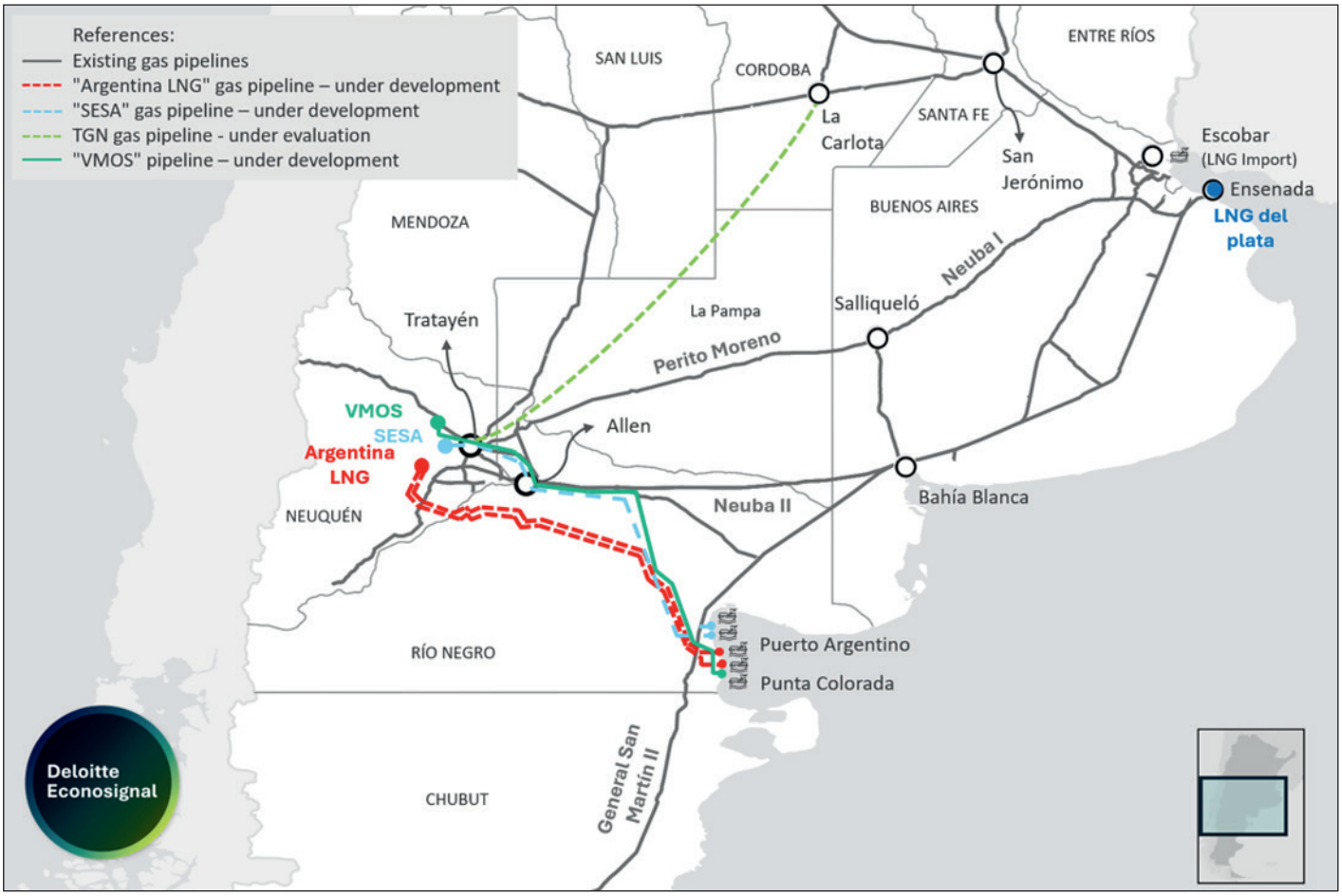
the province of Buenos Aires, from its **normal capacity of 225 thousand barrels to a maximum of 540 thousand barrels per day**, allowing to unblock a key bottleneck for crude oil exports. A year later, the pipeline was already operating at 95% capacity. Faced with the rapid saturation of the capacity incorporated by Duplicar Plus, Oldelval moved forward with a technical expansion of the system as a temporary solution until the entry into operation of VMOS, according to the company's CEO in an interview with EconoJournal. The initiative is based on the repowering of four pumping stations and the use of friction-reducing polymers on the Allen-Atlantic coast corridor, with the aim of adding up to 200,000 additional barrels per day of evacuation capacity[xix xx].

4 **Duplicar Norte: In parallel, Oldelval also confirmed the Duplicar Norte (North Hub) project**, a USD 380 million project aimed at reinforcing the evacuation of crude oil from the north of Vaca Muerta. The pipeline will be 207 kilometers and 24 inches, will connect Puesto Hernández with Allen and will be integrated into the Oldelval trunk system and the VMOS. The project will advance under *ship-or-pay* contracts with Pluspetrol, Chevron, Tecpetrol and Gas y Petróleo del Neuquén, with early start-up scheduled for the end of 2026 and full operation during the first quarter of 2027. Sectoral estimates place their **initial evacuation capacity at around 220,000 additional barrels per day**[xxi].

5 **Vaca Muerta Oil Sur (VMOS): The Vaca Muerta Oil Sur (VMOS) project, with an investment of close to USD 3,000 million, is one of the main energy infrastructure works in the country and aims to increase the volume of shale oil evacuation from the Neuquén Basin to international markets.** The system includes a 437 km 30" pipeline between Allen and Punta Colorada, in Río Negro, along with storage, pumping stations and a maritime terminal with offshore monobuoys for large vessels on the coasts of the Gulf of San Matías. It was approved under the RIGI as a Long-Term Strategic Export Project with a gradual development: **an initial phase of close to 170,000 barrels per day by the end of 2026**, a second stage of around **390,000 in 2027** and a subsequent expansion to **550,000 in 2028**, with **the potential to reach 700,000** depending on the evolution of production[xxii].

5.2. Natural Gas Infrastructure and Market Development: Pipelines and LNG Projects

Figure 19. Transportation of hydrocarbons from the Neuquén Basin and expansions



Source: Deloitte Econosignal.

1. **Perito Moreno Gas Pipeline:** In natural gas, one of the most relevant milestones was the commissioning of the first section of the current **Perito Moreno Gas Pipeline, inaugurated in July 2023**. The 573-kilometer pipeline between Tratayén, in Neuquén, and Salliqueló, in Buenos Aires, made it possible to expand the evacuation of gas from Vaca Muerta to the main consumption centers. In the first stage, it transported around **11 MMm³/d**, although its capacity was increased with the incorporation of compressor plants. The Tratayén plant was commissioned in July 2024 and the Salliqueló plant in October of the same year, allowing the effective capacity of the system to be brought to levels close to **21 MMm³/d**[xxiii].

2. **Perito Moreno Gas Pipeline Expansion: The expansion of the system would not be exhausted at that first stage.** Originally, it was contemplated to extend the gas pipeline in a second section to San Jerónimo, Santa Fe. More recently, the focus shifted to the **expansion of the capacity of the existing first section through new compressor plants and technical adaptations**. TGS presented the private initiative in June 2024 and was awarded in **October 2025 for the Expansion of Section I of the Perito Moreno Gas Pipeline between Tratayén and Salliqueló**. The project, later **approved under the RIGI in May 2026** through Resolution 676/2026, contemplates an **investment of close to USD 550 million, plus complementary works for around USD 220 million** in the regulated TGS system. The work is already underway and is expected to be ready for the **winter of 2027**. **It will allow the addition of an additional 14 MMm³/d, taking the capacity of the system from 21 to 35 MMm³/d**, and will facilitate the supply of the GBA, the Littoral and the north of the country with incremental gas from Vaca Muerta, reducing LNG imports[xxiv].

3. **New Neuquén-Córdoba gas pipeline: TGN is evaluating the construction of a new gas pipeline of approximately 750 km between Tratayén (Neuquén) and La Carlota (Córdoba) with the aim of increasing the capacity to evacuate gas from Vaca Muerta to the country's main consumption centers and export markets.** The project is currently in the basic engineering stage, and the company could adopt the final investment decision (FID) during the second half of 2026, conditional on securing demand commitments of between **13 and 15 MMm³/d**, a volume considered necessary to make the work economically viable. The pipeline would have an initial capacity of close to **20 MMm³/d**, with possibilities for future expansion. If completed, construction could begin in 2027 and the entry into operation would be estimated between **2028 and 2029**. The work would strengthen the supply of the center, north and coast of the country, complement the reversal of the Northern Gas Pipeline, supply new industrial and mining projects, and potentially enable greater regional exports, particularly to Brazil[xxv].

4. **Northern Gas Pipeline Reversal:** Also in 2024, the **reversal of the Northern Gas Pipeline** was completed, a key work to replace gas imported from Bolivia with gas produced in Vaca Muerta and supply the center and north of the country. The project required an investment of **USD 740 million**, of which approximately **USD 540 million** came from a CAF loan. The work included the construction of **122 kilometers** of gas pipeline, **62 kilometers** of loops and the reversal of four compressor plants in Córdoba, Santiago del Estero and Salta. With this, the system was able to transport up to **19 MMm³/d** to the northern provinces, with a direct impact on residential, industrial and mining supply. **The reversal of the Northern Gas Pipeline also has regional strategic relevance: it made it possible to replace natural gas imports from Bolivia, which are more expensive than local production, and opened the possibility of using existing infrastructure to export Argentine gas to Brazil.** This is particularly relevant because the Bolivia-Brazil Gas Pipeline, built in the 1990s to meet Brazil's growing energy needs amid recurrent hydrological constraints and increased reliance on thermal power generation, is currently operating below capacity due to the decline in Bolivian gas production[xxvi].

5. **Exporting Natural Gas to Brazil: To export natural gas from Vaca Muerta to Brazil, one immediate alternative is to utilize Bolivia's existing pipeline network,** a route that was successfully tested in April 2025. However, **this option depends on tolls, regulatory agreements and stability in a third country, in addition to requiring internal expansions in Argentina, with investments estimated between USD 2,900 million and USD 3,100 million**. Among the structural alternatives, the **connection via Uruguayana, in Brazil, appears to be one of the most attractive options, since it would allow direct integration with Argentina and avoid regional intermediaries.** However, it requires completing works towards Porto Alegre and expanding the Argentine system in the Paso de los Libres area, with an **estimated investment of between USD 3,900 million and USD 4,900 million**. A corridor via Paraguay is also being analyzed**, which would require a new gas pipeline of about 1,050 km and an investment of close to USD 5,400 million, although it faces greater challenges in financing**, scale and local demand. The primary challenge was not only technical, but also commercial, requiring the development of both physical infrastructure and viable export markets. **Southern Brazil has a strongly hydroelectric energy matrix, so the demand for gas for generation can be volatile depending on the rainfall regime**. For this reason, financing long-term infrastructure projects would depend on securing firm off-take agreements at competitive prices, preferably supported by stable industrial demand rather than occasional sales aimed at meeting peak thermal generation requirements[xxvii].

6 **Southern Energy S.A or SESA (LNG): The next major structural step in the development of Argentina's natural gas sector is associated with the advancement of Liquefied Natural Gas (LNG) projects.** Southern Energy, comprised of PAE, YPF, Pampa Energía, Harbour Energy and Golar LNG, has been approved under RIGI for a floating liquefaction project in the San Matías Gulf, Río Negro. The scheme includes **two liquefiing vessels: the Hilli Episeyo**, of Golar LNG with a capacity **of 2.45 million tons per year (Mta)** of LNG, equivalent to **11.5 MMm³/d of natural gas**, which is expected to start operations **at the end of 2027** and the second vessel originally named **MKII,** later renamed **Esperanza**, with a capacity of **3.5 Mta**, equivalent to almost **16 MMm³/d** and is expected to start **operating by the end of 2028**. With both vessels operational, the combined capacity would reach around **6 Mta of LNG, equivalent to almost 27 MMm³/d of natural gas**. To supply them continuously, the project requires, in a first stage, **connecting to the San Martín Gas Pipeline**, using the existing capacity of the Argentine transport system during the months of lower local demand. Subsequently, it contemplates the construction of the **Tratayén-San Antonio Oeste Dedicated Gas Pipeline (also known as the San Matías Gas Pipeline),** approved under the RIGI, with an estimated investment of **USD 1,300 million**, an extension of close to **480 km** and a transport capacity of approximately **27 MMm³/d**. The pipeline will extend from Tratayén, Neuquén, to the San Antonio Oeste Compressor Station, Río Negro, and then join the additional **1.5 km** stretch to near Fuerte Argentino, located on the Rio Negro coast of the San Matías Gulf, thus supplying Southern Energy's LNG export scheme. It is expected **to be completed in April 2028**[xxviii].

In terms of trade, the most relevant advance was the signing of Argentina's first firm long-term LNG export contract. In March 2026, Southern Energy S.A (SESA) agreed with Germany's SEFE (Securing Energy for Europe) to sell **2 Mta of LNG over eight years**, with deliveries expected from **the end of 2027** under FOB. That volume represents more than **80% of the capacity of the Hilli Episeyo**, the first liquefaction vessel of the project, and about a third of the planned joint capacity with two floating units (**6 Mta**). The agreement serves as an anchor contract for the first stage of the project and constitutes a key signal for the financing and insertion of Argentina as a new global LNG supplier[xxix]. This progress is supported by **Resolution 559/2025**, published on May 5, 2025, which approved Southern Energy's accession **to RIGI as a Long-Term Strategic Export Project** within the oil and gas sector. The initial stage of **1.5-2.2 Mta of LNG** contemplates a total estimated investment of **USD 6,878 million** and a computable investment within the RIGI of **USD 2,825 million** in the next 10 years.

7 **Argentina LNG (LNG):** In parallel, YPF is moving forward with **Argentina LNG**, an integrated project together with **ENI** and **XRG,** ADNOC's international arm, which contemplates an estimated cumulative investment of **USD 51,000 million**, which would make it the largest private investment in Argentine history and the largest-scale project presented under the Incentive Regime for Large Investments (RIGI) in August 2026. The priority phase contemplates an initial capacity of **12 Mtpa of LNG**, through two floating liquefaction units of **6 Mtpa each**, and integrates production, treatment, transport and liquefaction of gas from Vaca Muerta. The final investment decision (FID) is expected in 2026, with potential exports starting in 2030 or 2031. For this stage, YPF plans to seek project financing while the incorporation of ENI and XRG provides technical expertise, financial scale and global commercial capacity. Italy'**s ENI has a track record in LNG projects in Congo and Mozambique**, while **XRG/ADNOC adds international presence and access to markets in Asia and the Middle East**. Unlike Southern Energy, where there is already a firm sales contract with SEFE, in Argentina LNG the commercial progress is supported for now by the incorporation of strategic partners and the financial structuring of the project. YPF believes that Argentine LNG could be more competitive than U.S. LNG to supply Asia, although less competitive in the European market[xxx].

8 **LNG del Plata (LNG):** On the other hand, **Camuzzi Gas Inversora** signed a Memorandum of Understanding (MoU) in April 2026 with **Vitol**, one of the largest global energy traders, for the **"LNG del Plata"** project. It contemplates an investment of **USD 3,900 million over 20 years**, a **capacity of at least 2.4 Mta** and a dual model: **exporting LNG during months of lower domestic demand** and reinforcing domestic supply in winter. **The agreement provides that Vitol can buy up to 100% of the production through a long-term offtake contract** and evaluate an equity stake in the project. This is not yet equivalent to a firm contract such as the SEFE-SESA, but it does represent a relevant commercial signal because it adds a global trader with the capacity to place cargoes in different markets. The schedule foresees that the preliminary works will begin during 2026, with the **aim of reaching commercial operation by the beginning of 2028**. The plan includes the installation of a liquefaction ship and an offshore platform off the coast of Ensenada, connected by an underwater pipeline of approximately 10 kilometers. The company has already expressed its intention to apply for entry into the RIGI.[xxxi].

5.3. Infrastructure and commercialization of natural gas liquids (NGLs)

1. **Bahía Blanca Pipeline (NGLs):** In parallel to oil and natural gas transportation projects, investments aimed at monetizing natural gas liquids associated with the development of Vaca Muerta also began to gain relevance. In this segment, two initiatives stand out. In March 2026, **TGS announced an NGLs (*Natural Gas Liquids*) project** for approximately USD 3,000 million, which includes **the construction of: processing facilities in Tratayén, a 573 km pipeline to Bahía Blanca, fractionation and storage plants and port works for export**. The work would have an **estimated execution period of 45 months** and could generate exports of around USD 1,200 million per year and create 4,000 direct jobs and 15,000 indirect jobs during construction[xxxii].

2. **Fractionation in Bahía Blanca (NGLs):** On the other hand, **Compañía Mega inaugurated in April 2026 its new fractionation train (NTF) in Bahía Blanca**, with an investment of USD 260 million that will increase the production of natural gas liquids by 20% in its first stage and up to 50%. In addition, under the RIGI, it presented **a second stage of expansion for USD 360 million, aimed at expanding the separation, transport and fractionation of NGLs**. Mega's RIGI project would increase the company's total production by about 27% and add more than 500,000 tons per year of products such as ethane, propane, butane and natural gasoline. Of the additional volume, about 80% would be destined for export, mainly LPG and natural gasoline, while the remaining 20% would go to the domestic market, especially as ethane for the local petrochemical industry. These investments show that the infrastructure needed for Vaca Muerta is not limited to evacuating oil and dry gas, but also includes value capture in propane, butane, natural gasoline and ethane, strengthening the sector's export and petrochemical profile[xxxiii].

Together, these projects show that Vaca Muerta's gas development no longer depends solely on the productivity of wells, but on the ability to build an infrastructure network that connects production to markets. The Perito Moreno Gas Pipeline, the reversal of the Northern Gas Pipeline, the transportation expansions and the LNG and NGL projects configure a new stage for the sector, in which infrastructure becomes the main enabler of productive growth, import substitution and export expansion.

6. Impact on investment, employment, value added and exports in Argentina

The more favorable regulatory framework for investment strengthened Argentina's position as a prospective energy exporter, supported by the development of Vaca Muerta's unconventional resources. **This potential has been progressively realized through a process characterized by successive investment cycles, productivity gains, and the expansion of critical infrastructure**. In recent years, this outlook has gained further momentum with the implementation of the Bases Law, greater predictability for hydrocarbon exports, and the launch of strategic projects under the RIGI framework.

6.1. Investment

Initially, the RIGI applied to the Oil & Gas sector was mainly associated with the infrastructure necessary to transform Vaca Muerta's incremental production into sustainable exports. Within this framework, the projects approved or presented under the regime were aimed at resolving bottlenecks in the transportation, evacuation, storage, liquefaction and export of oil and natural gas, such as **VMOS, Southern Energy, the expansion of the Perito Moreno gas pipeline, the San Matías Gas Pipeline and Argentina LNG, already detailed in the infrastructure section.**

Figure 20. Major Oil & Gas projects linked to RIGI

	Project	Sector	Segment	Stage	Company	USD Million	Status	Approval / Postulation Date	Province
1	**Vaca Muerta Oil Sur (VMOS)**	Oil	Midstream	Transportation	YPF S.A. - Pan American Energy - Vista Energy - Pampa Energía - Pluspetrol - Chevron - Tecpetrol S.A.	2,900	Approved	20/03/2025	Rio Negro
2	**Southern Energy**	Gas	Midstream	Transportation	Pan American Energy - YPF S.A. - Pampa Energía - Harbour Energy - Golar LNG	15,156	Approved	29/04/2025	Rio Negro
3	**Ampliación Gasoducto Perito Moreno**	Gas	Midstream	Transportation	Transportadora de Gas del Sur S.A.	550	Approved	12/05/2026	La Pampa
4	**Gasoducto San Matias**	Gas	Midstream	Transportation	Pan American Energy	1,300	Approved	25/06/2026	Rio Negro / Neuquén
5	**Rincón de Aranda**	Oil & Gas	Upstream	Exploration	Pampa Energía	4,500	Approved	30/06/2026	Neuquén
6	**Mega**	Gas	Downstream	Petrochemicals	YPF S.A. - Petrobras - Dow	360	Approved	26/08/2026	Neuquén
7	**Fértil Pampa**	Gas	Downstream	Fertilizers	Pampa Energía	2,700	Approved	31/07/2026	Buenos Aires
8	**Bajo del Choique - La Invernada**	Oil & Gas	Upstream	Exploration	Pluspetrol - Gas y Petróleo del Neuquén S.A.	12,000	Under Review	24/04/2025	Neuquén
9	**Duplicar Norte**	Oil	Midstream	Transportation	Oldelval	380	Under Review	21/07/2025	Neuquén
10	**Los Toldos II Este**	Oil	Upstream	Production	Tecpetrol S.A. - Gas y Petróleo del Neuquén s.A.	2,400	Under Review	06/04/2026	Neuquén
11	**LILI Oil**	Oil	Upstream	Exploration	YPF S.A.	25,000	Under Review	15/05/2026	Neuquén
12	**Loma Jarillosa Este y Puesto Silva Oeste**	Oil	Upstream	Exploration	GeoPark - Gas y Petróleo del Neuquén S.A.	1,000	Under Review	15/05/2026	Neuquén
13	**PAE - Cerro Dragón**	Oil	Upstream	Exploration	Pan American Energy (PAE)	680	Under Review	01/06/2026	Chubut
14	**El Trapial**	Oil	Upstream	Exploration	Chevron	13,800	Under Review	02/06/2026	Neuquén
15	**Bandurria Norte**	Oil	Upstream	Production	Vista	5,800	Under Review	21/07/2026	Neuquén

Source: Econosignal, based on various sources.

However, **the scope of the regime was significantly expanded in February 2026**. Through Decree 105/2026, published in the Official Gazette on February 19, 2026, the Executive Branch extended the deadline for joining the RIGI by one year, until July 8, 2027, and incorporated new upstream oil and gas developments. **The amendment expressly included the exploitation and production of new onshore liquid and gaseous hydrocarbon projects, namely developments located in areas that had not witnessed significant activity at the time the Bases Law was enacted and where no investments in exploitation or production had been made** when the application for inclusion was submitted. For these onshore developments, the minimum investment threshold was set at USD 600 million, while the threshold for offshore exploration, exploitation, and production projects was reduced from USD 600 million to USD 200 million.

Among the first upstream projects submitted under the regime is **Pampa Energía's Rincón de Aranda project,** with an estimated investment exceeding **USD 4.5 billion in oil production facilities**, processing plants, and oil and gas pipeline infrastructure in Vaca Muerta. Another project presented was **Los Toldos II Este, developed by Tecpetrol and Gas y Petróleo del Neuquén, which contemplates an initial investment of approximately USD 2.4 billion through 2028,** the drilling of around 380 wells, and a production target of 70,000 barrels per day.

Among the large-scale projects still under evaluation within the RIGI framework is **Bajo del Choique–La Invernada, submitted by Pluspetrol and Gas y Petróleo del Neuquén (GyP).** The initiative envisages investments of nearly **USD 12 billion over the next 25 years** to develop one of the blocks acquired from ExxonMobil in Vaca Muerta. The project includes the drilling of more than 600 wells, the construction of four processing plants, and the development of new oil and gas transportation infrastructure, with the objective of reaching production of 100,000 barrels of oil per day and up to 12 million cubic meters of gas per day at its peak development stage[xxxiv].

LLL Oil also stands out, promoted by **YPF**, which with a projected investment of approximately **USD 25,000 million** is positioned as one of the largest hydrocarbon projects presented to the regime. The development encompasses a set of contiguous blocks of Vaca Muerta aimed at the production of unconventional oil and is expected to exceed **240,000 barrels per day** by the beginning of the next decade, supported by a campaign of more than **1,000 wells**[xxxv].

Among the relatively smaller-scale projects, but equally relevant for the productive expansion of the basin, are **Loma Jarillosa Este and Puesto Silva Oeste**, presented by **GeoPark together with**, with an estimated **investment of around USD 1,000 million** for the development of shale oil resources in the north of Neuquén.

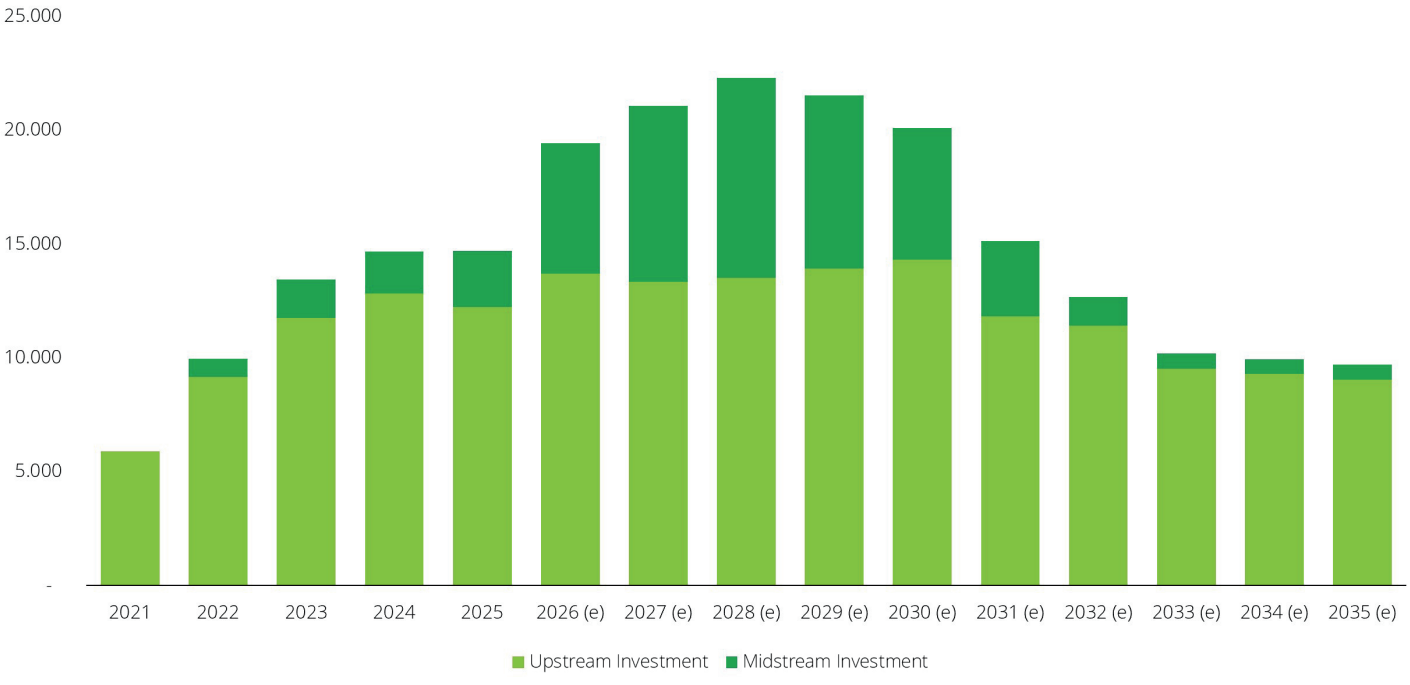
Likewise, **El Trapial**, operated by **Chevron**, appears among the most ambitious initiatives still in evaluation. Different estimates in the sector place the planned investment at over **USD 10,000 million**, aimed at accelerating the development of one of the most important oil assets in the province of Neuquén after the acquisition of the area from TotalEnergies.

In parallel, other companies are moving forward with projects linked to the development of Vaca Muerta, such as **Bandurria Norte**, **PAE-Cerro Dragón** and various initiatives associated with hydrocarbon transportation, processing and evacuation infrastructure.

Within the *downstream segment*, Pampa Energía's granulated urea plant in Bahía Blanca was recently incorporated into the universe of projects associated with RIGI. The project entails an investment of approximately **USD 2.7 billion** and is expected to become one of the largest fertilizer production complexes in Latin America, with the capacity to produce **2.1 million tons of urea per year** using natural gas from Vaca Muerta. Scheduled to begin operations by **the end of 2029**, the facility will add value to domestic gas production and is expected to generate around **USD 1 billion annually** through a combination of import substitution and export revenues. Given its scale, the plant could consume approximately **1.3 billion m³ of natural gas per year** (equivalent to roughly **3.5 MMm³/d**), positioning it as one of the most significant projects for the industrialization of Vaca Muerta gas and broadening the sector's economic impact beyond upstream hydrocarbon production[xxxvi].

These projects, together with the transportation and evacuation infrastructure already described, represent not only a significant opportunity to expand exports but also to generate employment, stimulate demand for local suppliers, and create value added across multiple stages of the energy value chain. In this context, assessing the impact of the sector's development on exports, employment, and GDP is essential to understanding the contribution that Vaca Muerta could make to the Argentine economy, particularly after more than a decade during which external constraints limited the country's ability to achieve sustained economic growth.

Figure 21. Exploitation and exploration investments in the hydrocarbons sector



Source: Deloitte Econosignal.

In the coming years, **upstream investment in Vaca Muerta could enter a new phase of expansion**. Private-sector and official estimates place drilling and production capital expenditures for 2026 at approximately **USD 12-14 billion**, above 2025 levels. Industry leaders estimate that increasing production to **1.5 million barrels per day** by the end of the decade would require annual investments of around **USD 19 billion**, including drilling, completion activities, infrastructure, and value-chain integration. In this context, the challenge is no longer limited to expanding transportation capacity but also to sustaining a steadily growing pace of drilling, completions, and surface facilities capable of transforming Vaca Muerta's geological potential into exportable production. The extension of RIGI benefits to upstream activities further supports this process by providing large-scale projects with fiscal, regulatory, and foreign-exchange stability. Under this scenario, **average annual upstream investment of nearly USD 12 billion could be sustained through 2035**, complemented by roughly **USD 4.2 billion per year in midstream infrastructure projects**, including transportation, processing, liquefaction, storage, and export facilities. As a result, **total annual investment in the sector could exceed USD 20 billion by 2030**, accumulating more than **USD 160 billion over the next decade** and providing the capital required to sustain the hydrocarbon sector's planned production and export expansion.[xxxvii]

To assess the impact of this development on these variables, this report employs Deloitte's Computable General Equilibrium (DCGE) model (see Annex 1). This framework enables a comprehensive evaluation of the interactions among sectors, economic agents, and markets, as well as the estimation of the macroeconomic and sectoral effects resulting from an investment shock. In this case, the model is used to project the potential evolution of employment, exports, and GDP under a scenario of increased investment in the hydrocarbon sector, particularly that associated with infrastructure development, unconventional resource production, and expanded export capacity.

First, **the recent evolution of the sector's production, employment, and exports will be examined**, with particular emphasis on the transformation driven by Vaca Muerta. Next, **the trajectory of these variables will be assessed under a scenario characterized by increased investment and the execution of the planned projects**. Finally, **the aggregate impact of this investment shock on economic growth will be quantified**, taking into account the strategic role that the hydrocarbon sector could play as a major source of foreign exchange generation for Argentina.[xxxviii]

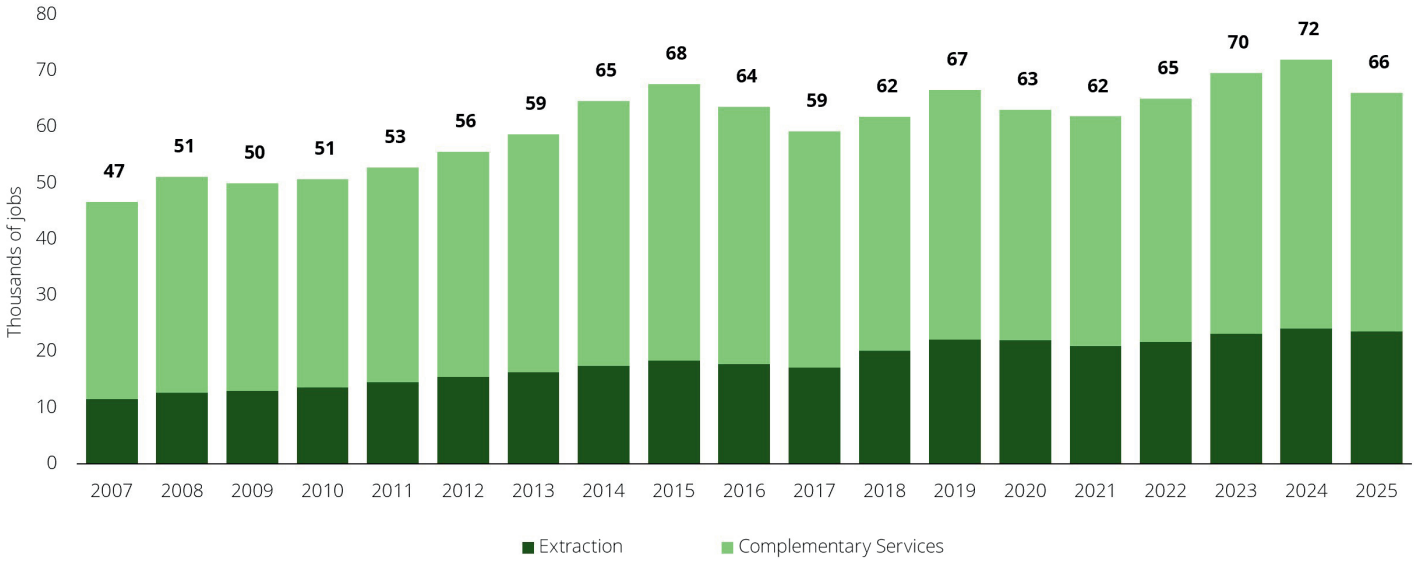
6.2. Employment

The Oil & Gas sector, much like mining, is highly capital-intensive but also relies on a specialized workforce throughout its value chain. In the case of Vaca Muerta, the expansion of unconventional resources requires technical and professional profiles associated with drilling, hydraulic fracturing, plant operations, transportation, logistics, safety, environmental management, industrial maintenance, engineering, automation, and specialized services, among others. As a result, the sector's employment impact extends well beyond direct jobs in exploration and production, generating demand across a broad network of industrial, technological, logistics, and service providers[xxxix].

In Argentina, the development of Vaca Muerta raised the relevance of hydrocarbon employment within the formal labor market. Based on data from the Ministry of Labor, **formal employment in the *upstream* grew 30.3% between 2010 and 2025, compared to an increase of 11.1% in the average of the economy**. **By the end of 2025, gas and oil production reached 66 thousand formal workers, out of a total of 6.7 million registered private wage earners**, equivalent to approximately 1.0% of national private formal employment[xl].

The employment dynamics of the sector exhibit a strong territorial concentration in the main producing provinces. **In 2025, Neuquén recorded the largest number of upstream jobs, with 25.6 thousand registered workers, accounting for approximately 39% of total sectoral employment nationwide, followed by Chubut, Santa Cruz, and Mendoza.** This distribution reflects both the central role of Vaca Muerta in the sector's current growth cycle and the continued importance of conventional basins, which still support a significant employment base despite differences in productivity levels and labor requirements. **Looking at the composition of employment by activity, as shown in Figure 22, oil and gas support services (service activities related to oil and gas extraction, excluding prospecting activities) accounted for 64.4% of total sectoral employment in 2025, while crude oil and natural gas extraction activities represented the remaining 35.6%.**

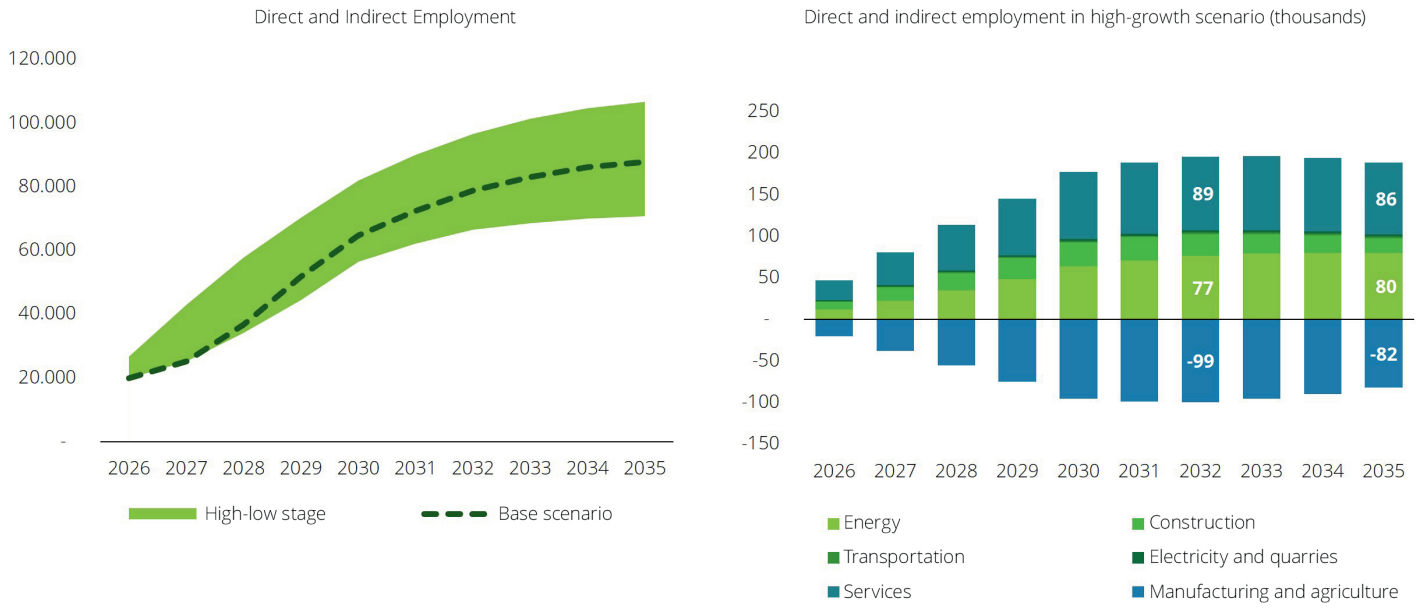
Figure 22. Number of employees registered in the Oil & Gas sector per year



Source: Econosignal, based on the Secretariat of Labor, OEDE.

A particular feature of the hydrocarbon sector is that direct employment accounts for only a portion of its overall economic impact. The development of Vaca Muerta depends on a broad value chain encompassing engineering, construction, metalworking, transportation, maintenance, oilfield services, sand supply, chemicals, water management, equipment manufacturing, pipelines, treatment facilities, and professional services. **According to the Argentine Institute of Oil and Gas (IAPG), the 37 leading oil and gas companies are supplied by nearly 10,000 vendor firms, approximately 78% of which are SMEs,** highlighting the sector's capacity to stimulate economic activity and employment well beyond the production fields themselves[xli].

Figure 23. Evolution of employment generated by Vaca Muerta and projections 2026-2035



Source: Deloitte Econosignal.

The multiplier effect is also relevant. The IAPG estimates that each direct job generates another within the sector and 5.1 additional jobs in related activities, such as transport, construction, hospitality, commerce and professional services. Projections forward reinforce this logic. **According to estimates based on the IAPG report, the development of Vaca Muerta could mobilize between 180,000 and 240,000 direct and indirect workers in its stage of greatest expansion, with peaks of up to 36,000 highly specialized direct jobs**. The greatest labor demand would be concentrated in the stage of investment and construction of infrastructure, including drilling wells, laying pipelines, assembly of treatment plants, roads, civil works and large-scale logistics[xlii].

Based on our general equilibrium model, we estimate that by 2035 increased investment and production in hydrocarbons **would generate around 87.7 thousand additional net direct and indirect jobs in the baseline scenario at the country level and 106.6 thousand in the high growth scenario.**

At the disaggregated level, employment in the energy sector is expected to increase by **56,000 workers** in the baseline scenario and by **80,000 workers** in the high-growth scenario. On the other hand, general equilibrium model simulations suggest that the expansion of Vaca Muerta would drive a reallocation of resources towards activities related to the energy sector.

As a result, some of the employment currently located in traditional tradable sectors would shift to energy-related activities. In the base scenario, by 2035 employment would be reduced by **20.3 thousand positions in the agricultural sector** and by **34.4 thousand positions in the manufacturing industry**. However, even considering these sectoral shifts, the net effect on aggregate employment remains positive. If this reallocation mechanism is excluded, the increase in direct and indirect employment would reach **142.5 thousand jobs** in the base scenario and **188.6 thousand jobs** in the high production scenario.

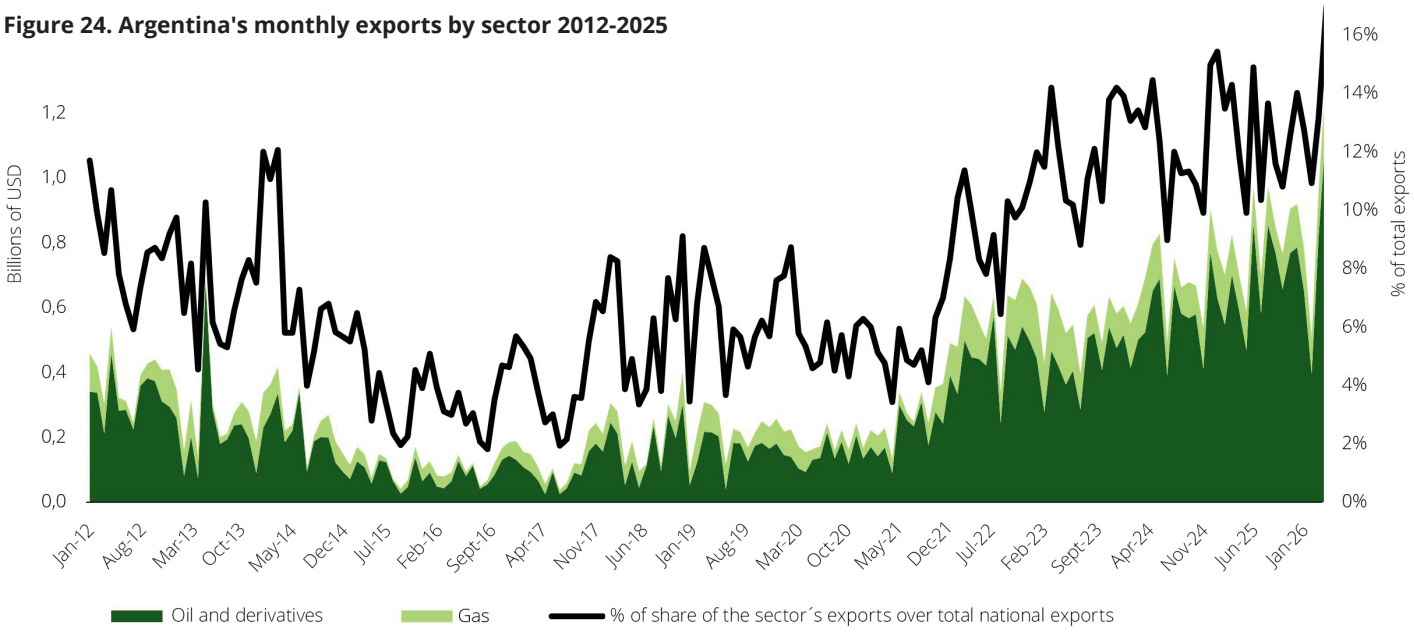
Likewise, under the high-growth scenario, labor demand in the construction sector would reach **28,700 workers at its peak**, while transportation activities would generate approximately **2,600 jobs**. In the services sector, including hospitality, retail trade, telecommunications, real estate activities, and other business services, employment demand would rise to nearly **86,000 workers**. Overall, these results suggest that **each additional job created in the energy sector supports the generation of approximately 1.4 jobs in the rest of the economy on a gross basis**, highlighting the sector's significant spillover effects on economic activity and employment.

In summary, the development of Vaca Muerta has the potential to become a major driver of formal, high-skilled employment. However, the magnitude of its impact will depend on the ability to sustain investment, expand infrastructure, strengthen local supplier networks, and anticipate evolving workforce skill requirements. In this context, assessing the sector's potential contribution to employment is essential not only to quantify its direct effects, but also to evaluate its capacity to stimulate value chains, create jobs in producing regions, and increase demand for technical and specialized skills across the Argentine economy.

6.3. Exports

Energy, together with agriculture and mining, account for **61%** of the country's exports, with energy accounting for **13%** of total exports in 2025 (Figure 24), above the average of **10%** observed in the last 5 years.

Figure 24. Argentina's monthly exports by sector 2012-2025

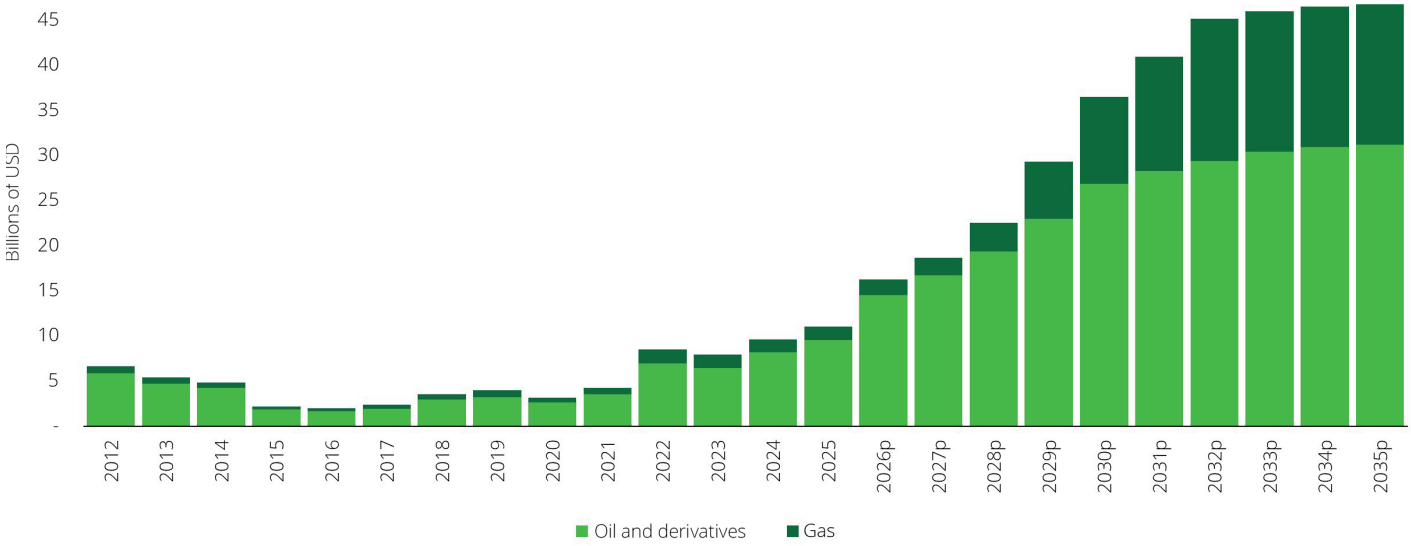


Source: INDEC and Deloitte Econosignal.

Among the sector's main export products during the first five months of 2026 were crude oil (63.2%), fuels for ships and aircraft (13.9%), and natural gas in gaseous form (4.6%). The performance of these products suggests that 2026 could be a record year for hydrocarbon exports. In just the first five months of the year, crude oil exports exceeded half of their total value for all of 2025, reaching more than **USD 3.8 billion** (56.2% of the previous year's total). According to our estimates, hydrocarbon exports could surpass **USD 16.3 billion in 2026**, implying year-on-year growth of approximately **55%** and further strengthening the sector's role as a source of foreign exchange earnings for the Argentine economy.

In this context, if the projected investments in the sector materialize, **hydrocarbon exports could increase from USD 11 billion in 2025 to USD 46.7 billion by 2035**, as illustrated in Figure 25. This would imply an average annual growth rate of approximately **16%** and a more than fourfold increase over the period. At that level, **hydrocarbon exports would exceed the value of Argentina's grain and by-product exports, which totaled approximately USD 35 billion in 2025**, positioning the sector as the country's leading source of export revenues.

Figure 25. Exports of oil, gas and derivatives



Note: The projection was made using the following average prices: barrel of Brent oil: 71 USD/b, Liquefied Natural Gas: USD 10 per MM Btu.

Source: Deloitte Econosignal.

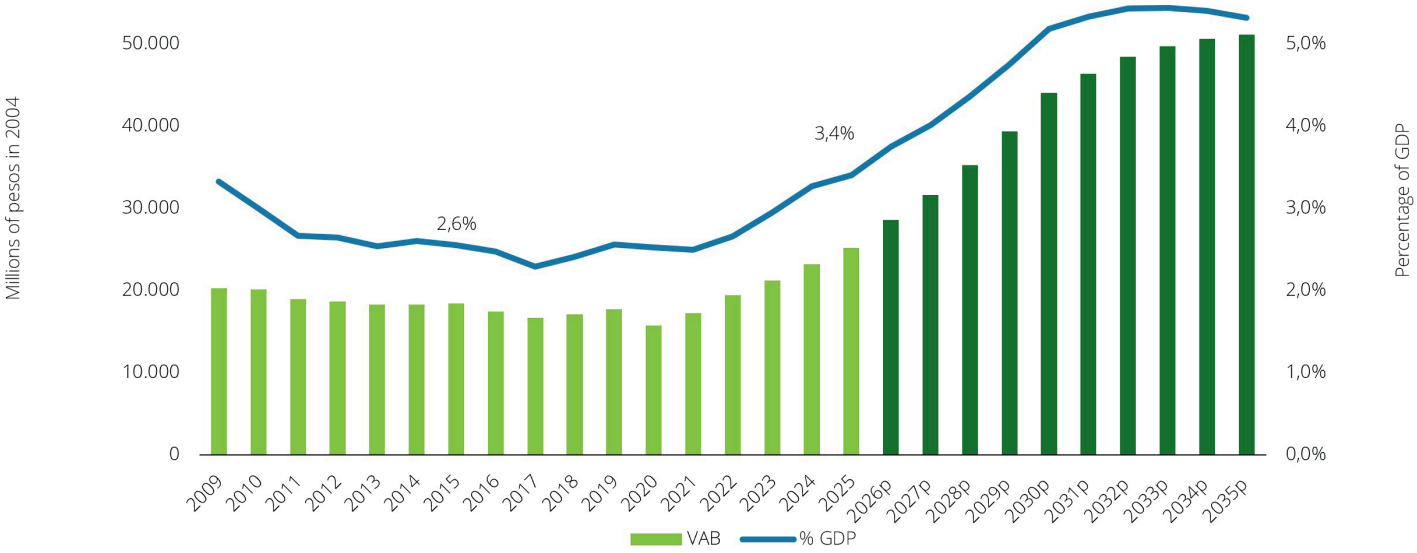
6.4. Economic activity

The hydrocarbon sector has significant potential to increase value added in the Argentine economy, both through its direct impact on the provinces where projects are developed and through its indirect effects on the regions that supply goods, services, infrastructure, and specialized inputs to the industry.

Over the past decade, the sector's gross value added has expanded substantially, with its **contribution to Gross Domestic Product (GDP) increasing from 2.6% in 2015 to 3.4% in 2025**, a gain of 0.8 percentage points. During the same period, while overall GDP grew by 2.5%, the hydrocarbon sector's gross value added increased by more than 36%, highlighting the strong expansion experienced by the industry in recent years.

Based on this trajectory, **the Oil & Gas sector's contribution to GDP could nearly double by 2035, reaching approximately 5.5% of total output**, further reinforcing its role as a key driver of economic activity, investment, exports, and foreign-exchange generation in Argentina.

Figure 26. Gross Value Added (GVA) of the hydrocarbon sector



Source: INDEC and Deloitte Econosignal. The GVA includes the following sectors: Coal and lignite extraction; peat extraction. Crude oil and natural gas extraction; service activities related to oil and gas extraction, except prospecting activities.

The materialization of these projections for the sector would have significant relevance for the Argentine economy, especially in a context in which the country has accumulated 14 years of relative stagnation, with an average annual growth of just 0.3%. This performance was considerably below the average for Latin America and the Caribbean, which reached 1.5% annually in the same period, highlighting the sector's potential contribution to boosting economic activity and reversing a low growth trajectory. For this reason, the country is in the process of rebuilding its macroeconomic stability, which is crucial for the development of the different sectors of the economy. Thus, under a scenario of macroeconomic stability and greater development of the mining sector, **the estimates of the DCGE model indicate that the hydrocarbons sector would contribute up to 0.14 additional percentage points to the average GDP growth rate between 2026 and 2035**.

Estimates indicate that Argentina is facing a unique opportunity, with positive expectations around the three variables analyzed. After many years in which the mining sector had untapped potential**, the development of the sector seems to be taking a new path, in which the impact on employment, exports and the country's growth could be very relevant.** If Argentina begins a process of long-term macroeconomic stability, the opportunities that arise in the development of the mining sector could put the country on a sustainable path of prolonged growth.

7. Legal Framework

Argentina has a long history of hydrocarbon regulation, with a legal framework that has evolved from periods of strong state intervention toward a model more oriented to market mechanisms, private investment, and export development. **This evolution is particularly significant in an industry that is capital-intensive, characterized by high exploration risk, and dependent on sustained long-term investment to expand reserves, increase production, and develop the infrastructure required to support growth.**

The legal framework governing the sector is rooted in **Article 124 of the National Constitution, which recognizes the provinces as the original owners of the natural resources located within their territories**. In the hydrocarbon industry, this principle is complemented by a **royalty-based regime**, under which producing provinces receive a share of the value generated from the extraction of non-renewable resources[xliii]. This arrangement is common across Latin America, where **subsoil resources are generally owned by the State and may be developed by public or private companies through exploration permits, production concessions, and the payment of royalties**. **Law No. 26,197**, commonly known as the **"Short Law"**, enacted in January 2007, reinforced this framework by transferring the administration of hydrocarbon deposits located within provincial jurisdictions to the provinces, including those situated in the seabed and subsoil of the corresponding territorial waters. Since then, provincial governments have played a central role as granting authorities in the **upstream** segment, with responsibility for issuing, supervising, and administering exploration permits and production concessions.

On this basis, the **specific regulatory framework for the sector is structured around the Hydrocarbons Law No. 17,319, enacted in 1967 and still in force with multiple amendments. This regulation regulates the activities of exploration, exploitation, processing, transportation, storage, industrialization and commercialization of hydrocarbons, which can be carried out by state, private or mixed companies.** It also consolidates a concession system in which operators assume the risk of the investment and, once the hydrocarbons have been extracted, acquire the right to transport, industrialize and market them in accordance with current regulations.

Subsequently, **Law 27,007 of 2014 introduced relevant modifications to promote the development of unconventional hydrocarbons**. Among other aspects, it incorporated specific conditions for larger-scale projects, extended concession terms and sought to adapt the legal framework to the investment needs of more capital- and technology-intensive developments. This change was key to laying the regulatory foundations for Vaca Muerta's growth[xliv].

At the same time, the natural gas sector is governed by a specific regulatory framework established under **Law No. 24,076 of 1992**, which regulates the transportation and distribution of natural gas as a national public service. This segment has distinct characteristics, as transportation and distribution operate as **natural monopolies** and are therefore subject to principles of open access, non-discrimination, tariff regulation, and service quality oversight. Regulatory supervision is entrusted to the **National Gas Regulatory Authority (ENARGAS)**, the body responsible for regulating and monitoring the operation of the natural gas system.

In the case of liquefied petroleum gas (LPG), the activity is regulated by Law 26,020, which establishes the framework applicable to its production, fractionation, distribution and marketing. This segment is particularly important to supply homes, businesses and industries that do not have access to natural gas networks, especially in areas far from the main urban centers.

More recently, the **regulatory framework underwent significant change with the approval of Law 27,742, known as the Bases Law, and its regulation through Decree 1057/2024**. These regulations introduce a new paradigm in energy policy, aimed at free competition, efficiency in the allocation of resources, the conclusion of long-term contracts, integration into international trade and the alignment of domestic prices with international references. This **new approach marks a break with previous schemes characterized by price controls, export restrictions and priority of domestic supply as the organizing principle of the sector**. On the other hand, the new framework incorporates as objectives the maximization of hydrocarbon income, the expansion of production and the development of an export profile, while maintaining security of supply criteria.

One of the most significant changes relates to the export regime. **Recent regulatory reforms have established a more liberalized export framework**, under which export operations may proceed unless the competent authority raises objections on technical or economic grounds. This approach seeks to provide greater certainty for long-term investment projects and to facilitate Argentina's integration into international crude oil, natural gas, and liquefied natural gas (LNG) markets[xiv].

Consistent with this approach, the **Large Investment Incentive Regime (RIGI)** has emerged as a key instrument for attracting large-scale projects in strategic sectors, including oil and gas. The regime provides fiscal, customs, foreign-exchange, and regulatory incentives, together with long-term regulatory stability, an especially relevant feature for hydrocarbon investments, which typically require substantial upfront capital expenditures and long development horizons.

At the institutional level, the **Secretariat of Energy, under the Ministry of Economy, serves as the national authority responsible for energy policy, sectoral regulation, and oversight of hydrocarbon-related activities**. Its role is complemented by specialized entities such as **ENARGAS** in the natural gas segment, as well as by the technical, environmental, and safety regulations applicable across the hydrocarbon value chain, including exploration, production, transportation, storage, refining, and commercialization.

In summary, Argentina's legal and regulatory framework combines public ownership of natural resources, provincial administration of hydrocarbon deposits, national oversight of the sector's general regulatory framework, and an increasing orientation toward private investment and international integration. These developments reflect a broader shift in the regulatory model aimed at enhancing competitiveness, expanding energy infrastructure, and promoting export growth. In this context, the availability of vast unconventional resources, particularly in Vaca Muerta, together with a regulatory framework that is gradually converging toward international standards, positions Argentina as a country with growing potential in global energy markets.

8. Conclusion

Argentina has a historic opportunity to transform its hydrocarbon sector into one of the main drivers of economic growth, foreign-exchange generation, and employment over the coming decades. The combination of Vaca Muerta's resource potential, an ambitious infrastructure investment agenda, expanding export markets, and a regulatory framework increasingly oriented toward private investment and international integration creates favorable conditions for a new phase of energy development.

In recent years, the country has regained energy self-sufficiency, reversed the trade deficit, and established itself as one of the most dynamic unconventional hydrocarbon producers outside North America. The next stage will depend on the ability to convert this production growth into a globally competitive export platform through the expansion of pipelines, export terminals, and LNG projects that provide access to major international markets.

If the planned investments materialize, the CGE model simulations point to significant macroeconomic and sectoral impacts. The hydrocarbon sector could contribute up to **0.14 additional percentage points to annual GDP growth between 2026 and 2035**, generate approximately **107,000 new jobs**, increase its share of GDP from **3.4% to 5.5%**, and expand exports from **USD 11 billion in 2025 to USD 46.7 billion by 2035**.

At the same time, crude oil production could reach 1.5 million barrels per day by 2030 and approach 1.7 million barrels per day by 2035, potentially positioning Argentina as the second-largest oil producer in Latin America and elevating its standing among the world's leading producers. Likewise, the development of LNG projects could establish the country as a relevant exporter of liquefied natural gas, significantly expanding its participation in global energy markets.

In summary, if Argentina can maintain macroeconomic stability, consolidate a predictable long-term regulatory environment, and develop the infrastructure required to support production growth, the hydrocarbon sector has the potential to become a transformative force for the national economy. Through higher investment, exports, employment, and foreign-exchange generation, the sector could strengthen the country's external position and help position Argentina among the leading energy exporters in the Western Hemisphere over the next decade.

Annex 1.

Deloitte Computable General Equilibrium Model (DCGE)

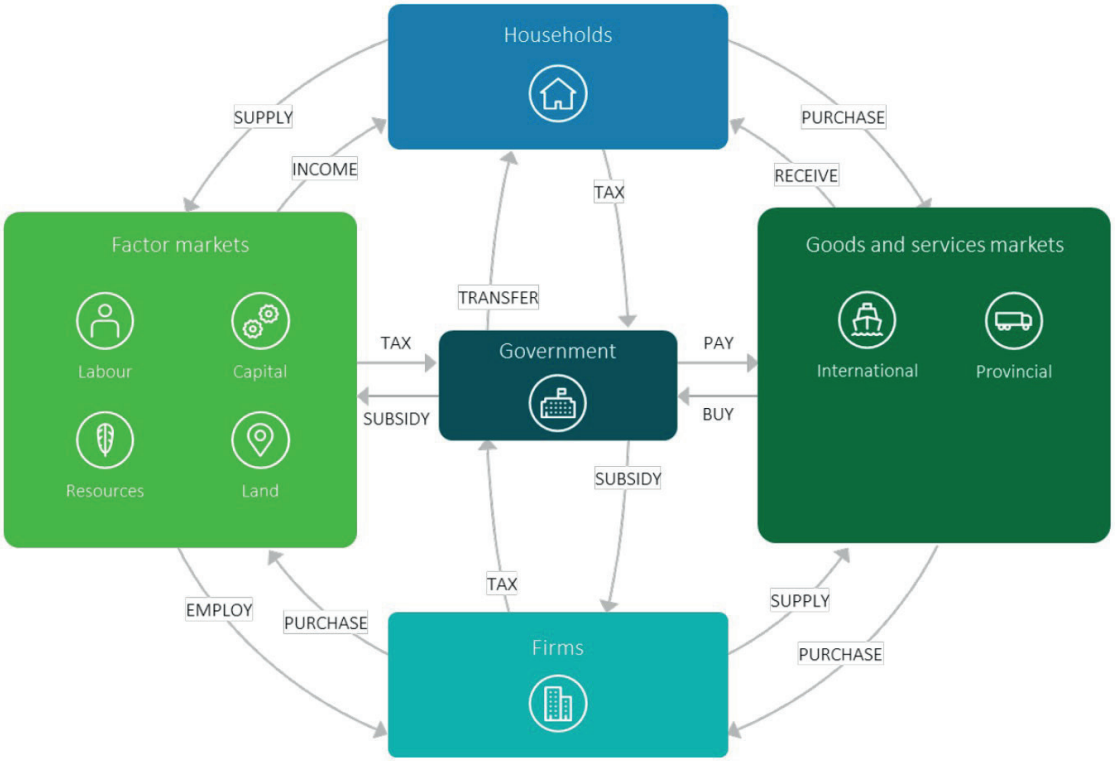
A **Computable General Equilibrium (CGE) model** is an analytical framework that provides a comprehensive representation of the economy and allows the simultaneous interactions among economic agents and markets to be assessed based on explicit assumptions regarding their behavior. Its construction relies on data from official sources, including central banks and national statistical agencies, complemented by information from international organizations.

The model is calibrated to a baseline economic equilibrium and **enables the evaluation of how economic shocks or policy changes generate ripple effects across production, consumption, employment, trade, and investment**, altering relative prices, production costs, trade flows, and sectoral outcomes throughout the economy.

Deloitte's Computable General Equilibrium (DCGE) model is a large-scale, dynamic, multi-regional, and multi-sector framework that incorporates all major components of the economy, including businesses, households, governments, and international trade. The model covers **180 countries** and **65 economic sectors per country**, enabling the analysis of economic impacts at both the national and sectoral levels.

Through this approach, it is possible to estimate the effects of public policies, fiscal measures, regulatory reforms, and investment programs on key economic indicators such as GDP, employment, wages, investment, and consumption. In addition, the model helps identify which sectors, regions, or economies are relatively more likely to benefit from or be affected by changes in economic conditions, public policies, or regulatory frameworks.

Figure 27. Visual representation of the DCGE model



Source: Deloitte Econosignal

Annex 2.

A brief history of export duties on a barrel of oil

Export duties (DEX) on crude oil in Argentina were reintroduced following the collapse of the Convertibility regime through Decree 310/2002,which established an ad valorem export duty rate of **20%** on crude oil exports. Subsequently, Resolution 337/2004 increased the rate to **25%**, while Resolution 532/2004 **introduced a sliding-scale mechanism** linked to international oil prices. Under this regime, the export duty rate remained at 25% when the WTI price was equal to or below USD 32 per barrel and increased progressively to a maximum of 45% when the WTI price reached USD 45 per barrel.

In November 2007, Resolution 394/2007 modified the framework by introducing a system of **variable export duties based on reference and cut-off prices**. Under this scheme, the export duty rate remained at 45% when international oil prices ranged between USD 45 and USD 60.9 per barrel, the latter defined as the reference value. If prices fell below USD 45 per barrel, the enforcement authority was required to establish a new rate within ninety days. Conversely, when prices exceeded the reference value of USD 60.9 per barrel, the export duty was automatically adjusted through a formula linking the international price (IP) to the cut-off value (CV), which was set at USD 42 per barrel. As a result, increases in international oil prices translated into higher export duties, effectively capping the net price received by exporters at approximately **USD 42 per barrel**. Consequently, a substantial share of the windfall gains generated by rising international oil prices was captured by the State through export duties.

Following the partial renationalization of YPF, Resolution 1/2013 of the Ministry of Economy increased the cut-off value from **USD 42/bbl to USD 70/bbl** and the reference value from **USD 60.9/bbl to USD 80/bbl**. This reduced the effective burden of export duties and increased the net price received by exporters. Part of the increase in domestic crude oil prices was passed through to consumers via higher fuel prices, although its impact in local-currency terms was moderated by the exchange-rate appreciation observed during those years.

Following the decline in international oil prices beginning in 2014, the regime was further relaxed through Resolution 803/2014 , issued in October of that year. The measure reduced the reference prices used in the calculation of export duties and established effective rates of **13%, 11.5%, and 10%**, respectively. At the time, policymakers considered that the development of Vaca Muerta required oil prices close to **USD 80 per barrel** to maintain project profitability.

Subsequently, Resolution 1077/2014, issued in December 2014, repealed Resolution 394/2007 and established an export duty rate of **1%** when the reference price (international price minus USD 8) was equal to or below **USD 71/bbl**, while maintaining a sliding-scale mechanism for higher prices. Under this framework, the maximum net price received by exporters remained close to **USD 70 per barrel**.

Following the decline in international oil prices during 2014 and 2015, and within the framework of the domestic fuel-pricing policy implemented by the national government and refiners, the value of the domestic barrel, commonly known as the **"criollo barrel,"** remained above international benchmarks. In fact, the concept of the *criollo barrel* is generally associated with the policy of maintaining domestic crude oil prices above international market levels. Under this framework, Escalante crude traded at approximately **USD 55 per barrel**, while Medanito crude was priced between **USD 67 and USD 68 per barrel**, compared with an average international oil price of **USD 52 per barrel** in 2015. This differential reflected Argentina's relatively high production costs, largely explained by two structural factors: the predominance of mature fields with more than three decades of operation and the growing importance of unconventional resource development.

Consistent with this strategy, an **Oil Production Incentive Program** was introduced in early 2015, under which the national government granted **USD 3 per barrel** to producers that maintained or increased output levels. Additional incentives ranging from **USD 2 to USD 3 per barrel** were provided to companies exporting part of their production and therefore exposed to lower international prices. The program resulted in transfers of approximately **USD 450 million** from the national government to producing companies during 2015.

Following the change in administration and the broader energy-market liberalization process implemented between 2016 and 2018, export duties on crude oil were eliminated. At the same time, domestic crude oil prices gradually converged with international benchmarks, while the various subsidy programs were progressively phased out.

The exchange-rate and fiscal crisis of 2018 led to the reintroduction of export duties through Decree 793/2018, which established a general export duty rate of **12%**, complemented by a cap equivalent to **ARS 4 per U.S. dollar exported** for primary products, including crude oil. Subsequently, **Law 27,541** and **Decree** 58/2019 stipulated that export duties applicable to hydrocarbons and mining could not exceed **8% of the FOB value**.

Following the change in administration and amid the COVID-19 pandemic, **Decree** 488/2020 **simultaneously established a domestic support price for crude oil, commonly referred to as the "criollo barrel",** initially set at USD 45 per barrel to mitigate the collapse in international oil prices and preserve production and investment. **The scheme remained in force between May and August 2020, when it was discontinued following the recovery in global oil prices.** In parallel, the decree introduced a sliding-scale export duty regime linked to Brent crude prices, establishing a 0% rate when Brent was equal to or below USD 45/bbl, an 8% maximum rate when prices reached or exceeded USD 60/bbl, and a polynomial formula for intermediate values.

In 2024, the **Bases Law (Law 27,742)** introduced one of the most significant reforms to Argentina's hydrocarbon regime since the market-oriented reforms of the 1990s. Among other changes, it redefined the objectives of energy policy, incorporated the principles of free markets and free commercialization, granted concessionaires greater freedom to transport, process, industrialize, and export hydrocarbons, and substantially reduced state discretion over foreign-trade operations. The subsequent regulation enacted through **Decree 1057/2024** reinforced this approach by establishing that exports may only be restricted under exceptional circumstances related to domestic supply security, thereby abandoning the longstanding principle that the domestic market should take priority over exports. In practice, this framework also marked the effective end of the *criollo barrel* system. By expanding marketing freedoms, reducing government intervention in price formation, and facilitating exports, the reform encouraged greater alignment between domestic and international crude oil prices.

The export-duty framework established in 2020 remained in effect until the enactment of Decree 59/2026, which modified the regime applicable to conventional oil production. The reform increased the **Base Value** from **USD 45 to USD 65 per barrel** and the **Reference Value** from **USD 60 to USD 80 per barrel**, while maintaining the existing adjustment mechanism and preserving the maximum export duty rate of **8%**.

Footnotes

[i] Based on our own calculations, remaining technically recoverable shale gas resources are estimated at 243.15 Tcf (trillion cubic feet), according to the assessment of the Vaca Muerta Formation published by the Argentine Institute of Oil and Gas (IAPG) in 2025, based on information available as of December 31, 2023. For the purposes of this analysis, a combined level of domestic consumption and exports of 3 Tcf per year is assumed. Regarding oil, 30.17 billion barrels of remaining technically recoverable shale oil resources are considered, based on the estimate prepared by the IAPG and released by the Secretariat of Energy in August 2026. This figure represents an 89% increase compared with the previous estimate of 16.22 billion barrels published by the U.S. Energy Information Administration (EIA) in 2013. It should be noted that these estimates refer to technically recoverable resources rather than proven reserves. To assess the long-term development potential of these resources, a combined level of domestic consumption and exports of 1.2 million barrels per day is assumed for oil. Under these assumptions, the Ministry of Energy's estimates suggest that Argentina's shale gas resources would be sufficient to sustain demand for approximately 68 years under the base-case scenario.
Ministry of Energy. (2026, August 12). *Vaca Muerta increased its oil resources by 89% compared to the last estimates in 2013*. https://www.argentina.gob.ar/noticias/vaca-muerta-aumento-en-un-89-sus-recursos-de-petroleo-respecto-de-las-ultimas-estimaciones
Ministry of Energy. (2025). *Resolution 157/2025*. Government of Argentina.
https://www.argentina.gob.ar/normativa/nacional/norma-411858/texto
U.S. Energy Information Administration (EIA). (2019). *U.S. natural gas production, consumption, and exports set records in 2018*. Today in Energy.
https://www.eia.gov/todayinenergy/detail.php?id=40093
El Economista. (n.d.). *Until 2086 Argentina has gas to export: 63 years*.
https://eleconomista.com.ar/energia/hasta-2086-argentina-tiene-gas-exportar-63-anos-n84201

[ii] Arceo, N., Bersten, L., & Wainer, A. (2022). The evolution of the hydrocarbons sector: Potentialities of the Argentine energy matrix. Buenos Aires: Fundar. https://www.fund.ar.

[iii] Ministry of Energy. *Oil and gas reserves*. Ministry of Economy of the Argentine Nation. https://www.argentina.gob.ar/economia/energia/hidrocarburos/reservas-de-petroleo-y-gas

[iv] MMBTU stands for one million BTUs (British Thermal Units), where the double "M" comes from the combination of the Roman numeral "M" (thousand) repeated to denote one thousand per thousand.

[v] Argentine Chamber of Construction. (2023). *Gas*. https://www.camarco.org.ar/wp-content/uploads/2023/07/17-Gas.pdf

[vi] Commission for Planning and Strategic Coordination of the National Hydrocarbon Investment Plan. (2013). *Resolution 1/2013. Program to Stimulate the Surplus Injection of Natural Gas*. InfoLEG. https://servicios.infoleg.gob.ar/infolegInternet/anexos/205000-209999/208430/texact.htm

[vii] La Nación. (2013, July 16). *YPF signed the final agreement with Chevron to exploit Vaca Muerta*.
https://www.lanacion.com.ar/economia/ypf-firmo-el-acuerdo-final-con-chevron-para-explotar-vaca-muerta-nid1601568/
This agreement was preceded by a Memorandum of Understanding in September 2012 and by preliminary terms and conditions agreements in both December 2012 and May 2013.
YPF. (2012, September 14). YPF signed an agreement with Chevron. https://novedades.ypf.com/Acuerdo-CHEVRON.html
The Andes. (2012, December 19). *YPF and Chevron make official the joint exploitation of Vaca Muerta*.
https://www.losandes.com.ar/chevron-oficializan-explotacion-conjunta-vaca-muerta-686649/
YPF. (2013, May 15). *YPF and Chevron signed the commercial agreement*. https://novedades.ypf.com/Acuerdo-YPF-Chevron.html

[viii] YPF. (2013, August 29). *YPF-Chevron Agreement: For the development of Vaca Muerta* [Presentation to investors]. https://inversores.ypf.com/documents/presentaciones/29-08-2013-Presentacion-YPF.pdf

[ix] ArgenPorts. (2023, July 16). *10 years after the agreement that meant the beginning of the massive development of Vaca Muerta*. https://www.argenports.com/nota/a-10-anos-del-acuerdo-que-significo-el-inicio-del-desarrollo-masivo-de-vaca-muerta/

[x] Acacio, J. A. (2023). *Hydrocarbon production in Argentina: from the recovery of YPF to the development of the Vaca Muerta megaproject. Revista Temas Sociológicos*, (31), 239–269. https://doi.org/10.29344/07196458.32.3254. https://ri.conicet.gov.ar/bitstream/handle/11336/236865/CONICET_Digital_Nro.cab70ae3-b7bb-46da-ab80-8bc9abb487bd_B.pdf?sequence=2

[xi] Ibid (2023).
Decree 929/2013 (2013, July 11). *Investment Promotion Regime for the Exploitation of Hydrocarbons*. https://servicios.infoleg.gob.ar/infolegInternet/anexos/215000-219999/217314/norma.htm

[xii] Legislature of the Province of Neuquén. (2013, August 29). *Law 2867. Agreement between the Province of Neuquén and YPF S.A.* https://www.legislaturaneuquen.gob.ar/svrfiles/Neuleg/normaslegales/pdf/LEY2867.pdf?var=2031049747

[xiii] In April 2025, Vista Energy acquired Petronas' stake in La Amarga Chica and became YPF's partner in the block, which maintained its 50% stake and operation of the asset.

[xiv] YPF. (2014, December 10). *PETRONAS and YPF reached the final agreement to invest 550 million dollars in Vaca Muerta*. https://novedades.ypf.com/PETRONAS-e-YPF-alcanzaron-el-acuerdo-final-para-invertir-550-millones-de-dolares-en-Vaca-Muerta.html
YPF. (2017, April 12). *YPF and Schlumberger signed a partnership agreement for the development of a shale oil pilot in the Bandurria Sur area*. https://edicion.ypf.com/YPFHoy/YPFSalaPrensa/Lists/ComunicadosDePrensa/06-Acuerdo-YPF-Schlumberger.pdf
Shell Argentina. (2020, January 31). *Shell strengthens Vaca Muerta's position through a stake in Bandurria Sur*. https://www.shell.com.ar/prensa/2020-media-releases/shell-fortalece-la-posicion-de-vaca-muerta-mediante-la-participacion-en-bandurria-sur.html
La Nación. (2015, December 15). *YPF and Dow announced an additional investment of US$ 500 million in Vaca Muerta*. https://www.lanacion.com.ar/economia/ypf-y-dow-anunciaron-una-inversion-adicional-de-us-500-millones-en-vaca-muerta-nid1854412/
Tecpetrol. (n.d.). *Fortín de Piedra*. https://www.tecpetrol.com/en/what-we-do/stone-fort/
TotalEnergies. (2017, April 27). *Argentina: Total sanctions the development of Vaca Muerta shale resources and increases its participation*. https://totalenergies.com/media/news/press-releases/argentina-total-sanctions-development-vaca-muerta-shale-resources-and-increases-its-participation
Pampa Energía. (2017, August 1). Agreement for the development of the Rincón del Mangrullo block. https://ri.pampa.com/press-release/acuerdo-para-el-desarrollo-del-bloque-rincon-del-mangrullo/

[xv] Stevens, C. (2017, February 9). *Expert advantage*. The Energy Year. https://theenergyyear.com/articles/expert-advantage/
YPF S.A. (2022). *YPF JPM GEM Conference March 2022* (Investor Presentation). https://inversores.ypf.com/documents/presentaciones/YPF-JPM-GEM-Conference-March-2022.pdf
Argentine Agency for Investment and International Trade. (2020, April). *Investing in Argentina: Oil & gas*. https://occat.cancilleria.gob.ar/userfiles/investing-in-argentina-oilgas-april-2020.pdf

[xvi] Gas Exporting Countries Forum. (2026). *Global Gas Outlook 2055* (10th ed.). GECF. https://www.gecf.org/Portals/0/xBlog/uploads/2026/4/13/2025EditionoftheGGO2055.pdf

[xvii] The degree of use varies over time. In April 2024 it reached 72,000 bpd, 65% of maximum capacity. In July 2024 it reached 83,000 bpd (75%). On the 1st quarter of 2025 it operated at 80% of maximum capacity. In the first half of 2026 it recorded an average of 73,000 bpd.
National Energy Secretariat. National Directorate of Hydrocarbon Transport. *Statistics on the transportation of oil by pipelines*.
Puerto Hernández – Buta Mallin Pipeline. https://estadisticasenergia.mecon.gob.ar/superset/dashboard/138/?standalone=true&native_filters=%28%29
Diario Rio Negro Energía (2025, July 5). *Vaca Muerta consolidates its oil exports to Chile with the Trans-Andean Pipeline*. https://www.rionegro.com.ar/energia/vaca-muerta-consolida-sus-exportaciones-de-petroleo-hacia-chile-con-el-oleoducto-trasandino/
Energetic Rumble. (2026, February 24). *Trans-Andean Pipeline: Crude oil exports reach record levels*. https://runrunenergetico.com/oleoducto-trasandino-exportaciones-de-crudo-llegan-a-niveles-record/

[xviii] From Puesto Hernández, crude oil can be diverted to Chile through OTASA or to the Luján de Cuyo refinery. The Puesto Hernández-Luján de Cuyo connection has a technical capacity of close to 93,500 barrels per day, while the Vaca Muerta Norte system allows the

dispatch of up to 160,000 barrels per day combining both destinations. In practice, the volume sent to Mendoza depends on the use of the Trans-Andean and the refinery's processing demand.

[xix] By the end of 2025, Oldelval had already covered about 85% of the additional capacity incorporated by Duplicar Plus. That equates to about 268,000 barrels per day on top of the 315,000 new barrels, bringing total system usage to approximately 493,000 barrels per day at a capacity of 540,000. By April 2026, some sectoral sources indicated that the system was already operating at 95% of its technical capacity, en about 513,000 barrels per day, leaving a free margin of just 27,000 barrels per day.

[xx] EconoJournal (2026, July 24). *Vaca Muerta: in order not to affect production, Oldelval activates a technical expansion of the oil evacuation system*.
https://econojournal.com.ar/oilgas/vaca-muerta-para-no-afectar-la-produccion-oldelval-activa-una-ampliacion-tecnica-del-sistema-de-evacuacion-de-petroleo/

[xxi] *Oldelval. (2025, July). Oldelval confirmed the execution of the Duplicar Norte project.* https://www.oldelval.com/oldelval-confirmo-la-ejecucion-del-proyecto-duplicar-norte/
Scope. (2025, July 21). Oldelval confirmed that it is going to RIGI with the Duplicar Norte project for USD 380 million. https://www.ambito.com/energia/oldelval-confirmo-la-ejecucion-del-proyecto-duplicar-norte-us380-millones-n6169420
Diario Río Negro. (2025, September 10). A new pipeline in Vaca Muerta: this en Oldelval's plan to evacuate an extra 220,000 barrels. https://www.rionegro.com.ar/energia/un-nuevo-oleoducto-en-vaca-muerta-asi-en-the-oldelval-plan-to-evacuate-200-thousand-extra-barrels-4293952/

[xxii] The work was structured with an internationally syndicated loan of 2,000 million dollars, equivalent to 70% of the necessary capital. The remaining 30% was contributed directly by the associated oil companies, with their own capital and based on their participation in VMOS S.A.
Ministry of Economy. (2025, March 20). *Resolution 302/2025. VMOS S.A. Incentive Regime for Large Investments*. https://www.argentina.gob.ar/normativa/nacional/resoluci%C3%B3n-302-2025-410830
VMOS. (n.d.). Vaca Muerta Oil Sur. https://vmos.ar/
YPF. (n.d.). VMOS. Vaca Muerta Oil Sur. https://energia-argentina.ypf.com/vmos.html
EconoJournal. (2025, May 26). *The construction of the largest infrastructure to increase crude oil production in Vaca Muerta is progressing*. https://econojournal.com.ar/2025/05/avanza-la-construccion-de-la-mayor-obra-de-infraestructura-para-aumentar-la-produccion-de-petroleo-en-vaca-muerta/
ADNSUR. (2026, June 16). The VMOS pipeline will export crude oil for more than USD 5,000 million a year: this is how the largest private work in Argentina is progressing. https://www.adnsur.com.ar/pulso-energetico/el-oleoducto-vmos-exportara-crudo-por-mas-de-us-5-000-millones-al-ano--asi-avanza-la-mayor-obra-privada-de-la-argentina_a6a3142e1029dbded7c29c480
Online Politics (2026, June 16). VMOS: the dollar machine that Milei and Caputo are betting on is entering its final stage. https://www.lapoliticaonline.com/energia/vmos-la-maquina-de-dolares-a-la-que-apuestan-milei-y-caputo-entra-en-su-etapa-final/

[xxiii] MMm³/d: Millions of cubic meters per day. Former President Néstor Kirchner Gas Pipeline, renamed in November 2024.

[xxiv] With stage II of the Perito Moreno gas pipeline, a similar increase of 39 MMm³/d was expected.
Transportadora de Gas del Sur. (2025, October 20). *TGS is awarded the expansion works of the Perito Moreno Gas Pipeline*. https://www.tgs.com.ar/adjudican-a-tgs-las-obras-de-ampliacion-del-gasoducto-perito-moreno/
Transportadora de Gas del Sur. (2026, February 9). *TGS advances with the expansion works of the Perito Moreno Gas Pipeline and launches the Open Tenders to award the incremental transport firm capacity*. https://www.tgs.com.ar/tgs-avanza-con-las-obras-de-ampliacion-del-gasoducto-perito-moreno-y-lanza-los-concursos-abiertos-para-adjudicar-la-capacidad-de-transporte-firme-incremental/
EconoJournal. (2026, May 13). *The RIGI of the TGS project that will expand the capacity of the Perito Moreno Gas Pipeline by 60% has been approved*. https://econojournal.com.ar/2026/05/aprueban-el-rigi-del-proyecto-de-tgs-que-ampliara-60-la-capacidad-del-gasoducto-perito-moreno/
Argentina.gob.ar. (2025, October 20). *Award of the extension of the Perito Moreno Gas Pipeline*. https://www.argentina.gob.ar/noticias/adjudicacion-de-la-extension-del-gasoducto-perito-moreno/

[xxv] EconoJournal. (2026, June 11). *TGN will seek to define before the end of the year the investment to build a strategic gas pipeline between Neuquén and Córdoba*. https://econojournal.com.ar/midstream-gas-day/tgn-buscara-presentar-antes-de-fin-de-ano-un-proyecto-de-construccion-de-un-gasoducto-entre-neuquen-y-cordoba/

[xxvi] Econojournal. (2026, June 11). *TGN will seek to define before the end of the year the investment to build a strategic gas pipeline between Neuquén and Córdoba*. https://econojournal.com.ar/destacada/tgn-buscara-presentar-antes-de-fin-de-ano-un-proyecto-de-construccion-de-un-gasoducto-entre-neuquen-y-cordoba/

[xxvii] The reversal of the northern gas pipeline made it possible to replace gas imports from Bolivia, whose cost was around USD 11.8 per million BTU, compared to a local production cost of approximately USD 2-3.5 per million BTU. In April 2025, Argentina made its first gas exports from Vaca Muerta to Brazil through Bolivian pipelines, in an operation between TotalEnergies, YPFB and Matrix Energía to test the technical feasibility of that route.
La Nación. (2024, November 4). *Reversal of the Northern Gas Pipeline: the Government inaugurated "the last work financed by the State".* https://www.lanacion.com.ar/economia/inversion-millonaria-el-gobierno-inaugura-la-ultima-obra-financiada-por-el-estado-nid04112024/
Scope. (2024, October 6). *Northern Gas Pipeline Reversal Inaugurated: Argentina Will Save Up to USD 2 Billion Per Year*. https://www.ambito.com/energia/inauguran-la-reversion-del-gasoducto-norte-argentina-ahorrara-us2000-millones-ano-n6067660
Reuters. (2025, April 1). *Argentina starts gas exports to Brazil through Bolivia*. https://www.reuters.com/business/energy/argentina-starts-gas-exports-through-bolivia-brazil-firm-says-2025-04-01/
S&P Global. (2024, November 28). *Bolivia transit deal opens door for Brazil to import natural gas from Argentina*. https://www.spglobal.com/energy/en/news-research/latest-news/natural-gas/112824-bolivia-transit-deal-opens-door-for-brazil-to-import-natural-gas-from-argentina.

[xxviii] San Matías Pipeline S.A., made up of PAE (30%), YPF (25%), Pampa Energía (20%), Harbour Energy (15%) and Golar LNG (10%) en the company registered in the RIGI that will oversee developing the gas pipeline.
EconoJournal. (2025, August 6). *Southern Energy confirmed the contracting of a second liquefaction vessel and the construction of a dedicated gas pipeline for its LNG export project*. https://econojournal.com.ar/2025/08/southern-energy-confirmo-segundo-buque-licuefactor-gasoducto-gnl-rio-negro-pae/
Southern Energy. (n.d.). *The project*. https://southern-nrg.com/el-proyecto/
More energy. (2026, June 10). *SESA renamed the second LNG vessel: the MKII will be renamed "Esperanza".* https://mase.lmneuquen.com/vaca-muerta/sesa-rebautizo-al-segundo-buque-gnl-el-mkii-pasara-llamarse-esperanza-n1241753
Diario Río Negro. (2026, June 4). *The entry of the San Matías Gas Pipeline into the RIGI has been approved: the investment of USD 1,300 million will transport gas from Vaca Muerta to Río Negro*. https://www.rionegro.com.ar/energia/aprobaron-el-ingreso-al-rigi-del-gasoducto-san-matias-la-inversion-de-us-1-300-millones-transportara-gas-desde-vaca-muerta-a-rio-negro-4598642/
EconoJournal. (2026, March 4). *Southern Energy and the German company SEFE signed a contract in Berlin for the sale of LNG for 8 years*. https://econojournal.com.ar/2026/03/southern-energy-y-sefe-firmaron-en-berlin-el-contrato-para-la-venta-de-gnl-por-8-anos/

[xxix] SEFE. (2026, March 4). *SEFE and Southern Energy sign LNG supply agreement for two million tonnes per year*. https://www.sefe.eu/en/media/newsroom/press-releases/press-release-detail_2368.html
Ortiz, I. (2026, March 4). *Southern Energy and the German company SEFE signed a contract in Berlin for the sale of LNG for 8 years*. EconoJournal. https://econojournal.com.ar/2026/03/southern-energy-y-sefe-firmaron-en-berlin-el-contrato-para-la-venta-de-gnl-por-8-anos/

[xxx] The phase originally associated with Shell was reformulated, reducing its projected capacity from 12 to 6 million tonnes per year. As a result of the changes in the scope of the project, the company decided to withdraw from that stage, so YPF is evaluating the incorporation of a new strategic partner to sustain its expansion objective. YPF would seek a new partner to replace it and sustain the goal of bringing the total capacity of the block led by the company to 18 million tons per year.
Reuters. (2025, December 4). *YPF CEO sees green light for Argentina LNG project with Eni, XRG in mid-2026*. https://www.reuters.com/business/energy/ypf-ceo-sees-green-light-20-billion-argentina-lng-project-mid-2026-2025-12-04/
Eni. (2025, June 6). *Eni and YPF sign agreement for participation at the Argentina LNG project*. https://www.eni.com/en-IT/media/press-release/2025/06/pr-eni-ypf-sign-agreement-argentina-lng-june-2025.html

[xxxi] A long-term offtake contract ensures the future purchase of part of the project's production, providing predictability of revenues and facilitating its financing.
Reuters. (2026, April 27). *Camuzzi, Vitol sign MoU for Argentina's USD 3.9 billion LNG del Plata project*. https://www.reuters.com/business/energy/camuzzi-vitol-sign-mou-argentinas-39-billion-lng-del-plata-project-2026-04-27/
EconoJournal (2026, April 27). Camuzzi Gas signs an agreement with Vitol for the LNG del Plata project. https://econojournal.com.ar/2026/04/vitol-firma-un-mou-con-camuzzi-gas-para-sumarse-al-proyecto-lng-del-plata/

[xxxii] NGL: *Natural Gas Liquids*. These are components that are associated with natural gas and that are separated to obtain higher-value products, such as ethane, propane, butane and natural gasoline. It en not the same as LNG: LNG en natural gas, mainly methane, liquefied for export; NGLs are liquids separated from gas and are used for petrochemicals, LPG, fuels or export.

[xxxiii] Compañía Mega has YPF 38%, Petrobras 34% and Dow 28% as shareholders and has plants in Loma La Lata and Bahía Blanca, connected by a pipeline of approximately 600 km. It currently processes about 40% of the gas produced in the Neuquén Basin.
NGL stands for *Natural Gas Liquids*. These are components that are associated with natural gas and that are separated to obtain higher-

value products, such as ethane, propane, butane and natural gasoline. It en not the same as LNG: LNG en natural gas, mainly methane, liquefied for export; NGLs are liquids separated from gas and are used for petrochemicals, LPG, fuels or export.
Transportadora de Gas del Sur. (2026, March 12). *TGS announced the largest investment in history for a Natural Gas Liquids (NGL's) project in Argentina*. https://www.tgs.com.ar/tgs-anuncio-la-mayor-inversion-de-la-historia-para-un-proyecto-de-liquidos-de-gas-natural-ngls-en-argentina/
Diamante, S. (2026, March 11). *TGS will invest USD 3,000 million to export liquids from Vaca Muerta*. La Nación. https://www.lanacion.com.ar/economia/tgs-invertira-us3000-millones-para-exportar-liquidos-de-vaca-muerta-nid11032026/
Río Negro. (2026, May 4). *With a focus on Vaca Muerta, Mega activates its subdivision train and projects investments of USD 360 million*. https://www.rionegro.com.ar/energia/con-foco-en-vaca-muerta-mega-activa-su-tren-de-fraccionamiento-y-proyecta-inversiones-por-us360-millones-4562332/
Ortiz, I. (2026, March 18). *Vaca Muerta: Mega presents itself to the RIGI with an investment of USD 360 million in its plant for separating liquids from gas*. EconoJournal. https://econojournal.com.ar/2026/03/vaca-muerta-mega-se-presenta-al-rigi-con-una-inversion-de-us360-millones-en-su-planta-de-separacion-de-liquidos-del-gas/

[xxxiv] Infobae. (2026, April 23). *Pluspetrol asked to join the RIGI to invest USD 12,000 million in a megaproject in Vaca Muerta*. https://www.infobae.com/economia/2026/04/23/pluspetrol-pidio-ingresar-al-rigi-para-invertir-usd-12000-millones-en-un-megaproyecto-en-vaca-muerta/

[xxxv] Shale24. (2026, July 1). *YPF, Pluspetrol, Chevron, Phoenix, Tecpetrol, GeoPark, Vista and TanGo: the RIGI shale oil projects that follow the approval of Rincón de Aranda*. https://www.shale24.com/oil-gas/ypf-pluspetrol-chevron-phoenix-tecpetrol-geopark-vista-tango-proyectos-rigi-shale-oil-siguen-aprobacion-rincon-aranda-n1388

[xxxvi] Gas consumption is assumed to be between 20 and 22 MMBtu for each tonne of urea produced. This is equivalent to an approximate consumption of 608 cubic meters of gas per ton of urea. The calculation of natural gas consumption arises from assuming a daily urea production of 5,700 tons per day and an estimated consumption of 3.5 MM m³/day of natural gas. Under these assumptions, annual gas consumption amounts to approximately 1,300 million cubic meters.
Pampa Energía. (2026, July 17). *Pampa enters the fertilizer business with the construction of the largest urea plant in LatAm*. https://ri.pampa.com/press-release/pampa-ingresa-al-negocio-de-fertilizantes-con-la-construccion-de-la-mayor-planta-de-urea-de-latam/

[xxxvii] ADNSUR. (2025, November 20). *Vaca Muerta: Oil companies project investments of USD 12,000 million by 2026 and anticipate a record year in activity*. https://www.adnsur.com.ar/pulso-energetico/vaca-muerta--las-petroleras-proyectan-inversiones-por-usd-12-000-millones-para-2026-y-anticipan-un-ano-record-en-actividad_a691f739c419386cf2ea2e5c3
iProfessional. (2025, November 19). *Record rain of dollars in Vaca Muerta: with YPF at the forefront, oil companies will invest USD 12,000 million in 2026*. https://www.iprofesional.com/energia/442113-asi-sera-la-lluvia-de-dolares-record-que-se-espera-en-vaca-muerta-en-los-proximos-meses
More energy. (2025, March 13). *Ricardo Markous: "Vaca Muerta is going to need USD 19,000 million of investment per year."* https://mase.lmneuquen.com/vaca-muerta/ricardo-markous-vaca-muerta-va-necesitar-usd-19000-millones-inversion-ano-n1179724
More energy. (2026, March 10). *Pampa Energía asked the RIGI to invest USD 4,500 million in Rincón de Aranda*. https://mase.lmneuquen.com/vaca-muerta/pampa-energia-pidio-el-rigi-invertir-usd-4500-millones-rincon-aranda-n1231028
Neuquén Informa. (2026, April 6). *Neuquén adds a new megaproject to the RIGI.* https://www.neuqueninforma.gob.ar/noticias/2026/04/06/255955-neuquen-suma-un-nuevo-megaproyecto-al-rigi
Infobae. (2026, April 23). *Pluspetrol asked to join the RIGI to invest USD 12,000 million in a megaproject in Vaca Muerta*. https://www.infobae.com/economia/2026/04/23/pluspetrol-pidio-ingresar-al-rigi-para-invertir-usd-12000-millones-en-un-megaproyecto-en-vaca-muerta/

[xxxviii] Ministry of Economy. (2025, March 20). *Resolution 302/2025. VMOS S.A. Incentive Regime for Large Investments*. Argentina.gob.ar. https://www.argentina.gob.ar/normativa/nacional/resoluci%C3%B3n-302-2025-410830
Ministry of Economy. (2025, April 29). *Resolution 559/2025. Southern Energy S.A. Incentive Regime for Large Investments*. Argentina.gob.ar. https://www.argentina.gob.ar/normativa/nacional/resoluci%C3%B3n-559-2025-412353
Espina, M. (2025, March 14). *Milei's government approved RIGI to export oil from Vaca Muerta in a company led by YPF.* Bloomberg Line. https://www.bloomberglinea.com/latinoamerica/argentina/gobierno-de-milei-aprobo-rigi-para-exportar-petroleo-de-vaca-muerta-en-empresa-liderada-por-ypf/
Ciruzzi, C. (2025, May 5). *Southern Energy: What does the approval in the RIGI mean for the LNG project*. More energy. https://mase.lmneuquen.com/economia/southern-energy-que-significa-la-aprobacion-el-rigi-el-proyecto-gnl-n1189173
Agüero, S. (2026, June 4). *The entry of the San Matías Gas Pipeline into the RIGI has been approved: the investment of USD 1,300 million will transport gas from Vaca Muerta to Río Negro*. Diario Río Negro. https://www.rionegro.com.ar/energia/aprobaron-el-ingreso-al-rigi-del-gasoducto-san-matias-la-inversion-de-us-1-300-millones-transportara-gas-desde-vaca-muerta-a-rio-negro-4598642/
Infobae. (2026, June 4). *The Government approved the entry of two new projects into the RIGI and there are already 18 initiatives accepted.*

https://www.infobae.com/economia/2026/06/04/el-gobierno-aprobo-el-ingreso-de-dos-nuevos-proyectos-al-rigi-y-ya-son-18-las-iniciativas-aceptadas/

[xxxix] Argentine Institute of Oil and Gas. (September, 2025). *Value chain for the development of Vaca Muerta: Analysis and projection of requirements*. https://download.iapg.org.ar/IAPG_-Cadena_de_valor_para_el_desarrollo_de_Vaca_Muerta-_Analis_y_proyecci%C3%B3n_de_requerimientos.pdf
https://mase.lmneuquen.com/petroleo/vaca-muerta-demandara-240-mil-empleos-y-130-mil-km-ductos-2040-n1209323

[xl] https://www.adnsur.com.ar/pulso-energetico/el-empleo-en-el-sector-de-gas-y-petroleo-triplico-el-promedio-nacional-en-la-ultima-decada_a688b70f2004bda15a33afc00
https://econojournal.com.ar/2025/07/el-empleo-formal-en-la-produccion-de-gas-y-petroleo-crecio-134-en-la-ultima-decada/

[xli] ADNSUR. (2025, September 22). *How many jobs will Vaca Muerta demand at its peak of development*? https://www.adnsur.com.ar/sociedad/cuantos-empleos-demandara-vaca-muerta-en-su-pico-de-desarrollo_a68d139d879b9188e17baf93d

[xlii] Huarpe Newspaper. (2025, September 27). *The development of Vaca Muerta will require between 180,000 and 240,000 workers*. https://www.diariohuarpe.com/nota/el-desarrollo-de-vaca-muerta-demandara-entre-180-mil-y-240-mil-trabajadores-20259271640
ADNSUR. (2025, September 22). *How many jobs will Vaca Muerta demand at its peak of development*? https://www.adnsur.com.ar/sociedad/cuantos-empleos-demandara-vaca-muerta-en-su-pico-de-desarrollo_a68d139d879b9188e17baf93d
ADNSUR. (2025, July 31). *Employment in the oil and gas sector tripled the national average over the past decade*. https://www.adnsur.com.ar/pulso-energetico/el-empleo-en-el-sector-de-gas-y-petroleo-triplico-el-promedio-nacional-en-la-ultima-decada_a688b70f2004bda15a33afc00

[xliii] Argentine Institute of Oil and Gas (IAPG). (2009). The ABCs of oil and gas in the world and in Argentina (3rd ed.). Buenos Aires: IAPG, p. 36.

[xliv] Provincial: onshore and offshore up to 12 nautical miles from baselines. National: offshore from 12 nautical miles to the outer limit of the continental shelf.

[xlv] Olveira, D. (2024, December 4). *Vaca Muerta: what the oil companies are celebrating about the regulations of the Basic Law on the free export of oil*. iProfessional. https://www.iprofesional.com/negocios/418325-vaca-muerta-que-festejan-petroleras-reglamento-ley-bases.

Deloitte.