



## CFA Institute Research Challenge hosted by Argentina & Uruguay “Equipo ITBA SDF”

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# Pampa Energía

**Pampa Energía S.A.**

**Exchange:** NYSE & BYMA

**Ticker:** PAM & PAMP

**Valuation date:** November 16th, 2024

**Recommendation:** BUY

**Industry:** Electric utilities

**Current price:** \$76.38 USD

**Target price:** \$119.79 USD

**Upside:** 56%

**Pampa Energía** is a leading energy company in Argentina, integrated across the electricity and gas value chain. It operates in power generation, transmission, distribution, and natural gas production and transportation. The company is listed on both BYMA ("PAMP") and NYSE ("PAM").



Market Profile	
Closing Price Nov 15, 2024	U\$S 76.38
Outstanding shares	54,39 M
52 Week Range (U\$S)	38.15 - 78.72
Average Daily Volume (U\$S)	231,060
Market Cap (U\$S)	4,733 B
EV / EBITDA	7.61x
Beta (5Y Monthly)	0.58
Enterprise Value (U\$S)	5,17 B

Source: YahooFinance

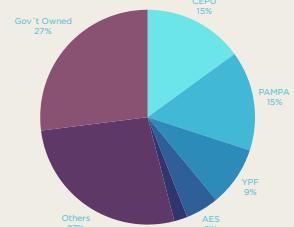
Valuation		
Methodology	Weight	Price
FCFF	75%	U\$S 93,88
EV/EBITDA	25%	U\$S 197,56
Target Price		U\$S 119,79
Upside		56%

## INVESTMENT SUMMARY

We issue a **BUY** recommendation on Pampa Energía's ADR with a target price of US\$ 119.79, representing a significant upside from the current closing price of US\$ 76.38 as of 16/11/2024. Our valuation is based 75% on a Discounted Free Cash Flow model and 25% on an EV/EBITDA multiple. This recommendation is underpinned by the following factors:

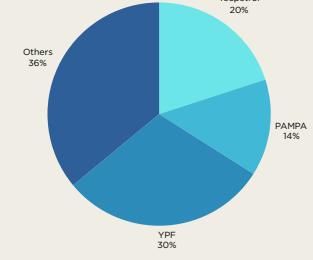
- Stable EBITDA Performance:** Despite macroeconomic volatility, the company has maintained strong EBITDA margins, reflecting its operational efficiency and effective cost management. The Argentine economy has been significantly impacted, but the company has successfully mitigated the effects on its performance. We observe stability in EBITDA, although projections indicate a slight decline. These margins are expected to improve further with the full operationalization of the renewable energy project "PEPE VI" and the Piedra Buena expansion, which will increase capacity and diversify energy generation sources.
- Strategic Acquisition of Rincón de Aranda:** In August 2023, Pampa Energía completed the acquisition of the Rincón de Aranda block in the Neuquén Basin, securing 100% ownership by purchasing the remaining 45% stake from Total Austral S.A. This strategic move enhances Pampa's position in the shale oil segment, providing access to a block with significant production potential and further diversifying its energy portfolio.
- Future Stock Revaluation Potential:** The integration of Rincón de Aranda, along with ongoing cost optimization and new projects, provides a robust foundation for potential stock price appreciation. The company's diversified portfolio positions it well to weather sector-specific disruptions and capitalize on emerging opportunities.
- Resilient and Diversified Portfolio:** Pampa Energía's operations span electricity generation, oil and gas exploration, and petrochemical production. This diversification mitigates risks and enhances its capacity to meet energy demands effectively.
- Commitment to Growth and Sustainability:** Through continuous investments in renewable energy, strategic acquisitions like Rincón de Aranda, and infrastructure upgrades, Pampa Energía is actively contributing to Argentina's energy transition goals. These initiatives are expected to drive long-term growth while reducing the company's carbon footprint.
- Consumer Behavior and Demand Management:** The removal of the tariff segmentation system, which previously provided subsidies to specific consumer segments, has led to adjustments in demand. Pampa Energía is adapting by focusing on operational excellence and efficient energy generation.

Argentina's power generation market share  
3Q 2024



Source: Company Data  
Figure № 1

Argentina's unconventional gas market share  
3Q 2024



Source: Company Data  
Figure № 2



## CURRENT HIGHLIGHTS

**Regulatory Changes and Political Landscape:** The energy sector in Argentina has undergone substantial transformations under the administration of Javier Milei. The government's decision to cut over USD 3 billion in energy subsidies for 2025 is part of a broader initiative to reduce public spending and address fiscal imbalances. However, this policy shift has significantly impacted the cost structure for energy companies, including Pampa Energía, which now faces higher operating costs. Simultaneously, the removal of the tariff segmentation system and the reimplementation of a social tariff scheme have further constrained consumer purchasing power, leading to a decline in electricity demand. To counteract these pressures, Pampa Energía is prioritizing operational efficiency and cost control to safeguard its financial stability while adapting to the new regulatory landscape.

**New Energy Plants and Expansion Projects:** Pampa Energía continues to position itself as a leader in Argentina's energy market through strategic investments in renewable and conventional energy infrastructure. In September 2024, the company successfully inaugurated the "PEPE VI" wind farm in Bahía Blanca, adding 140 MW of capacity to its renewable energy portfolio. This milestone underscores Pampa Energía's commitment to sustainability and diversification. Additionally, the company is expanding the Piedra Buena Thermal Power Plant by adding 120 MW of new capacity, which will enhance reliability and provide critical support during peak demand periods. Looking ahead, Pampa Energía is exploring further opportunities in renewable energy, particularly in solar projects, aligning with global trends and Argentina's energy transition goals.

**Economic Context and Market Performance:** Recent months have seen relative stabilization in Argentina's inflationary environment, providing some relief for businesses and consumers alike. However, tighter monetary policies have driven up borrowing costs, creating additional financial pressure for companies like Pampa Energía. The exchange rate volatility, with the official rate at 980 ARS/USD in October 2024 and the parallel market rate projected to reach 1,200 ARS/USD, has further complicated the company's cost management and debt servicing efforts. Despite these macroeconomic headwinds, Pampa Energía has maintained strong EBITDA margins, supported by its efficient operations and recent project completions. The "PEPE VI" wind farm and the Piedra Buena expansion are expected to contribute significantly to revenue growth and bolster investor confidence. However, the company's financial outlook beyond November 2024 remains contingent on evolving macroeconomic conditions and regulatory adjustments.

**Growth Prospects Despite Challenges:** While the broader economic environment remains uncertain, Pampa Energía's proactive measures and strategic investments have positioned it to capture growth opportunities. The combined impact of its renewable energy initiatives, thermal power expansions, and cost management strategies ensures the company is well-prepared to navigate the challenges ahead. As a result, Pampa Energía is poised to deliver strong financial performance and shareholder value, with the potential for significant stock revaluation in the medium to long term.

**Acquisition of Petrobras Argentina:** Pampa Energía has also played a significant role in consolidating Argentina's energy sector with the acquisition of Petrobras Argentina in 2016. This acquisition allowed the company to significantly increase its power generation capacity and expand its exploration and production activities, including reserves in key areas such as Vaca Muerta (Figure N°5). Since 2017, gas generation has increased by more than 100%. This expansion was a key moment that has contributed to consolidating Pampa's position as one of the leaders in the sector.

**CAMMESA - A Strategic Partner:** Pampa Energía's relationship with CAMMESA, the Wholesale Electricity Market Administrator Company, is a critical aspect of its operations. By actively participating in the wholesale market, Pampa maintains ongoing interactions with CAMMESA to ensure the efficient supply and distribution of electricity throughout Argentina. This collaboration is crucial as it bridges Pampa with the private sector, comprising both corporate clients and individual consumers who rely on the company's energy supply.

## BUSINESS DESCRIPTION

Pampa Energía is one of Argentina's leading energy companies, distinguished by its vertical integration and comprehensive presence across the entire energy value chain. Established in 2005, the company operates in electricity generation, transmission, and distribution, as well as in the exploration, production, transportation, and commercialization of natural gas and oil. Its diversified portfolio also includes significant operations in the petrochemical sector, reinforcing its position as a key player in Argentina's energy market (Appendix 14).

**Electricity Generation:** Pampa Energía boasts an installed capacity of 5,332 MW, accounting for approximately 12% of Argentina's total electricity generation capacity. Its portfolio includes 9 thermal power plants, 3 hydroelectric plants, and 5 wind farms with a combined renewable energy capacity of 1,225 MW.

Top biggest market crashes (1950-2024)		
Index	1-day% change	Year
Dow Jones	-22	1987
Sri Lanka Stock Market Colombo All-Share Index	-61,7	1989
S&P Merval Index	-45,2	2002
The Kazakhstan Stock Exchange Index KASE	-38,6	2002
Mongolia Stock Exchange Top 20 Index	-35,4	2004
Dow Jones	-13	2008
S&P Merval Index	-48	2019
Nikkei 225	-12,4	2024

Source: Reuters & Team Analysis

Figure N° 3

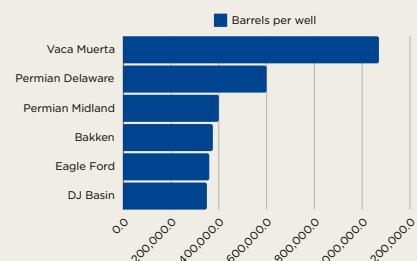
### Massive oil resources to unlock



Source: Company Data

Figure N° 4

### Oil EUR by play



Source: Company Data & Team Analysis

Figure N° 5

### Pampa's main assets

Rank	Asset	Size
1	Sierra Chata	214k acres
2	Rincón de Aranda	59k acres
3	El Mangrullo	48k acres

Source: Company Data

Figure N° 6



Notable assets include the Loma de la Lata thermal power plant in Neuquén, the Los Nihuiles and Pichi Picún Leufú hydroelectric plants, and wind farms such as PEPE II, PEPE III, PEPE IV, PEA II, and PEPE VI. Pampa Energía has prioritized renewable energy projects to align with Argentina's energy transition goals. In September 2024, the company inaugurated the PEPE VI wind farm, a 140 MW project in Bahía Blanca, further expanding its renewable energy footprint. Additionally, the Piedra Buena Thermal Power Plant is undergoing an expansion to add 120 MW, enhancing grid reliability during peak demand.

**Electricity Transmission:** Pampa Energía owns a 26.3% stake in Transener, Argentina's largest high-voltage transmission network operator. Transener operates and maintains 86% of the country's high-voltage network, playing a critical role in connecting power plants to distribution grids and large-scale consumers. This infrastructure ensures the reliable and efficient delivery of electricity across the country.

**Oil and Gas Operations:** Pampa Energía is deeply integrated into Argentina's oil and gas industry, covering the entire value chain (Figure N°6):

- **Upstream (Exploration and Production):** The company operates in 12 production areas, producing 90.8 thousand barrels of oil equivalent per day (kboe/d), of which 94% is natural gas. Key production blocks include El Mangrullo, Rincón del Mangrullo, and Río Neuquén. In June 2023, Pampa acquired the remaining 45% stake in the Rincón de Aranda block from Total Austral S.A., achieving full ownership of this strategic asset located in the Vaca Muerta shale oil region. This acquisition strengthens Pampa's unconventional oil reserves and production, solidifying its leadership in Argentina's shale oil development.
- **Midstream (Transportation):** Pampa controls the largest gas pipeline system in Latin America through its stake in TGS (Transportadora de Gas del Sur), operating over 9,000 km of gas pipelines that connect key production areas with consumption hubs. It also holds a stake in Oldelval, which transports crude oil from the Neuquén Basin to the port of Bahía Blanca, facilitating exports and domestic distribution.
- **Downstream (Refining and commercialization):** In the downstream segment, Pampa Energía focuses on refining and commercializing hydrocarbons, adding value to its upstream production. The company actively participates in the distribution of natural gas and petroleum derivatives to residential, commercial, and industrial customers across Argentina.
  - Refining: Pampa processes crude oil, primarily from Vaca Muerta, ensuring its products meet market standards.
  - Gas Distribution: Through its stake in TGS, Pampa commercializes natural gas and byproducts extracted during gas treatment.
  - Exports: The company facilitates the export of crude oil and refined products, contributing to Argentina's trade balance.

**Petrochemical Operations:** Pampa Energía operates the Puerto General San Martín petrochemical complex in Santa Fe Province, a fully integrated facility with production capabilities for gases, aromatics, styrene, and synthetic rubber. This diversification enables the company to supply a wide range of products to both domestic and international markets, enhancing its competitive positioning and adding value to its operations.

## INDUSTRY OVERVIEW AND COMPETITIVE POSITIONING

Argentina's energy sector is a cornerstone of its economy, contributing around 10% of GDP and employing hundreds of thousands across oil, gas, and power industries. The country is the largest natural gas producer in Latin America and holds the second-largest shale gas reserves and the fourth-largest shale oil reserves globally, primarily in the Vaca Muerta formation. Vaca Muerta's production potential is significant, with recoverable reserves estimated at 308 trillion cubic feet of gas and 16.2 billion barrels of oil, making it a critical driver for the country's energy future.

Natural gas accounts for 55% of Argentina's energy consumption, while oil comprises around 31%, with renewables and nuclear energy making up a smaller but growing share. Argentina's total installed power generation capacity is approximately 42 GW, with thermal plants contributing the majority (around 60%), followed by hydroelectric (27%), nuclear (5%), and renewables (8%).

Renewable energy has seen rapid growth, with capacity increasing by over 300% in the last five years due to the RenovAr program and private investments. Projects under this program have added more than 2.5 GW of renewable capacity to the grid, particularly in wind and solar. However, the country's reliance on imported fuels, coupled with high inflation (averaging over 100% year-on-year in 2024) and exchange rate volatility (projected at 1,200 ARS/USD in the parallel market), presents ongoing challenges for sector profitability and investment.

Argentina also boasts a robust energy infrastructure:

- 86% of the high-voltage transmission network is managed by Transener, connecting generation facilities to distribution networks.
- The natural gas transportation system spans over 29,000 km, with TGS operating the largest portion, transporting 60% of the country's gas demand.

### Vision

"To be an emblematic energy company in Argentina, recognized for its commitment, operational excellence, and continuous growth"

### Mission

"To foster personal development, productive investments in the country, and the highest standards based on ethical values, ensuring sustainable performance"

### Values

**Responsibility:** We encourage respect for diversity, the community, and the environment, committing to both the present and the future.

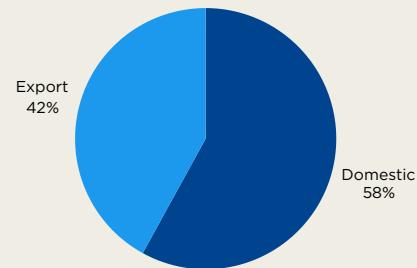
**Integrity:** We uphold transparency as the foundation for healthy and sustained growth.

**Excellence:** We strive for continuous improvement to achieve tangible results that positively impact society.

**Entrepreneurial Spirit:** We promote development and creativity.

**Teamwork:** We overcome challenges by working collaboratively and maximizing the potential of each individual.

Sales volume breakdown by market



Source: Company Data  
Figure N° 7

Pampa's Growth and Investment Funnel



Source: Team Analysis  
Figure N° 8

Pampa Energía leverages its extensive asset base and strategic integration across the energy value chain to solidify its position as one of Argentina's leading energy companies.

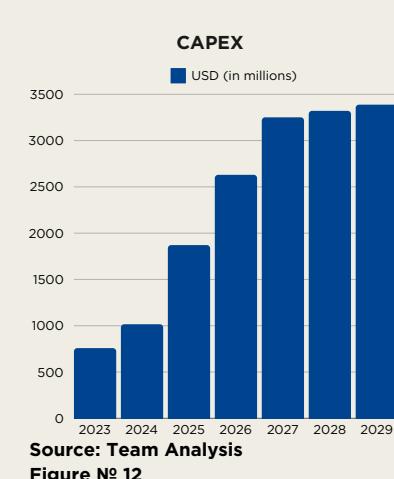
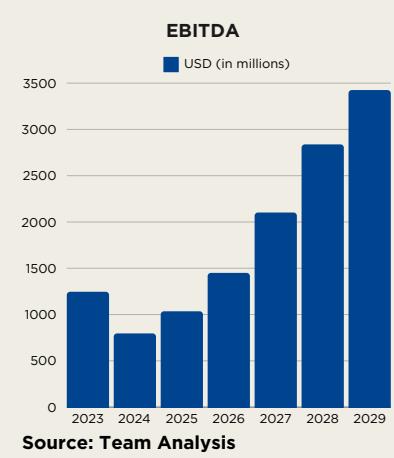
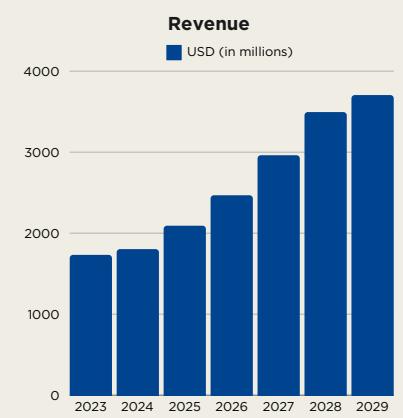
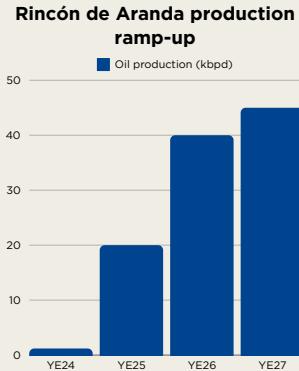
**1. Market Leadership:** Pampa Energía accounts for approximately 12% of Argentina's total installed electricity generation capacity, with 5,332 MW. It operates 9 thermal power plants, 3 hydroelectric plants, and 5 wind farms, including the newly operational PEPE VI, which added 140 MW in 2024. Its renewable energy capacity of 1,225 MW represents a growing focus on clean energy.

**2. Strategic Asset Control:** Through its 26.3% stake in Transener, Pampa helps manage 86% of Argentina's high-voltage transmission network, critical for connecting energy supply with demand. Its midstream dominance comes from a major stake in TGS, which operates over 9,000 km of gas pipelines, transporting 60% of Argentina's natural gas and connecting major production zones with consumption centers.

**3. Unconventional Hydrocarbon Strength:** Pampa is a major producer of natural gas, generating 90.8 kboe/d, with 94% from natural gas. It operates strategic blocks in Vaca Muerta, including Rincón de Aranda, which it fully acquired in 2023, boosting its unconventional oil production capacity (Figure N°9). Argentina's potential to become a global LNG exporter further supports Pampa's long-term outlook.

**4. Financial Resilience in Economic Uncertainty:** Despite inflation and currency challenges, Pampa has maintained a strong financial performance, with consistent EBITDA supported by strategic investments in high-demand assets like the PEPE VI wind farm and the Piedra Buena expansion (adding 120 MW). Its ability to operate efficiently in volatile markets gives it a competitive edge.

**5. Commitment to Sustainability:** Pampa's focus on renewables is aligned with Argentina's national goal to achieve 20% of energy from renewables by 2030. Its renewable portfolio, representing 23% of its generation capacity, highlights its leadership in the clean energy transition.



## FINANCIAL ANALYSIS

### Revenues - Unrestrained growth

Pampa Energía is projected to achieve sustained revenue growth through 2029, underpinned by its diversified operations in power generation, oil and gas production, and midstream activities. Revenues are expected to grow at a compound annual growth rate (CAGR) of 16% for the first years, driven primarily by capacity expansions in power generation and the development of new oil and gas projects, particularly in Vaca Muerta (Figure N°10). The power generation segment will remain the company's main revenue driver, contributing approximately 60-65% of total revenues by 2029. This growth will be supported by dollar-linked contracts, which provide a buffer against inflation and currency depreciation. Additionally, oil and gas production will see steady increases, with peak contributions expected between 2026 and 2027. However, this segment remains exposed to commodity price volatility and domestic market interventions.

### Cost structure

On the cost side, Pampa Energía's focus on operational efficiency has enabled it to manage expenses effectively despite Argentina's challenging macroeconomic environment, characterized by high inflation and currency devaluation. Operating costs are anticipated to grow at a slower rate than revenues due to economies of scale in power generation and improved extraction costs in oil and gas. While labor and maintenance costs will rise because of inflationary pressures, these impacts will be partially offset by the company's dollar-linked revenues.

### Resilient profitability

Profitability metrics for Pampa remain robust. EBITDA itself is expected to grow at a CAGR of 23%, supported by revenue growth and disciplined cost management (Figure N°11). The company's diversified revenue streams and operational efficiencies will ensure resilience in profitability, although fluctuations in oil and gas prices could cause short-term variability in margins.

### CAPEX - a key element

Pampa's capital expenditure strategy is focused on driving growth through strategic investments in power generation and unconventional oil and gas projects. From 2024 to 2029, the company plans to allocate an average of \$2.5 billion annually to expand its generation capacity, develop renewable energy projects, and enhance production capabilities in Vaca Muerta (Figure N°12). These investments, while significant, are carefully aligned with cash flow projections, ensuring that the company maintains a healthy financial position.

### Bottom line

Overall, Pampa Energía is well-positioned to capitalize on Argentina's growing energy demand and global energy transition trends. Its diversified operations, strong financial discipline, and strategic investments provide a solid foundation for long-term growth. However, the outlook is subject to macroeconomic challenges, including inflation, currency devaluation, and regulatory uncertainties, which could impact the company's performance.

# VALUATION

We issue a BUY recommendation on Pampa Energía's ADR with a target price of US\$ 119.79, representing a significant upside from the current closing price of US\$ 76,38 as of 16/11/2024. Our valuation is based 75% on a Discounted Free Cash Flow model and 25% on an EV/EBITDA multiple. We assigned more weight to the DFCF approach as we were able to simulate different scenarios (60% base, 30% bear and 10% bull) contemplating regulatory framework changes that would significantly affect the target price. Meanwhile, we relied on the EV/EBITDA multiple calculated for a set of comparable peers to mitigate valuation risks as this approach gathers implicit assumptions made by investors.

## Revenue

Pampa Energía's revenue is projected to experience robust growth, averaging 16% annually over the next three years, significantly outpacing the 2.6% growth forecast for the Electric Utilities industry in South America. This impressive trajectory is underpinned by the company's strategic initiatives and its expansion across multiple fronts.

The acquisition of Petrobras has been a transformative event for Pampa, resulting in a 46% increase in installed power capacity and a staggering 135% boost in peak gas production (Figure N°14). Additionally, Pampa's access to massive shale oil reserves in Rincón de Aranda (with an estimated potential of 400 million barrels) positions it as a major player in the region. The company is capitalizing on the development of Vaca Muerta, a key driver in Argentina's transition to becoming a net gas exporter. This initiative has already markedly reduced fuel imports from Bolivia and increased oil and gas exports.

Oil exports, which are expected to constitute 25% of revenue in 2024, are forecasted to rise to 60% by 2030. Similarly, natural gas exports are projected to grow from 6.5% in 2024 to 22% by 2030, representing a 300% increase by the end of the decade. Vaca Muerta alone now accounts for 54% of Argentina's total oil exports, underscoring its transformative impact on the sector (Figure N°7).

Pampa's revenue forecast reflects exponential growth, driven by these strategic developments. By 2029, revenue is expected to more than double compared to 2024 levels, as the company capitalizes on its enhanced capacity, rising exports, and the favorable macroeconomic conditions shaping the energy sector in Argentina. While precise growth rates may fluctuate due to market dynamics, the trajectory is unmistakably upward, affirming Pampa's position as a key growth leader in the region (Figure N°13).

## Costs

Pampa Energía's cost structure is heavily influenced by its operational scale and the nature of its energy and resource production. The Cost of Revenue is projected to grow in tandem with the company's expanding operations, increasing from \$1,107 million in 2023 to \$2,271 million by 2029. This reflects both the rising capacity utilization and the larger share of exports within Pampa's revenue mix. Unlike companies that rely heavily on external fuel purchases, Pampa's costs are shaped primarily by production-related variables such as operational maintenance, labor, and transportation. These costs are expected to remain denominated in U.S. dollars, thereby providing a degree of insulation from Argentina's inflationary pressures and currency volatility.

The forecasted increase in costs aligns with Pampa's significant growth in output, driven by expansions in power generation and gas production. As natural gas exports are set to triple by 2030 and oil exports are projected to account for 60% of revenue, logistical and operational expenditures will naturally rise. Additionally, the maintenance of its enhanced infrastructure, including expanded capacity in Rincón de Aranda and Vaca Muerta, will contribute to higher costs over the forecast period.

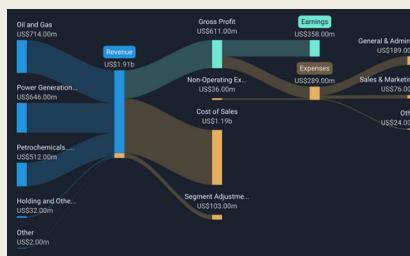
However, a gradual reduction in lifting costs is anticipated over the forecast period, reflecting operational efficiencies and infrastructure developments (Figure N°16). In the initial years, cost reductions will stem from the implementation of extended well testing and oil tracking, which enhance production processes and resource management. As operations progress, the deployment of temporary facilities and the integration of pipelines will further streamline logistics and lower costs. Starting in 2026, the commissioning of the central processing facility is expected to deliver a substantial and enduring decrease in lifting costs, solidifying Pampa's position as a cost-efficient producer.

Although costs will rise in absolute terms, the scalability of Pampa's operations, along with higher-margin export revenues, is expected to mitigate the impact on overall profit margins. While future cost increases reflect operational expansion and efficiency upgrades, the company is likely to leverage economies of scale to support long-term profitability.

## Amortizations and Depreciations

The projected Amortizations and Depreciations (AA&DD) for Pampa Energía reflect the company's asset growth driven by its CAPEX plans. Using a consistent AA&DD-to-assets ratio, the forecast shows an increase from \$205 million in 2021 to \$328 million in 2029, with variations reflecting the timeline of investments transitioning to operational assets. This growth aligns with Pampa's infrastructure expansion and suggests that asset depreciation is manageable while supporting revenue-generating capacity.

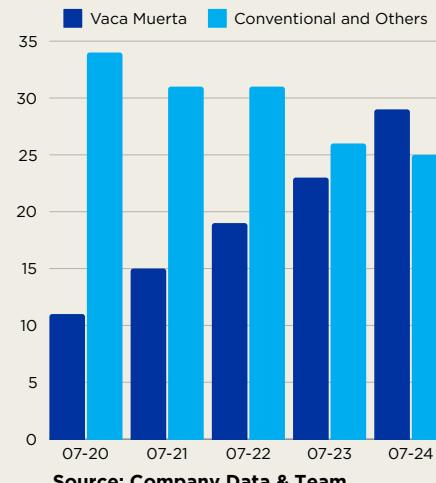
Revenue & Expenses Breakdown 2024  
(Appendix 13)



Source: Company Data & Team Analysis

Figure N° 13

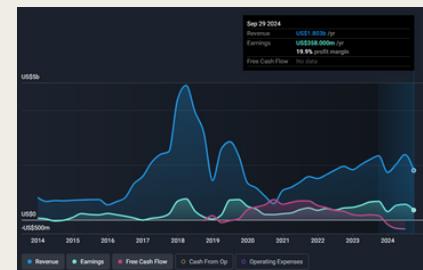
Gas Production in Argentina  
(bcfpd)



Source: Company Data & Team Analysis

Figure N° 14

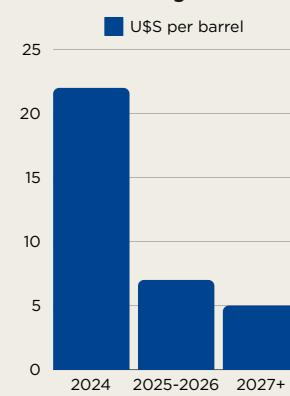
Earnings & Revenue YoY  
Pampa



Source: Company Data & Team Analysis

Figure N° 15

Lifting Cost



Source: Company Data

Figure N° 16



## Working Capital

The WC for Pampa Energía is primarily influenced by changes in accounts receivable and accounts payable, given the lack of inventory. Projected variations show fluctuations from \$783 million in 2021 to \$815 million in 2023, with key changes in specific years driven by operational and financial adjustments. These shifts reflect the company's focus on optimizing its cash cycle and maintaining liquidity to support ongoing activities and investments. A stable and positive working capital indicates Pampa Energía's ability to meet its short-term obligations, which is crucial for its credit rating. However, fluctuations in working capital may signal operational risks or liquidity challenges, which contribute to the company's relatively low credit ratings from S&P, Moody's, and Fitch. These credit ratings reflect concerns over the company's financial stability, particularly in managing short-term debt and maintaining liquidity (Figure N°17).

Credit Ranking Pampa		
	Foreign Currency	Local Currency
S&P Global	b-	-
Moody's	Caa3	-
Fitch	B-	AA+ (long term) A1+ (short term)

Source: Company Data

Figure N° 17

## CAPEX

Pampa reflects a significant ramp-up in capital expenditures from 2025 to 2027, primarily driven by substantial investments in the development of the Rincón de Aranda field in Neuquén. This area is expected to receive approximately \$600 million in investments, which will be instrumental in increasing oil production. As a result, CAPEX increases significantly during this period, from \$1.87 billion in 2025 to \$2.63 billion in 2026, and reaching \$3.25 billion in 2027. This expansionary CAPEX is aligned with the company's growth strategy to boost production and capacity in the short term. Starting in 2028, CAPEX is expected to stabilize at around \$3.32 billion, with a focus shifting toward maintenance rather than further expansion. This ongoing investment will be crucial for sustaining the newly developed wells and ensuring the long-term viability of the Rincón de Aranda fields. Maintenance CAPEX is projected to continue at similar levels through 2029, aligning with the need to preserve operational efficiency and asset integrity, following the peak expansion period.



Source: Kroll

Figure N° 18

## Weighted Average Cost of Capital (WACC)

In this case, we adopted a comprehensive approach, reflecting the economic realities of Argentina. Given the country's economic volatility and recent fiscal policy changes, a multi-WACC methodology was utilized. A key challenge in this process was determining the country risk premium, particularly considering the significant fluctuations in Argentina's sovereign bond market. To address this, the EMBI+ index from JP Morgan was incorporated, with adjustments based on macroeconomic projections that suggest a gradual stabilization of the country risk premium over the coming years, despite ongoing political and economic uncertainty. Furthermore, a corporate tax rate of 23% was assumed, in line with the current fiscal landscape. The final WACC calculation included a cost of debt of 7.03% and a cost of equity of 7.09%, resulting in a consistent WACC of 7.06% throughout the projected period. This methodology provides a solid framework for maintaining an efficient capital structure, aligned with the company's growth objectives amidst an uncertain macroeconomic environment.

Ticker	Company	Enterprise Value to EBITDA ( $\Sigma$ -Avg)
CECO2	Enel Generación Costanera	11,35
CEPU	Central Puerto	6,63
YPF	YPF	4,08
AES	The Aes Corp.	15,42
EDELMAG	Empresa Eléctrica de Magallanes	6,12
CEBR3	Compañía Energética de Brasilia	2,54
ENGIEC1	Engie Energía Perú	4,45
Average		7,23
Standard Deviation		4,23

Source: StockAnalysis & Team Analysis

Figure N° 19

## Cost of equity

To determine the cost of equity, we applied the Capital Asset Pricing Model (CAPM), adjusting for the Argentine Country Risk Premium. The calculation incorporated three main components: (i) the yield of the 10-year US Treasury Bond as the risk-free rate, (ii) Pampa Energía's leveraged beta, and (iii) the country risk premium, derived from the EMBI+ index for Argentina. The equity risk premium was set at 4.28%, based on the recommendation from Damodaran (November 2024). This approach ensures that the cost of equity accounts for both market risks and the additional uncertainties stemming from Argentina's economic volatility.

(In US\$)

Average EV/EBITDA (LATAM)	8.67x
Average EV/EBITDA (ARG)	14.69x
Argentina factor vs LATAM	69,43%
EBITDA PAM 2024F	\$ 796,75
EV PAM (LATAM)	\$ 6.907,82
EV PAM (ARG)	\$ 11.704,26
- Debt	\$ 1.998,00
- Minority interest	\$ 330,40
+ Cash	\$ 1.399,00
Quantity ADRs	54,54
STOCK PRICE (LATAM)	\$ 109,62
STOCK PRICE (ARG)	\$ 197,56

Source: Damodaran & Team Analysis

Figure N° 20

## Terminal Value Growth

For Pampa Energía, the terminal growth rate was set at 0.98%, reflecting the long-term growth prospects of the company. This rate was derived using Argentina's GDP growth projections, as estimated by the International Monetary Fund (IMF), which serves as a reliable proxy for the country's economic outlook. This growth rate ensures a conservative yet realistic outlook for the company's performance beyond the forecast period, aligned with the broader economic conditions in Argentina.

Selected LATAM Countries	
Argentina	Jamaica
Brasil	Mexico
Chile	Panama
Colombia	Perú
Costa Rica	Uruguay
Ecuador	Venezuela

Source: Team Analysis

Figure N° 21

## Relative Valuation

For the relative valuation, we selected seven comparable peers based on the following criteria: (i) operating in the utilities or energy sector; (ii) located in LATAM (Figure N°21); and (iii) market capitalization between U\$S 1 billion and U\$S 15 billion. This selection ensures relevance to Pampa's industry and regional context, factoring in similarities in market dynamics and economic conditions. Based on the analysis, the average EV/EBITDA multiple for LATAM peers is 8.67x, while for Argentine peers, it is significantly higher at 14.69x. Although the EV/EBITDA for regional competitors is approximately 7.23x (Figure N°19), it is derived from a much larger pool of companies, which makes global data (such as Damodaran's averages) a valid benchmark for this valuation. This disparity reflects Argentina's unique economic environment, where valuation multiples are often inflated due to macroeconomic risks.

Using Pampa's forecasted 2024 EBITDA of \$796.75M, the enterprise value (EV) was calculated under two scenarios: \$6.91B using the LATAM multiple and \$11.70B using the Argentine multiple. Adjusting for debt (\$1,998M), minority interest (\$330.40M), and cash (\$1,399M), we derived stock prices of \$109.62 (LATAM basis) and \$197.56 (Argentina basis), based on the 54.54 million ADRs outstanding (Figure N°20).



Interestingly, the average EV/EBITDA multiple for Argentina stands out compared to LATAM, as it represents more than 50% above the regional average. This discrepancy aligns with the notable performance of Argentine markets in the past year, with the Merval index achieving a remarkable growth of 94.08% (Figure N°22). Such growth may indicate a shift in the country's macroeconomic trajectory, driven by the adoption of liberal policies by the new government. This changing environment provides a favorable outlook for companies like Pampa Energía, positioning them to benefit from an improved business climate and investor sentiment.

Pampa Energía positions itself as a competitive player in the regional energy sector, albeit with notable distinctions compared to its peers. Its P/E ratio of 13.89 surpasses both the regional (10.76) and general averages (12.75), suggesting the market has higher growth expectations for Pampa compared to companies like AES and Engie Energía Perú. Conversely, its EV/Revenue multiple of 2.67 falls significantly below both the local (4.44) and regional averages (7.27), indicating potential underestimation of its revenue-generating capacity relative to its valuation. Pampa's ROA of 5.20% aligns with the general average (5.02%) but trails the regional average (6.46%), highlighting room for improvement in asset efficiency. Meanwhile, its DEBT/EBITDA ratio of 2.56 reflects controlled leverage, slightly under the regional average (2.60), reinforcing its financial stability compared to highly leveraged peers like AES (8.86). (Appendix 11)

In conclusion, Pampa Energía showcases robust financial stability and growth potential, with its valuation heavily influenced by the economic conditions of Argentina (Figure N°18). The higher stock price derived from the Argentine multiple underscores the premium investors place on local risks and opportunities. Moreover, the improved macroeconomic conditions and policy reforms further strengthen the company's prospects within the regional energy sector.

## INVESTMENT RISKS

### Operational Risks

**Completion Risk (OR1):** Pampa Energía faces completion risk related to its Rincón de Aranda project, with an estimated investment of USD 700 million for 2025 and a target of reaching USD 1.5 billion by 2027. This investment aims to develop unconventional hydrocarbon production in Vaca Muerta, increasing Pampa Energía's production capacity and strengthening its share in the Argentine energy market.

### Industry Risks

**1. Fuel Supply (IR1):** Pampa Energía relies heavily on natural gas for its thermal power plants, and so far has benefited from the free supply of fuel by CAMMESA. However, any policy change requiring Pampa Energía to bear the cost of fuel could lead to a significant increase in operational expenses. This could impact profitability, as energy prices are often regulated, making it difficult for the company to pass these costs on to consumers. It is estimated that if CAMMESA stops covering the cost of fuel, Pampa Energía would need to spend approximately USD 2.5 billion annually to secure its natural gas supply.

**2. Competition in the Energy Sector (IR2):** The Argentine energy market is highly competitive, with major players such as Central Puerto, AES, and ENEL continuously investing in renewable energy infrastructure and technology. In 2024, Central Puerto increased its capacity by 1,000 MW, while ENEL invested USD 250 million in renewable projects. To maintain competitiveness and avoid obsolescence, Pampa Energía must continue investing in renewable projects and modernizing its plants. Failure to do so could result in a decline in dispatch rates and market share.

**3. Dependence on CAMMESA (IR3):** A significant portion of Pampa Energía's revenue comes from contracts with CAMMESA, the entity that manages the wholesale electricity market. CAMMESA's financial situation and its ability to fulfill contractual obligations have a direct impact on Pampa Energía's cash flow. Any financial difficulties at CAMMESA or payment delays could affect Pampa's ability to fund operations and future investments. In 2023, CAMMESA faced a funding shortfall of approximately USD 1 billion, which delayed payments to several energy companies, including Pampa Energía.

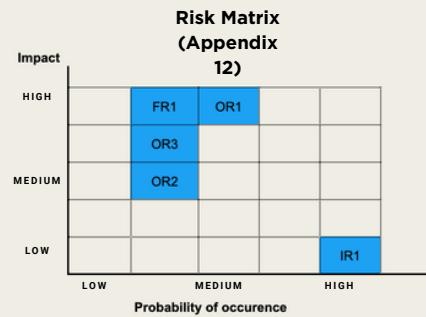
### Economic and Political Risks

**Regulatory and Political Changes (IR4):** The current administration under Javier Milei has implemented deregulation policies and reduced subsidies, which significantly affect the energy sector. The removal of subsidies and changes in the tariff structure could result in increased operational costs for Pampa Energía. These regulatory changes, along with political uncertainty, may impact investment decisions and the financial stability of the company. Subsidy reductions are expected to save the government USD 3 billion by 2025, but they also increase Pampa Energía's costs, potentially reducing its profitability.

Yields % 2024 in the currency of operation	
Cocoa	97,30%
S&P Merval Index	94,08%
BTC/EUR	57,22%
BTC/USD	56,03%
Orange Juice	55,11%
Coffee	33,92%
Silver	30,95%
BELEX15 Index	30,15%
Gold	28,23%
Hang Seng	23,73%
Nasdaq Comp.	26,26%
S&P 500	22,85%
BUX Index	22,78%
Palm Oil (Settlement)	21,87%
Nasdaq 100	21,47%
Baha Japan 225	20,06%
E-mini S&P 500 Index Future	18,87%
Nikkei 225	18,35%
IBEX	17,31%

Source: X & Team Analysis

Figure N° 22



Source: Team Analysis

Figure N° 23

Risks	Mitigating Factors
Investment Risks	
Completion Risk (IR1)	<ul style="list-style-type: none"> <li>- Maintain a disciplined approach to project financing to ensure adequate liquidity.</li> <li>- Secure partnerships or joint ventures to share project risks.</li> <li>- Employ robust project management and oversight to minimize delays and cost overruns.</li> </ul>
Operational Risks	
Fuel Supply (OR1)	<ul style="list-style-type: none"> <li>- Negotiate long-term agreements with CAMMESA or diversify fuel supply contracts.</li> <li>- Invest in alternative energy sources to reduce dependence on natural gas.</li> <li>- Develop on-site fuel storage facilities to mitigate supply disruptions.</li> </ul>
Competition in the Energy Sector (OR2)	<ul style="list-style-type: none"> <li>- Increase investments in renewable energy projects to maintain competitiveness.</li> <li>- Modernize and optimize existing plants to improve operational efficiency.</li> <li>- Focus on innovation in energy storage and grid technology.</li> </ul>
Dependence on CAMMESA (OR3)	<ul style="list-style-type: none"> <li>- Diversify revenue streams by exploring private contracts and export opportunities.</li> <li>- Strengthen financial reserves to handle potential delays in payments.</li> <li>- Build contingency plans for alternative funding sources.</li> </ul>
Industry Risks	
Regulatory and Political Changes (IR1)	<ul style="list-style-type: none"> <li>- Engage in active dialogue with policymakers to advocate for favorable regulatory outcomes.</li> <li>- Monitor regulatory changes closely and adjust operational strategies proactively.</li> <li>- Diversify investments geographically to reduce reliance on domestic policies.</li> </ul>

Source: Team Analysis

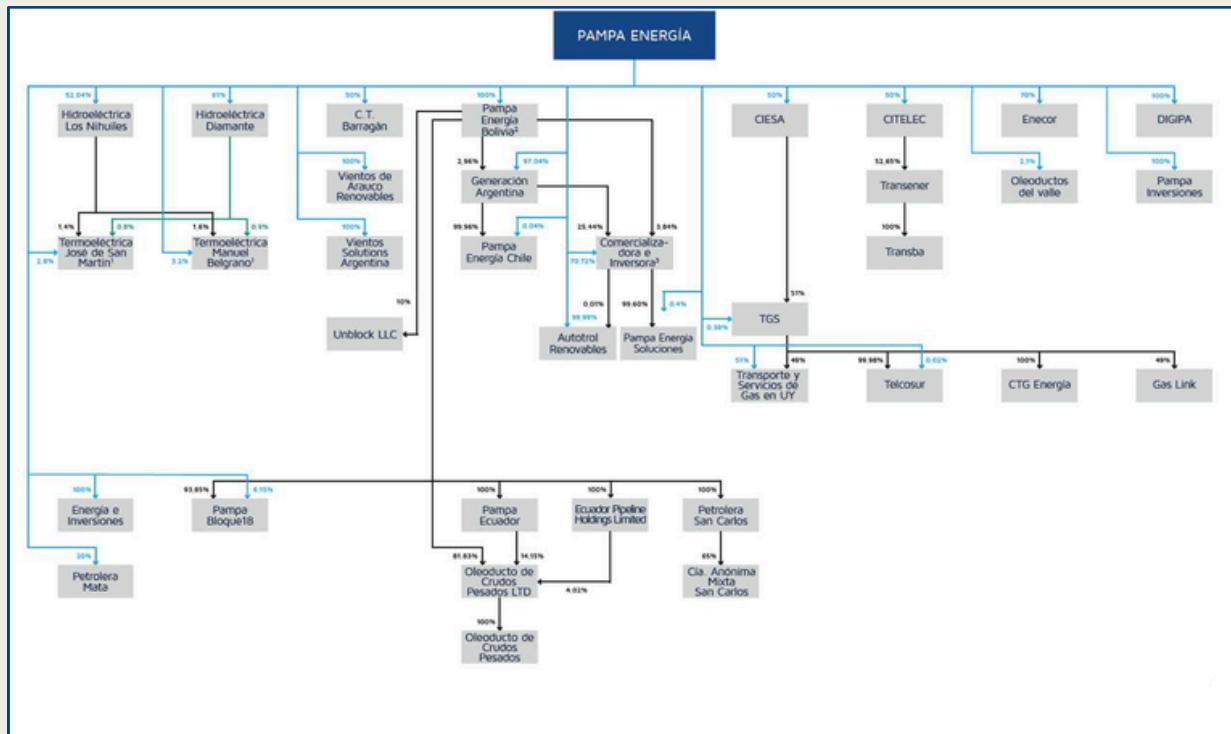
Figure N° 24



# CORPORATE GOVERNANCE

**Group structure:** Pampa Energía S.A. operates as a diversified energy holding company with multiple subsidiaries across various sectors. In the power generation segment, it holds majority stakes in Hidroeléctrica Los Nihuiles (85.04%) and Hidroeléctrica Diamante (61%), along with a 50% participation in CT Barragán and smaller stakes in thermal plants José de San Martín (2.9%) and Manuel Belgrano (3.2%). The company has fully owned renewable energy subsidiaries including Vientos de Arauco Renovables and Vientos Argentina, with additional presence through Pampa Energía Chile's structure. In the transmission sector, Pampa holds strategic positions in CIESA and CITELEC (both 50%), controls Transener (52.65%), and owns Transba (100%). The company's diversification extends to gas distribution through shareholdings in Oleoductos del Valle (2.1%), CTG Energía (50.02%), and Gas Link (49%). Additionally, Pampa maintains international presence through its Ecuador operations, including Petrolera San Carlos and participation in Oleoducto de Crudos Pesados LTD. The structure is complemented by investment vehicles including Pampa Inversiones, Energía e Inversiones, and Pampa Bloque18.

The following figure illustrates Pampa's corporate chart:



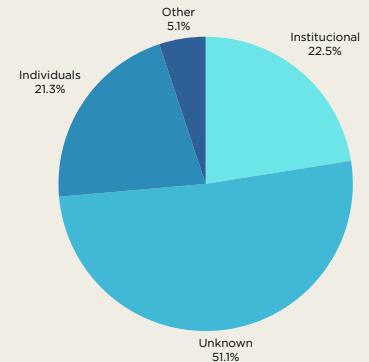
Source: Company Data

**Main shareholders:** Main shareholders: Pampa Energía has 1,363,520,380 outstanding common shares (75.40% on free float), each conferring the right to one vote - there are no preferred stocks. The company maintains a small position of company-owned shares representing 0.2845% (3,878,939 shares). The Administración Nacional de la Seguridad Social (ANSES) is currently the largest shareholder, with approximately 307M shares (22.51%), followed by the Mindlin Family which possesses 220.6M shares (16.18%). Hidden Lake SA owns 69.1M shares (5.07%), while key executives Gustavo Mariani and Ricardo Alejandro Torres hold significant positions with 41.2M shares (3.02%) and 28.4M shares (2.08%) respectively (Figure N°25). The top 5 main shareholders together control approximately 48.87% of the company's outstanding shares.

**Board of Directors:** Pampa Energía's board of directors currently has 11 members and is comprised of a chairman, a vice-chairman, and nine directors. Positions are elected in the annual shareholders' meeting, and directors maintain their positions for one year, until the next annual ordinary meeting (in accordance with Section 257 of the Argentine Corporate Law). Furthermore, in compliance with applicable regulations, Pampa Energía reports the status of independence of its directors prior to their appointment at each of the shareholders' meetings (Appendix 5).

**Long and solid experience in the industry and as a team:** The board of directors is composed of members with extensive experience and a proven track record in the energy and corporate sectors. Several members of the board, such as Marcos Marcelo Mindlin, Gustavo Mariani, Ricardo Alejandro Torres, and Damián Miguel Mindlin, have been serving for nearly two decades. This long-standing leadership has fostered an effective and cohesive management team. Their collective expertise and trust have significantly contributed to the company's success and its reputation within the financial and business communities.

Breakdown by shareholder type



Source: MarketScreener  
Figure N° 25



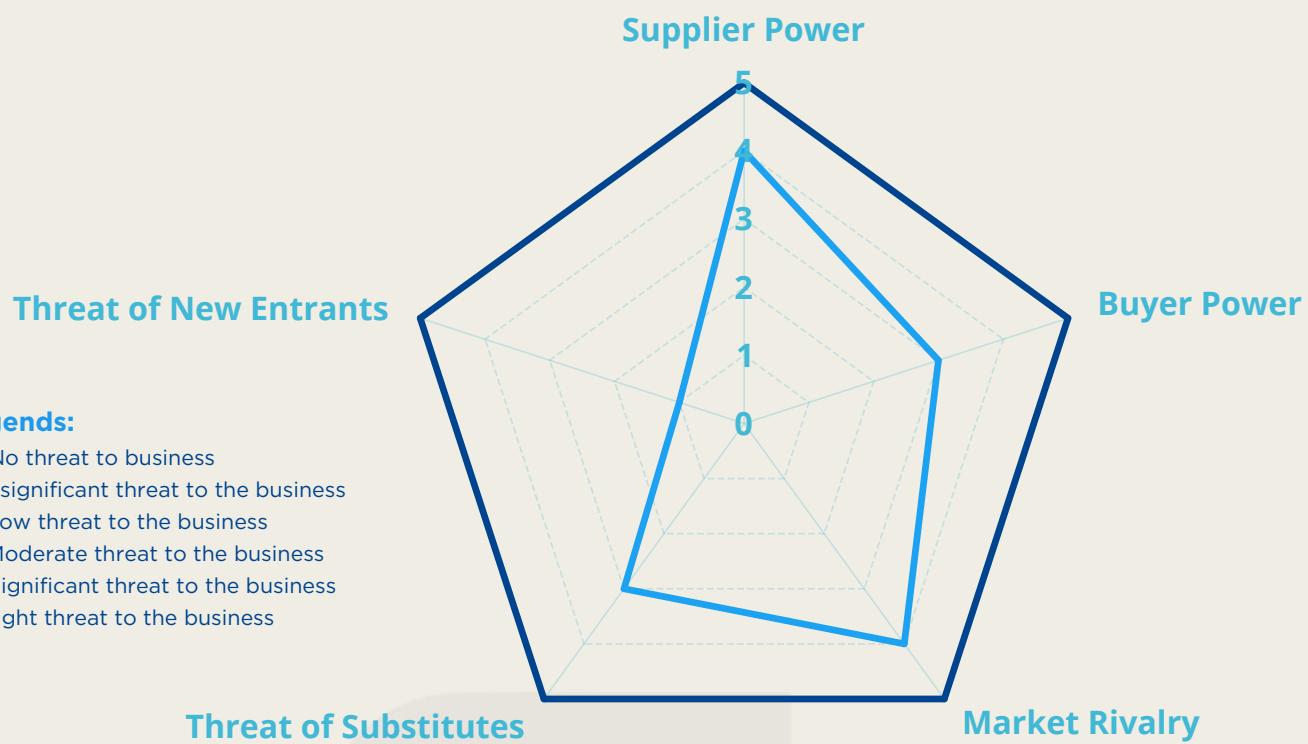
Relationship with the community and the shareholders: Pampa Energía prioritizes maintaining strong relationships with its shareholders and the communities it serves. The company operates under a governance framework aligned with the Argentine Companies Law No. 19.550 and the regulations of the CNV (Argentine Securities Commission). Pampa Energía strives to create value for its shareholders while promoting transparency in corporate governance.

To further strengthen community relations, Pampa Energía ensures adherence to a robust Code of Business Conduct that underscores ethical practices and sustainable development. The company integrates environmental management systems into its operations, adhering to high standards to support its commitment to sustainability and anti-corruption policies.

In its efforts to foster shareholder trust, Pampa Energía ensures the publication of relevant information in an accessible manner, allowing shareholders to exercise their rights and participate in key decision-making processes during the annual shareholders' meetings.



Term	Meaning
WEM	WHOLE SALE ENERGY MARKETS
FONINVEMEM	FUND FOR NECESSARY INVESTMENTS THAT ALLOW THE INCREASE OF ELECTRIC ENERGY OFFER IN THE WHOLESALE ENERGY MARKETS
ENERGÍA BASE	FRAMEWORK THAT ESTABLISHES HOW ELECTRIC POWER IS REMUNERATED IN THE SPOT MARKET
ENERGÍA PLUS	FRAMEWORK TO RESPOND TO SUSTAINED INCREASE IN ENERGY DEMAND AND FOSTER NEW PRIVATE SECTOR INTERESTED PARTIES TO INVEST
PPA	POWER PURCHASE AGREEMENT
RENOVAR	BIDDING PROCESS FOR RENEWABLE ENERGY GENERATION PROJECTS
MATER	FUTURES MARKET OF RENEWABLE ENERGIES
AR\$	ARGENTINE PESO (CURRENCY)
KWh	KILOWATTS PRODUCED PER HOUR-MEASURE OF POWER
MWh	MEGAWATTS PRODUCED PER HOUR (1000 kWh) - MEASURE OF POWER
GWk	GIGAWATTS PRODUCED PER HOUR (1000 MWh) - MEASURE OF POWER
TWh	TERAWATTS PRODUCED PER HOUR (1000 GWh) - MEASURE OF POWER
KW	KILOWATTS - MEASURE OF CAPACITY
MW	MEGAWATTS - MEASURE OF CAPACITY
GW	GIGAWATTS - MEASURE OF CAPACITY
TW	TERAWATTS - MEASURE OF CAPACITY
KVA	KILOVOLT AMPERES
CAMMESA	ADMINISTRATOR OF THE WHOLESALE ENERGY MARKET
KIW	KREDITANSTALT FUR WIEDERAUFBAU (GERMAN BANK)
ADR	AMERICAN DEPOSIT RECEIPT
EV	ENTERPRISE VALUE
EBITDA	EARNINGS BEFORE INTERESTS DEPRECIATIONS AND AMORTIZATIONS
PAM	PAMPA ENERGÍA TICKER
FX	FOREIGN EXCHANGE
NYSE	NEW YORK STOCK EXCHANGE
MERVAL	MERCADO DE VALORES STOCK EXCHANGE
CNV	COMISION NACIONAL DE VALORES
CAGR	COMPOUNDED ANNUAL GROWTH RATE
AES	AES ENERGY CORPORATION'S TICKER
ENEL	ENEL ENERGY CORPORATION'S TICKER
GE	GENERAL ELECTRIC'S TICKER
CAPEX	CAPITAL EXPENDITURE
ROE	RETURN ON EQUITY
B	BILLIONS
M	MILLIONS
K	THOUSANDS
LIBOR	LONDON INTER BANK OFFERED RATE
FCF	FREE CASH FLOW
FCFF	FREE CASH FLOW TO THE FIRM
FCFE	FREE CASH FLOW TO EQUITY
DCF	DISCOUNTED CASH FLOW
LATAM	LATIN AMERICA
IMF	INTERNATIONAL MONETARY FUND
GDP	GROSS DOMESTIC PRODUCT
COGS	COST OF GOODS SOLD
AA&DD	AMORTIZATIONS & DEPRECIATIONS
WC	WORKING CAPITAL
WACC	WEIGHTED AVERAGE COST OF CAPITAL
EMBI	EMERGING MARKETS BOND INDEX
D/E	DEBT/EQUITY
BPS	BASIS POINTS
KBPD	THOUSAND BARRELS PER DAY
BN	BILLIONS
MBBLS	ONE THOUSAND BARRELS OF OIL
MRQ	MOST RECENT QUARTER
TTM	TRAILING TWELVE MONTHS
YOY	YEAR OVER YEAR
LFY	LAST FISCAL YEAR
FYE	FISCAL YEAR END



**Supplier power**

First, the bargaining power of suppliers is considerable due to the limited options in the gas and oil market. With a restricted number of suppliers (around six major ones), Pampa Energía has less room to negotiate prices or favorable conditions. Additionally, the high switching costs for essential materials like gas and specialized equipment, which can range between one million and five million dollars, strengthen the suppliers' power. The company's reliance on these specialized pieces of equipment, which represented approximately 30% of its capital expenditures in 2021, adds another layer of complexity, as suppliers can influence the prices of critical machinery. Nevertheless, government regulations limit this power by establishing price controls, as seen in 2023 with the natural gas price set at 3.50 dollars per MMBtu. In turn, the long-term contracts Pampa Energía has negotiated with certain suppliers help mitigate this power, providing cost stability and reducing dependency on short-term price fluctuations.

**Buyer power**

On the other hand, the bargaining power of customers varies significantly between large industrial customers and residential ones. Industrial customers, who account for 50% of total energy demand, have considerable leverage, allowing them to negotiate lower rates due to their high consumption. In contrast, residential customers, who represent 25% of consumption, have less bargaining power, as they face prices set by regulatory authorities. However, the deregulation of the Argentine market has given consumers more options to switch providers, leading to average savings of 15% for those who have opted for alternative suppliers. This competition has intensified price sensitivity, particularly among residential customers. Moreover, the increasing availability of renewable energy sources has strengthened consumers' bargaining power, as they can reduce their energy costs by investing in solutions such as solar panels, putting additional pressure on conventional suppliers.

**Threat of substitutes**

The threat of substitutes is on the rise due to the growing adoption of renewable energy sources like solar, wind, and hydroelectric power. In Argentina, solar and wind energy capacity has experienced rapid growth, reaching 2,414 MW and 1,890 MW, respectively, by 2023. Government incentives, both local and international, are driving the transition towards clean energy, posing a threat to traditional energy providers. Additionally, improvements in energy efficiency have reduced consumption, increasing the viability of substitutes. For instance, the cost of solar energy has decreased significantly since 2010, with an 88% reduction in the levelized cost of electricity (LCOE), making it more accessible and competitive.

### Market rivalry

Regarding competitive rivalry, the Argentine energy sector is highly competitive, with around 25 large electricity generation companies. Pampa Energía faces intense competition in both price and service quality. In a market where electricity prices averaged 101.820 ARS per MWh in October 2024, companies fiercely compete to attract both industrial and residential customers, which puts pressure on profit margins. Service quality is a key differentiator, and Pampa Energía has managed to maintain a satisfaction score of 75%, higher than competitors like Central Puerto (70%) and Genneia (68%). However, high exit barriers due to sunk infrastructure costs, along with the need for technological innovation, keep rivalry high. Pampa Energía has invested 150 million dollars in renewable energy, strengthening its competitive position against other players, such as Central Puerto, which has focused more on natural gas technology.

### Threat of new entrants

Finally, the threat of new entrants is low due to the high barriers to entry in the sector. The energy industry requires large capital investments; in 2023, Pampa Energía spent approximately 758 million dollars in capital expenditures, which discourages new competitors from entering. Additionally, regulatory and environmental compliance is strict, with annual costs that can exceed 20 million dollars, further complicating the entry of new players. Pampa Energía has also cultivated strong relationships with its customers, leading to a retention rate close to 90%, making it difficult for new entrants to gain market share. The company also benefits from economies of scale, which reduce production costs per unit and create a competitive advantage over smaller competitors trying to enter the market.

### Political Factors

- Government Energy Policies: Law 27.191 aims for 20% renewable energy generation by 2025, but Milei's administration may change incentives, impacting Pampa's investments.
- Energy Policy Changes: Milei's reforms include ending tariff segmentation and reintroducing social tariffs for fiscal efficiency.
- Privatization of State Companies: Plans to privatize companies like YPF could affect the energy sector.
- Subsidy Reduction: Reduction of subsidies by USD 3 billion by 2025, impacting Pampa's operating costs.
- Impact on Pampa Energía: Market-oriented policies may increase costs, requiring Pampa to adapt.

### Economic Factors

- Inflation Rates: Monthly inflation is decreasing, but annual inflation remains high (209%), affecting Pampa's costs.
- Economic Growth: A 2.7% growth is projected for 2024, positively impacting Pampa's revenues.
- Interest Rates: High rates (100%) increase financing costs, but reductions are expected in late 2024.
- Currency Fluctuations: High exchange rate gap (980 ARS/USD vs. 1,200 ARS/USD) complicates profit repatriation.

### Social Factors

- Public Perception: Skepticism towards energy providers; demand for transparency and sustainability.
- Population Growth: Population growth (46.1 million) increases energy demand.
- Urbanization: High urbanization (92%) requires infrastructure investment in metropolitan areas.

### Technological Factors

- Renewable Energy Adoption: 23% of installed capacity is renewable; Pampa plans to expand it.
- Infrastructure Advances: Inauguration of Pampa VI Wind Farm with 140 MW capacity.
- Technological Innovation: Participation in events focusing on sector innovation and digitalization.
- Research and Development: USD 90 million investment in R&D to stay competitive.

### Legal Factors

- Labor Laws: Pampa follows union agreements; committed to wages and employee rights.
- Contractual Obligations: Participation in public and private contracts valued at USD 2 billion.
- Intellectual Property: Pampa holds energy-related patents, key for competitive advantage.

### Environmental Factors

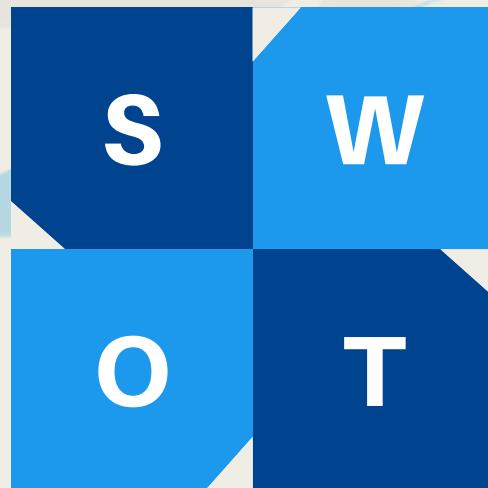
- Climate Change: Climate projections challenge hydroelectric generation.
- Emissions Standards: Compliance with strict emission regulations.
- Waste Management: Waste management program with recycling rates up to 90%.
- Sustainable Energy Sources: Plan to reach 50% renewable energy generation by 2025.

## STRENGTHS

- Leadership Position in the Argentine Energy Sector: Pampa Energía is one of the largest independent energy producers in the country, with a market share of approximately 12% in electricity generation.
- Diversified Portfolio: The company operates in multiple segments, including electricity generation, distribution, and oil and gas, which reduces risks and provides multiple sources of income.
- Strong Financial Performance: With revenues of approximately USD 1.5 billion and a solid EBITDA margin of 28% over the last three years, Pampa demonstrates consistent income flow.
- Strategic Location of Assets: The thermal plants are located near urban areas, which minimizes transportation costs and improves the reliability of the electricity grid.
- Established Customer Base: The company serves approximately 2.5 million users, reflecting strong brand recognition and trust in the quality of its service.

## WEAKNESSES

- High Dependence on the Argentine Market: Approximately 97% of its revenues come from Argentina, limiting its ability to expand internationally and making it vulnerable to local economic recessions.
- Regulatory and Political Risks: The volatility of the Argentine regulatory environment can affect operations, as evidenced by recent changes that altered pricing structures.
- Volatility in Energy Prices: Electricity prices have shown significant fluctuations, which can negatively impact the company's margins and profitability.
- High Operating Costs: Pampa faces operating costs above the sector average, especially in its thermal segment, which can erode its competitiveness.
- Environmental Liabilities: The company must comply with environmental regulations that could translate into significant compliance costs.



## OPPORTUNITIES

- International Expansion: The company seeks to diversify its sources of income by exploring international markets, which could significantly increase its revenues.
- Growing Demand for Renewable Energy: The Argentine government's goal to generate 20% of electricity from renewable sources by 2025 represents an investment opportunity.
- Strategic Alliances: Partnering with local and international companies can enhance operational efficiency and market penetration, as seen in joint projects.
- Government Incentives for Renewable Energy: Tax benefits for renewable energy projects offer a significant opportunity to increase investments.
- Infrastructure Modernization: Upgrading its infrastructure, with substantial investment, could improve efficiency and reduce operating costs.

## THREATS

- Economic Instability: While inflation has been relatively controlled in recent months due to measures implemented by the new government, the inherent unpredictability of Argentina's economic landscape remains a concern. Despite recent stability, the long-term outlook is uncertain, which continues to pose risks to investor confidence and operational consistency.
- Volatility in Global Oil and Gas Prices: Fluctuations in global oil prices can impact operating costs and profitability.
- Intense Competition: Players in the Argentine energy market, such as YPF, increase competition, putting pressure on margins and prices.
- Technological Obsolescence: The rapid advancement of renewable energy technologies requires Pampa to update its assets, which may require significant investment.

Position	Name	
Chairman of the Board	Marcos Marcelo Mindlin	Born on January 19, 1964, he is one of the founders of Pampa Energía and has been a board member since June 2006. He served as CEO from 2016 to 2018
Vice Chairman of the Board & CEO	Gustavo Mariani	Born on September 9, 1970, he is a co-founder of Pampa Energía and has been a board member since November 2005
Director and Executive Vice Chairman of Pampa	Ricardo Alejandro Torres	Born on March 26, 1958, he is a co-founder of the company and has been a board member since November 2005
Director and Head of Procurement, Security, and Marketing	Damián Miguel Mindlin	Born on January 3, 1966, he is a co-founder of Pampa Energía and has been a board member since November 2005
Director and Executive Director of Legal Affairs	María Carolina Sigwald	Born on November 15, 1967, she joined the board in November 2017
Director	Carolina Zang	Born on October 26, 1972, she has served as a board member since April 2022
Director	Carlos Correa Urquiza	Born on September 17, 1969, he has been a board member since April 2019
Director	Silvana Waserszstrom	Born on March 18, 1968, she has been a board member since June 2021
Director	Julia Sofía Pomares	Born on June 6, 1975, she joined the board in 2024
Director	Lucas Sebastián Amado	Born on May 29, 1974, he has been a board member since 2024.

## Income statement - BASE

All numbers in millions

Currency in usd

Annual standarized in U\$S	2021	2022	2023	2024	2025	2026	2027	2028	2029
A/F	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Total Revenue	\$ 1.508,00	\$ 1.829,00	\$ 1.732,00	\$ 1.803,68	\$ 2.092,27	\$ 2.468,88	\$ 2.962,65	\$ 3.495,93	\$ 3.705,69
Local Market Sales Revenue	-	\$ 1.478,00	\$ 1.423,00	\$ 1.388,83	\$ 1.359,97	\$ 1.728,21	\$ 1.777,59	\$ 1.817,88	\$ 1.667,56
Foreign Market Sales Revenue	-	\$ 351,00	\$ 309,00	\$ 414,85	\$ 732,29	\$ 740,66	\$ 1.185,06	\$ 1.678,05	\$ 2.038,13
Cost of Revenue	(\$951,00)	(\$1.139,00)	(\$1.107,00)	(\$1.192,53)	(\$1.225,83)	(\$1.456,52)	(\$1.702,59)	(\$2.162,32)	(\$2.271,26)
<b>Gross Profit</b>	<b>\$ 557,00</b>	<b>\$ 690,00</b>	<b>\$ 625,00</b>	<b>\$ 611,15</b>	<b>\$ 866,44</b>	<b>\$ 1.012,35</b>	<b>\$ 1.260,06</b>	<b>\$ 1.333,61</b>	<b>\$ 1.434,43</b>
Selling Expenses	(\$37,00)	(\$65,00)	(\$66,00)	(\$72,15)	(\$66,70)	(\$78,71)	(\$141,86)	(\$132,43)	(\$118,14)
Administrative Expenses	\$ 102,00	(\$142,00)	(\$185,00)	(\$217,00)	(\$215,00)	(\$222,00)	(\$256,00)	(\$192,00)	(\$122,00)
Exploration Expenses	-	-	(\$7,00)	-	-	-	-	(\$5,00)	-
Other Operating Income	\$ 105,00	\$ 131,00	\$ 177,00	\$ 137,00	\$ 166,79	\$ 139,74	\$ 210,13	\$ 171,30	\$ 166,02
Other Operating Expenses	(\$58,00)	(\$46,00)	(\$88,00)	(\$72,00)	(\$74,00)	(\$62,00)	(\$93,23)	(\$76,00)	(\$73,66)
Impairment of Financial Assets	(\$2,00)	(\$4,00)	-	-	-	-	-	-	-
Impairment of PPE, Intangible Assets, and Inventory	(\$4,00)	(\$38,00)	(\$39,00)	(\$41,00)	(\$28,00)	(\$33,00)	(\$11,00)	(\$13,00)	(\$21,00)
Income from Joint Ventures and Associates	\$ 117,00	\$ 105,00	(\$2,00)	-	-	-	-	-	-
Gain on Sale of Participations in Companies	-	-	\$ 9,00	-	-	-	-	-	-
<b>Operating Profit</b>	<b>\$ 579,00</b>	<b>\$ 631,00</b>	<b>\$ 424,00</b>	<b>\$ 346,00</b>	<b>\$ 649,52</b>	<b>\$ 756,38</b>	<b>\$ 968,10</b>	<b>\$ 1.086,48</b>	<b>\$ 1.265,65</b>
Financial Income	\$ 10,00	\$ 5,00	\$ 5,00	\$ 6,00	\$ 11,00	\$ 7,33	\$ 4,00	\$ 5,00	\$ 7,00
Financial Expenses	(\$185,00)	(\$221,00)	(\$364,00)	(\$324,66)	(\$376,61)	(\$444,40)	(\$533,28)	(\$629,27)	(\$555,85)
Other Financial Results	(\$14,00)	\$ 166,00	\$ 558,00	\$ 252,33	\$ 383,24	\$ 122,77	\$ 19,56	\$ 5,52	(\$9,50)
<b>Net Financial Results</b>	<b>(\$189,00)</b>	<b>(\$50,00)</b>	<b>\$ 199,00</b>	<b>(\$66,33)</b>	<b>\$ 17,63</b>	<b>(\$314,30)</b>	<b>(\$509,72)</b>	<b>(\$618,75)</b>	<b>(\$558,35)</b>
Income Before Taxes	\$ 390,00	\$ 581,00	\$ 623,00	\$ 279,67	\$ 667,15	\$ 442,09	\$ 458,39	\$ 467,73	\$ 707,29
Income Tax	(\$77,00)	(\$124,00)	(\$318,00)	(\$172,00)	\$ 186,44	\$ 217,51	\$ 252,31	\$ 255,47	\$ 308,28
<b>Income from Continuing Operations</b>	<b>\$ 313,00</b>	<b>\$ 457,00</b>	<b>\$ 305,00</b>	<b>\$ 107,67</b>	<b>\$ 853,59</b>	<b>\$ 659,60</b>	<b>\$ 710,70</b>	<b>\$ 723,20</b>	<b>\$ 1.015,57</b>
Income from Discontinued Operations	(\$75,00)	-	-	-	-	-	-	-	-
<b>Net Income for the Period</b>	<b>\$ 238,00</b>	<b>\$ 457,00</b>	<b>\$ 305,00</b>	<b>\$ 107,67</b>	<b>\$ 853,59</b>	<b>\$ 659,60</b>	<b>\$ 710,70</b>	<b>\$ 723,20</b>	<b>\$ 1.015,57</b>





## Appendix 9

### DCF - BASE

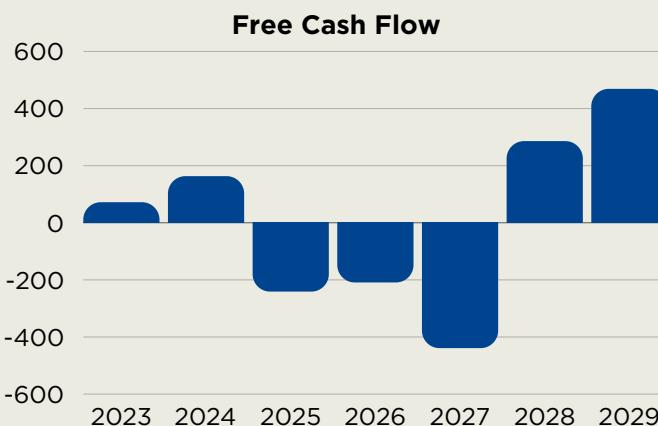
DCF - BASE

All numbers in millions

Currency in usd

Annual Standardised in USD	2024	2025	2026	2027	2028	2029	Terminal value
A/F	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
FCF	\$ 163,27	(\$241,07)	(\$209,29)	(\$439,84)	\$ 286,05	\$ 469,06	\$ 7.784,69
WACC	7,06%	7,06%	7,06%	7,06%	7,06%	7,06%	7,06%
g (perpetual growth rate)				0,98%			
Periods	1	2	3	4	5	6	6
Discounted CF	\$ 152,51	(\$210,34)	(\$170,56)	(\$334,77)	\$ 203,34	\$ 311,43	\$ 5.168,55
Sum discounted CF	\$ 5.120,16						
Quantity ADRs	54,54						
Stock price	\$ 93,88						

Terminal value	
EBIT	\$ 3.097,06
Tax	(\$308,28)
AA&DD	\$ 328,27
Var WC	\$ 188,00
<b>Operating Cash Flow</b>	<b>\$ 2.774,52</b>
CAPEX (reinvestment)	(\$3.388,57)
<b>Net Cash Flow from Investing</b>	<b>(\$2.236,45)</b>
Debt Ammortization	(\$293,00)
Interests paid	(\$616,56)
Tax Shield	\$ 308,28
<b>Cash from Financing Activities</b>	<b>(\$69,00)</b>
<b>FCF</b>	<b>\$ 469,06</b>
WACC	7,06%
g (perpetual growth rate)	0,98%
<b>Terminal Value</b>	<b>\$ 7.784,69</b>



## Appendix 10

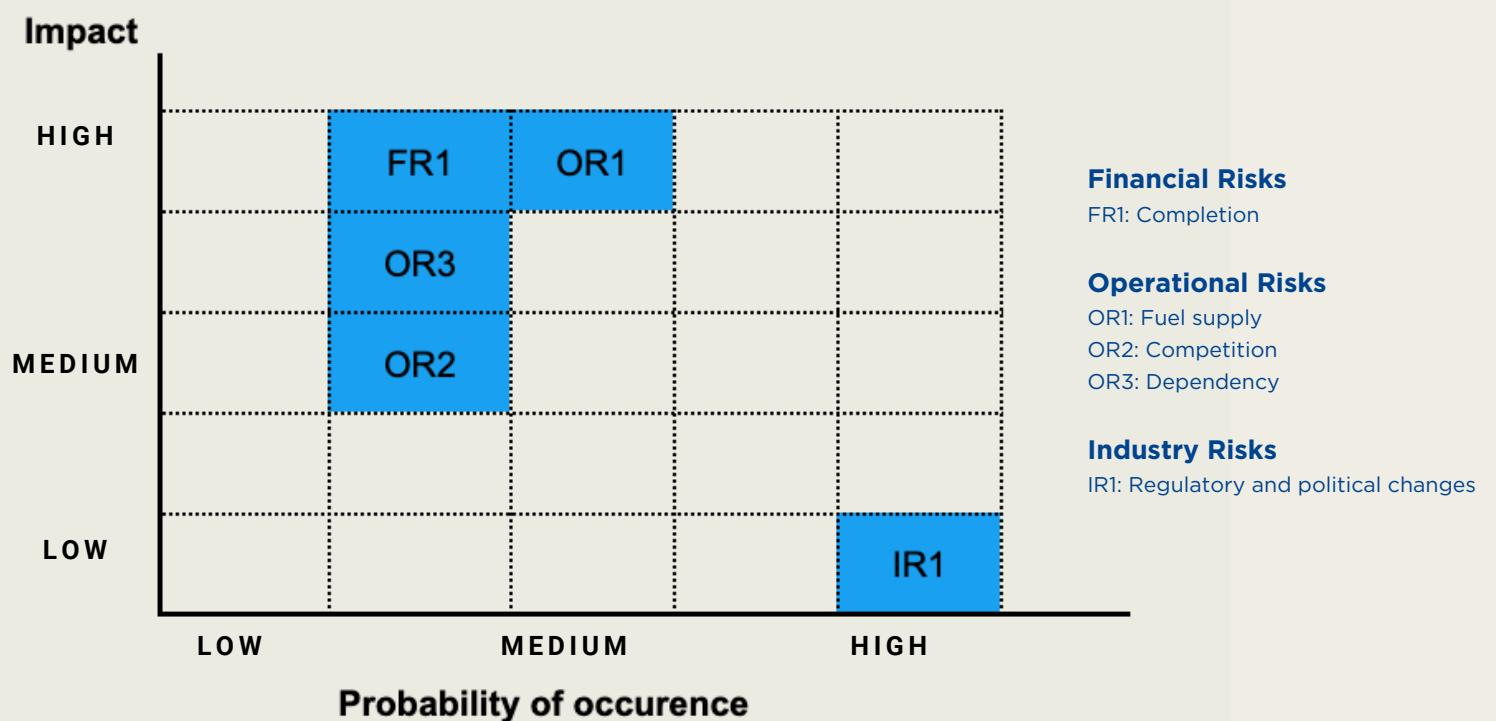
### WACC - BASE

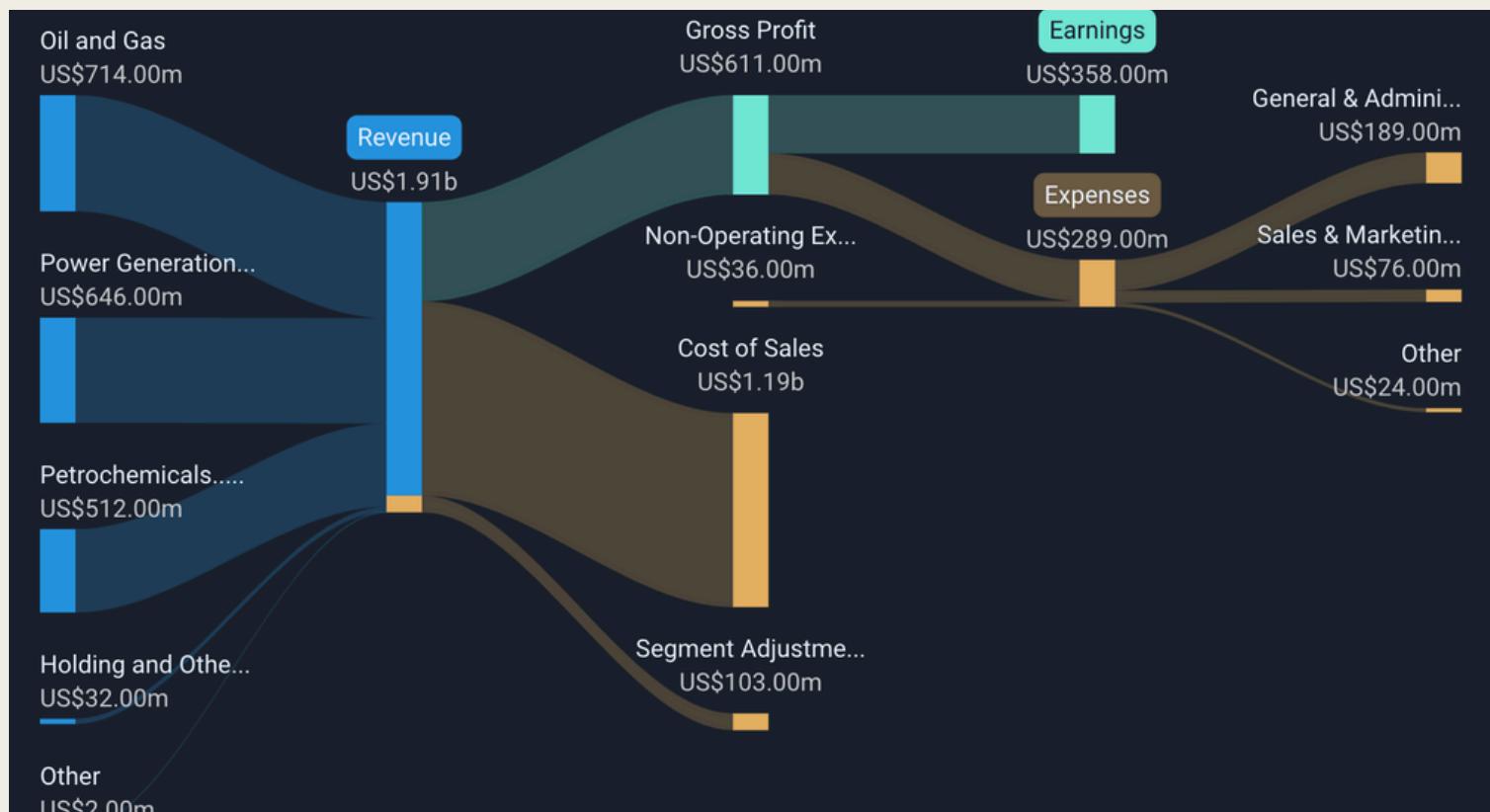
Weighted Average Cost of Capital (WACC)	2024	2025	2026	2027	2028	2029
A/F	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Interest rate	9,125%	9,125%	9,125%	9,125%	9,125%	9,125%
Tax Rate	23%	23%	23%	23%	23%	23%
<b>Cost of debt (kd)</b>	<b>7,03%</b>	<b>7,03%</b>	<b>7,03%</b>	<b>7,03%</b>	<b>7,03%</b>	<b>7,03%</b>
Risk-free rate (rf)	4,28%	4,28%	4,28%	4,28%	4,28%	4,28%
Leveraged Beta	0,58	0,58	0,58	0,58	0,58	0,58
Country Risk Premium (CRP)	9,55%	9,55%	8,72%	8,72%	8,72%	8,72%
Equity Risk Premium (ERP)	4,29%	4,29%	4,29%	4,29%	4,29%	4,29%
Historic S&P500 Standard deviation	9,27%	9,27%	9,27%	9,27%	9,27%	9,27%
Historic S&P Merval Standard deviation	38,90%	38,90%	38,90%	38,90%	38,90%	38,90%
<b>Cost of Equity (ke)</b>	<b>7,09%</b>	<b>7,09%</b>	<b>7,09%</b>	<b>7,09%</b>	<b>7,09%</b>	<b>7,09%</b>
Equity/Assets	46,39%	48,17%	51,10%	56,56%	58,19%	59,91%
Debt/Assets	53,61%	51,83%	48,90%	43,44%	41,81%	40,09%
<b>WACC</b>	<b>7,06%</b>	<b>7,06%</b>	<b>7,06%</b>	<b>7,06%</b>	<b>7,06%</b>	<b>7,06%</b>

#### Comments

- Interest rate: Yield of a bond with similar credit score. (PAM 2029 Bond - MGC3O)
- Risk free-rate: US T. Bond 10-year (01/10/2024)
- Country Risk Premium (CPR): Argentina's EMBI (01/11/2024)
- Equity Risk Premium (ERP): Damodaran (November 2024)
- Historic S&P500 Standard deviation: Damodaran (January 2024)
- Historic S&P Merval Standard deviation: Damodaran (June 2024)
- Kd = Interest rate \* (1 - Tax Rate)
- Ke = Rf + (Interest Rate - Rf) \* Leveraged Beta
- WACC = Kd \* (Debt / Assets) + Ke \* (Equity / Assets)

Ticker	Company	Country	Market Cap (Intraday)	EBITDA Margin %	P/E	PEG	EV/REVENUE	DEBT/EBITDA	ROA
CECO2	Enel Generación Costanera	Argentina	290,974 B	39,02	16,4	0,03	5,66	1,26	-1,86
CEPU	Central Puerto	Argentina	1,949 B	57,68	11,48	0,04	6,53	1,29	8,16
YPF	YPF	Argentina	14,568 B	23,52	16,36	0,06	1,13	2,98	4,45
<b>Local Mean</b>				<b>40,07</b>	<b>14,75</b>	<b>0,04</b>	<b>4,44</b>	<b>1,84</b>	<b>3,58</b>
AES	The Aes Corp.	Chile	9,933 B	27,14	9,70	0,04	3,04	8,86	2,84
EDEL MAG	Empresa Eléctrica de Magallanes	Chile	66,047 B	33,50	9,90	-1,42	1,83	1,96	8,83
CEBR3	Compañía Energética de Brasilia	Brasil	1,308 B	63,51	7,93	-0,68	1,91	-3,05	11,16
ENGIEC1	Engie Energía Perú	Perú	2,500 B	32,38	15,52	-0,5	22,31	2,64	3,02
<b>Regional Mean</b>				<b>39,13</b>	<b>10,76</b>	<b>-0,64</b>	<b>7,27</b>	<b>2,60</b>	<b>6,46</b>
<b>Overall Mean</b>				<b>39,60</b>	<b>12,75</b>	<b>-0,30</b>	<b>5,86</b>	<b>2,22</b>	<b>5,02</b>
<b>Pampa Energía</b>				<b>37,35</b>	<b>13,89</b>	<b>-0,13</b>	<b>2,67</b>	<b>2,56</b>	<b>5,20</b>





## HISTORY OF THE COMPANY

In 2005, the group known as EMES acquired "Pampa SA," a company already listed on the Buenos Aires Stock Exchange but without any commercial activities at the time. This company became the platform for EMES to consolidate its investments in Argentina's energy sector. Later, the company was renamed "Pampa Holding SA" and finally, due to its focus on the sector, was rebranded as "Pampa Energía SA."

In 2006, Pampa Energía acquired co-control of Transener, the leading high-voltage electricity transmission company in Argentina. Additionally, it purchased controlling stakes in the Nihuiles and Diamante hydroelectric plants in Mendoza, as well as the Güemes Thermal Power Plant in Salta. In 2007, they expanded further with the acquisition of the Loma de la Lata Thermal Power Plant in Neuquén and the Piedra Buena Thermal Power Plant in Buenos Aires. In September of that year, they increased their capital to take control of Edenor, the largest electricity distributor in the country.

In 2009, Pampa Energía expanded its international presence by listing on the New York Stock Exchange under the ticker "PAM." In 2011, they acquired co-control of TGS, the largest gas transportation company in the country, and in the same year expanded the capacity of the Loma de la Lata Thermal Power Plant by installing a combined cycle.

In the following years, Pampa continued to grow through new acquisitions and expansions. In 2016, they acquired 67.2% of Petrobras Argentina and in 2017 carried out the largest corporate debt issuance by an Argentine private company. They also continued increasing their generation capacity with new turbines and thermal power plants, as well as inaugurating wind farms to strengthen their commitment to renewable energy.

In recent years, Pampa has continued to develop its electricity generation capacity, with the expansion of the Genelba Power Plant in 2020. Currently, they employ nearly 10,000 people and have invested over \$7.2 billion in Argentina.