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FOSTERING INNOVATION AS AN ENGINE OF ECONOMIC GROWTH IN ARGENTINA

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One-paragraph Summary

Argentina stands at a moment of economic transformation. Building on its highly educated workforce, entrepreneurial spirit, and abundant natural resources, the country has significant opportunities for growth through innovation in four key sectors. In agriculture, its position as the world's third-largest food exporter combined with 165 specialized ag-tech firms positions Argentina to become a regional leader in agricultural technology. In energy, the country's exceptional wind and solar resources make it an ideal producer of green hydrogen, attracting major investments including €200 million from the EU and \$8.4 billion from Fortescue. In lithium production, Argentina is revolutionizing extraction methods with Direct Lithium Extraction (DLE) technology that reduces water usage by 50% while diversifying into clay and geothermal deposits that could triple reserves by 2035. In consumer goods, Argentina can leverage its position as the ninth-largest tobacco producer to develop a manufacturing hub for innovative nicotine products, a market projected to reach \$63 billion by 2032. Recent economic reforms under President Milei have created a more favorable investment environment, though further policy changes are needed to fully unlock this potential. By implementing supportive regulations, reducing trade barriers, and fostering public-private partnerships, Argentina can establish itself as a leading innovation economy in Latin America.

Executive Summary

Argentina stands at the threshold of an extraordinary economic transformation, powered by its unique combination of natural resources, human capital, and innovation potential. The country's highly educated workforce, entrepreneurial spirit, and thriving tech ecosystem—exemplified by its 12 unicorn companies and 340+ fintech firms—position it as Latin America's emerging innovation hub.

Four key sectors offer immediate opportunities for sustainable growth and international leadership:

- » **Agriculture Technology:** Argentina's established position as the world's third-largest food exporter provides a foundation for agricultural innovation. With 165 specialized ag-tech firms developing cutting-edge solutions in farm management, biotechnology, and robotics, the country is positioned to become a regional leader in agrifood technology development, creating spillover benefits across multiple sectors.
- » **Green Hydrogen:** Argentina's exceptional renewable energy resources—particularly Patagonia's wind power and northern regions' solar potential—make it an ideal producer of green hydrogen, projected to be a \$30 billion market by 2030. The European Union's commitment of €200 million for renewable hydrogen development and Fortescue's \$8.4 billion investment demonstrate strong international confidence in Argentina's potential to become a global clean energy leader.
- » **Lithium Production:** Argentina's lithium sector is transforming through Direct Lithium Extraction technology, cutting water usage by 50% and production cycles from months to days. The country is diversifying with clay deposits and geothermal brines that could triple reserves by 2035. With vast lithium resources and infrastructure improvements underway, Argentina is becoming a reliable, environmentally responsible supplier in the critical minerals market.
- » **Innovative Consumer Products:** Building on its position as the world's ninth-largest tobacco producer, Argentina has the opportunity to transform its traditional agricultural base into a high-value manufacturing hub for innovative nicotine products. This emerging market offers significant opportunities for job creation, increased exports, and stable tax revenues.

Recent economic reforms have created a favorable environment for foreign direct investment. By leveraging these advantages and implementing supportive policies, Argentina is uniquely positioned to establish itself as a leading innovation economy in Latin America and a trusted partner in the global marketplace.

1. Setting the Macroeconomic Stage

Argentina's Fluctuating Economic Policy Approaches Have Largely Contributed To Today's Challenging Situation.

Argentina's economic journey is a remarkable and cautionary tale in global history. In the early 20th century, it was a high-income nation. Over time, economic decline reduced it to a middle-income country, where it is still to this day – a rare phenomenon.¹ Over the past 70 years, it has endured 14 deep recessions, and extreme volatility with hardly any economic growth.

In the past few years, the situation has further deteriorated. While neighboring Latin American countries have achieved some growth, Argentina has continued to face multiple challenges. In 2024, poverty skyrocketed to 55%.² The unemployment rate was at 7% with a clear deterioration of private labor quality, and inflation was standing tall at an astonishing 230% (the second-highest in the world). Additionally, the Argentine central bank remains the largest IMF debtor with a total debt of 43 billion USD.^{3,4} While inflation is getting under control and poverty is declining after the government's work, many challenges remain. These challenges underline the urgent need for structural reforms to break free from the crisis cycle and pave the way toward sustainable economic growth with private job creation.

Milei's Austro-Libertarian Approach Has Led To Recovery But Challenges Persist

Argentina has undergone a dramatic economic shift under its newly elected libertarian and self-proclaimed anarcho-capitalist president, Javier Milei. Known for his ambitious policies, Milei attempted to overhaul the country's prevailing economic approach with a 600-measure large-scale Omnibus bill and a

300-measure emergency decree.⁵ His reforms also include deep cuts to public spending, a devaluation of the peso by over 50%, a freeze on public salaries and pensions, and incentives for foreign investors.⁶ These incentives include 30-year tax concessions and facilitated foreign trade procedures for investments exceeding 200 million USD in key sectors.

The measures have yielded immediate results: a fiscal surplus, declining inflation, improved credit ratings,

and positive reactions from international investors.⁷ However, challenges persist on the horizon, and more work will be needed.

Public And Private Economic Stakeholders Have High Expectations For The Argentinian Government

Argentina's economic stability heavily depends on securing hard currency, primarily through exports. At its core, this has been its recurring issue. A consistent presence of hard currency allows for productive investments and the reduction of its large IMF debts as a result.⁸ The path to recovery involves more than just the difficult job of controlling inflation – the IMF stresses that structural reforms, such as reducing barriers in the foreign exchange market, are needed to solve the country's deep economic challenges. Investors, both local and international, demand the removal of strict capital controls and trade restrictions. While the reduction and progressive elimination of these capital controls is something that needs to be done, practical issues remain. The sudden elimination of capital controls could lead to a potent outflow of hard currency, which would result in immediate adverse effects on the country's economy. For certain, these barriers end up blocking investment, raising import costs, and hurting exports, which are essential for economic growth. Beyond policy changes, Argentina must demonstrate political stability to regain international trust and restore its standing as a reliable partner.

¹ World Bank (2018). [Argentina: Escaping crises, sustaining growth, sharing prosperity.](#)

² Infobae (2024). [Un estudio de la UCA estimó que la pobreza en Argentina ascendió al 55,5% y la indigencia al 17,5%.](#)

³ Reuters (2024). [Argentina poverty rate soars over 50% as Milei austerity bites.](#)

⁴ IMF (2024). [Argentina.](#)

⁵ Latinvex (2024). <https://latinvex.com/one-year-of-javier-mileis-economic-policy/>

⁶ The Economist (2024). [Javier Milei has turned Argentina into a libertarian laboratory.](#)

⁷ Trading Economics. [Argentina - Credit Rating.](#)

⁸ Reuters (2024). [Argentina economy snapshot: central bank dollar buying spree slows.](#)

2. Innovation as a channel to economic growth

“Innovation plays an important role in diversifying the sources of growth in a country like Argentina, which has qualified human capital, research capabilities, and entrepreneurial energy”.

World Bank (2022)⁹

Promoting innovation is critical for Argentina

Innovation is crucial for Argentina’s economic and social progress. It can boost low productivity, enabling businesses to produce more with the same resources, and may drive the creation of new industries like information technology and renewable energy.¹⁰ Innovation will diversify the economy, create jobs, and attract investments.¹¹ Firms that invest in research, development, and partnerships experience higher growth and profitability, contributing to national economic progress.¹²

Innovation also strengthens education and skill development, fostering entrepreneurship and preparing the workforce for jobs in future-proof industries. The World Bank highlights innovation as Argentina’s key to transformation, supporting knowledge-intensive sectors and small- and medium enterprises to drive inclusive growth.¹³

From Potential To Reality: Argentinian Innovation Ability Needs to Materialize

Argentina’s innovation performance, measured through 80 indicators like R&D spending and patent output, aligns with the global average. However, it falls behind most other Latin American countries, including Brazil,

Mexico, Chile, Colombia, Uruguay, Costa Rica and Peru.¹⁴ Brazil is the innovation leader in Latin America, mainly due to its spending on research and development (R&D), its information and communication technology infrastructure and its sectoral diversification. Mexico is another frontrunner in Latin America due to its capacity for disseminating knowledge and creating creative goods and services.

Nevertheless, Argentina excels in several innovation areas. One area of strength is education and knowledge absorption. Argentina’s tertiary education and universities rank high, reflecting the country’s strong academic foundation. Knowledge absorption, which measures how well a country integrates global knowledge into its economy, is another area where Argentina performs well, showing openness to adopting and adapting international innovations.

Another notable strength is Argentina’s ability to transform R&D investments into outputs. This refers to the efficiency with which investments in R&D lead to tangible results, such as the creation of new businesses, patents, or product development. Argentina’s high performance in this area highlights its capacity to capitalize on limited R&D resources to generate economic and entrepreneurial outcomes.

Argentina’s Citizens Are Enthusiastic About Commercializing Ideas

In spite of its economic hurdles of low growth, export challenges, and high inflation, Argentina has emerged as a beacon of innovation with a dynamic entrepreneurial spirit and a flourishing tech ecosystem. Buenos Aires, often dubbed the South American Silicon Valley, is at the heart of this transformation, serving as a hub for cutting-edge technology and innovation.¹⁵ The country boasts 12 tech unicorns, each worth over 1 billion USD, with the leading sector being fintech. The fintech sector has experienced robust growth and has more than 340 firms reshaping financial services and driving digital transformation. This combination

⁹ World Bank. <https://www.worldbank.org/en/news/press-release/2022/07/25/el-banco-mundial-impulsa-la-innovacion-y-el-emprendedurismo-en-argentina>

¹⁰ ECB (2017) [How does innovation lead to growth?](#)

¹¹ Brookings (2011). [Technology and the Innovation Economy](#)

¹² Gustavo et al (2013). [Structural Change and Economic Dynamics](#)

¹³ World Bank (2022). [The World Bank promotes innovation and entrepreneurship in Argentina.](#)

¹⁴ World Intellectual Property Organization. [Global Innovation Index 2024.](#)

¹⁵ International Trade Administration (2024). [Argentina - Country Commercial Guide.](#)

of vibrant entrepreneurship and robust technological advancement positions Argentina as an innovation leader in the region.

Argentina Has A High Potential For Human Capital

Argentina still stands out in Latin America for its high education levels, surpassing other Latin American countries like Peru, Chile, Uruguay, Ecuador, and Brazil.¹⁶ This strong educational foundation highlights Argentina's potential for developing a highly skilled workforce.

However, the country faces a critical challenge in translating its educational achievements into employment opportunities. Youth unemployment reached 18% in 2023, and like many other middle-income countries, Argentina has a large mismatch between education levels and occupation.¹⁷ This means that a relatively large proportion of the labor force is under or overeducated for their jobs.

Several Reforms Are Required To Unlock The Innovation Potential – Patience and Constance Are Needed

Argentina's innovation potential is evident, but its ability to transform this capacity into tangible economic growth is currently hampered by years of policy failures. To unlock its potential, the country will need to continue in the implementation of structural reforms that allow its innovative strengths to thrive.¹⁸

Four key sectors – agriculture, green hydrogen, lithium, and consumer goods – offer immense innovative potential and could stimulate economic growth with minimal government intervention. By focusing on these areas and thereby creating an innovation ecosystem, Argentina could leverage its natural resources, technological capabilities, and entrepreneurial culture to drive sustainable development and enhance its position in the global economy.

3. Increasing the Competitiveness and Resilience Of The Agricultural Sector

Years of Mismanagement Have Lead Argentina To Lose Its Leading Role On The International Playing Field

Argentina holds a prominent position as the world's third-largest food exporter, with agriculture and food industry contributing 16% of its GDP and 11% of tax revenues in 2021.¹⁹ However, despite its significance, the sector has been losing competitiveness in international markets in recent years. Argentina's share in the global agrifood market fell from 2.7% in 2011 to 2.2% in 2021, and exports to the EU dropped by 33% in value between 2022 and 2023.²⁰

This decline in the global agrifood market share is largely attributed to insufficient regulatory support and burdensome policies. Export restrictions, bans, and high and volatile export taxes have undermined the sector's growth and technological advancements. Between 2020 and 2022, Argentina recorded the most negative producer support among its global competitors, reaching -15%.²¹ Producer support is the monetary value from consumers and taxpayers to agricultural producers, arising from policy measures that support – or penalize – agriculture. In most countries, this indicator is positive as governments usually subsidize the agriculture sector. Argentina is, however, one of the three countries worldwide (next to Vietnam and India) with negative producer support. For example, while soybeans are the main export commodity, they also face the highest export rate. These policies that restrain agricultural producers act as an implicit tax, suppressing profitability and discouraging investment in agricultural innovation. Indeed, the expenditure on agricultural innovation decreased from 57% in 2000/02 to 50% in 2020/22.

Ag-Tech Businesses Are Key To Regaining International Market Share

¹⁶ World Bank (2024). [Secondary school enrollment.](#)

¹⁷ World Bank (2024). [Secondary school enrollment.](#)

¹⁸ World Bank (2024). [A New Growth Horizon for Argentina - Economic Memorandum.](#)

¹⁹ World Bank (2024). [Towards a more competitive, inclusive, and resilient agrifood sector in Argentina.](#)

²⁰ European Commission (2024). [Agri-food trade statistical factsheet.](#)

²¹ OECD (2023). [Agricultural Policy Monitoring and Evaluation.](#)

Shifting weather patterns are forcing agricultural producers worldwide to adopt adaptive practices, particularly in countries heavily affected by weather-related events where the agricultural sector plays a major economic role. Argentina stands prominently among these nations. Projections indicate that by 2050, agricultural droughts could increase by 65% and heatwaves could persist 63 times longer than current durations.²² This makes enhancing productivity, efficiency, and resilience absolutely critical for Argentina's agricultural future.

Adaptive agricultural technologies encompass improved soil and water management practices along with sophisticated data systems and financial instruments that strengthen risk management capabilities. Israel, globally recognized for leadership in agricultural smart technologies,²³ currently provides Argentina with valuable knowledge transfers in irrigation technology and fertilizer optimization.

Argentina already possesses a robust ag-tech ecosystem with 165 specialized firms as of 2022.²⁴ These companies span diverse areas including farm management, agricultural biotechnology, midstream technologies, agribusiness marketplaces, and farm robotics.²⁵ The potential for expanding the agricultural frontier through these technologies remains substantial, especially with strategic involvement from the Instituto Nacional de Tecnología Agropecuaria (INTA), which can provide research support, validation, and implementation assistance for new technologies.

Current agricultural technologies range from satellite imagery that identifies weather-related events to financial technologies simplifying procurement processes. Mobile applications and artificial intelligence solutions continue making the entire value chain more efficient.²⁶ These horizontal technologies extend beyond agriculture-specific applications, benefiting sectors such as healthcare, manufacturing, and logistics. Indeed, most industries stand to gain from financial technologies, artificial intelligence, and other digital innovations.

By developing this dynamic ecosystem further, Ar-

gentina could establish itself as the global leader in agrifood technology development. Leveraging its established technological foundation while incorporating INTA's extensive agricultural expertise would enable Argentina to transform its agricultural sector into a modern, resilient powerhouse driving economic growth, reclaiming international market position, and creating positive spillover effects throughout the entire economy.

A Two-Pronged Approach Is Needed To Transform The Existing Ag-Tech Business Into A More Efficient System

To fully harness the potential of its agricultural sector, the government needs to follow a two-pronged approach, consisting of public support and private investments. Updating the regulatory framework is imperative to unlock private sector investments. Reducing export restrictions and eliminating capital controls would remove trade barriers and enable agricultural producers to compete more effectively in global markets. In addition, the government needs to increase producer support – moving it to positive levels – as most countries do, by lowering and eventually eliminating export taxes. By taking these steps, Argentina can revitalize its agricultural industry and reclaim its position as a leader in agrifood.

In parallel, Argentina should focus on removing regulatory barriers to investment, strengthening intellectual property protections, and simplifying the tax code for ag-tech ventures. Specific reforms could include streamlining business registration processes, reducing capital controls, and establishing clear legal frameworks for agribusiness ventures. These market-oriented policies, implemented once economic stability is achieved, would create an environment where private investment can naturally flow to promising agricultural technologies and innovations.

4. Green Hydrogen Can Make Argentina A Global Green Pioneer

²² G20 Climate Risk Atlas. [Argentina](#).

²³ Embassy of Israel (2024). [The Ambassador of Israel in Argentina visited Catamarca](#).

²⁴ Endeavor y Bain & Company (2022). [Situación actual y perspectivas del ecosistema AgTech de Argentina](#).

²⁵ Endeavor y Bain & Company (2022). [Situación actual y perspectivas del ecosistema AgTech de Argentina](#).

²⁶ Ministry of Agriculture, Fisheries, Food Security and Nature (2022). [Startups: Argentina's Agtech sector as cutting edge for the region](#).

The Argentinian Territory Has The Perfect Natural Resources For Renewable Energy

Argentina is uniquely positioned to lead in the technologies of the future, thanks to its abundant natural resources, including vast land, water reserves, and favorable conditions for wind and solar energy. Argentina's northern regions hold massive potential for solar energy expansion, while its large agricultural sector provides ample biogas and biomass for energy production. Patagonia's powerful winds enhance the country's capacity for wind energy generation, which can be converted into green hydrogen through electrolysis. Green hydrogen is produced with electrical energy from renewable sources and the subsequent conversion of electricity into gaseous or liquid energy carriers is known as green hydrogen or power-to-X. It is a game-changing technology for storing energy and transporting it efficiently over long distances.²⁷

The Global Demand In Green Hydrogen Will Grow Massively In The Next Decades

Green hydrogen is emerging as a cornerstone of the global transition to net-zero emissions, with its market poised to grow from 1 billion USD in 2024 to 30 billion USD by 2030.²⁸ By 2050, demand is projected to increase sixfold to 650 million tons, accounting for 20% of global energy needs.²⁹ Often described as the "oil of the 21st century," green hydrogen is set to play a transformative role in the energy landscape as it can be used in many ways:

- » Climate-friendly energy carrier for trucks;
- » Sustainable production of steel or cement;
- » Sustainable aviation fuels;
- » Production of ammonia for fertilizers;
- » Storage of surplus electricity;

- » Conversion back to electricity in periods with a shortage of electricity;
- » Contribution to the decarbonization of all industries that cannot be electrified (e.g. aviation, shipping, heavy-duty transport).³⁰

By capitalizing on its natural advantages, Argentina has the opportunity to drive sustainable energy development, meet growing global demand for green hydrogen, and establish itself as a major player in the clean energy economy of the future.³¹

The EU Aims To Establish Argentina As a Trade Partner For Green Hydrogen

With Europe fulfilling its objective to diversify its energy sources to reduce dependency on autocracies, the timing is ideal for Argentina to position itself as a reliable and democratic trade partner and energy supplier. Moreover, global demand for non-fossil hydrogen must increase 75-fold between 2023 and 2050 to meet the Paris Agreement targets. This need to increase the supply of green hydrogen is leading to high volumes of investment. For example, both OECD countries and China have announced subsidies of 100 billion USD in 2023 to promote clean hydrogen.³²

Argentina's potential has not escaped the EU, which considers Argentina an important partner in building a sustainable energy future. In July 2024, the European Commission declared the creation of a 200 million Euro platform to fund Argentina's renewable hydrogen sector, aiming to increase green hydrogen exports to the EU.³³

Policymakers need to realize and implement their strategies to attract investors

Argentina needs to implement key regulatory changes to capitalize on the growing global interest in its renewable energy and green hydrogen sectors.³⁴ The

27 World Economic Forum (2021). [What is green hydrogen and why do we need it?](#)

28 Forbes (2024). [Green Hydrogen Will Become The 21st Century Version Of Oil.](#)

29 Geopolitical Intelligence Services (2023). [The future of global hydrogen.](#)

30 KfW. [What is green hydrogen?](#)

31 Cámara de Industria y Comercio Argentino-Alemana. [Factsheet: Renewable Energy and \(Green\) Hydrogen in Argentina.](#)

32 Worldbank (2023). [Unleashing the power of hydrogen for the clean energy transition.](#)

33 European Commission (2024). [Dialogue on Energy Transition and Green Hydrogen.](#)

34 Initiative for Climate Action Transparency (2023). [Application of the ICAT Transformational Change and Sustainable Development Methodologies to assess disruptive innovations and behaviours in support of climate action in Argentina.](#)

government has already taken an important step with its 'National Strategy for the Development of the Hydrogen Economy', which outlines action points aimed at promoting competitiveness both locally and internationally. A slow implementation will undermine investor confidence.³⁵ Additionally, efforts are underway to enact a bill that would establish the framework for funding the hydrogen value chain – a milestone initiative that would strengthen the sector and exemplify effective public-private collaboration.^{36, 37}

To capitalize on Argentina's wind and solar energy advantages for green hydrogen production and meet growing global demand, significant legislative action is required beyond the hydrogen bill alone. The current renewable energy framework under Law 27.191, set to expire in 2025, has faced substantial implementation challenges, particularly regarding territorial coordination with provinces, insufficient private investment, grid connectivity issues, and industrial transport limitations.

A comprehensive approach must acknowledge that provinces hold constitutional authority over natural resources, necessitating both national and provincial legislation working in harmony. The federal government must not only establish a stable national legal framework through the hydrogen bill but also coordinate with provincial governments to develop compatible provincial laws that streamline project approvals and create consistent regulations across jurisdictions.

Additionally, targeted incentives such as tax breaks or low-interest loans are essential to stimulate investment in renewable energy projects, especially given the historical difficulties in attracting private capital under the current framework. While Argentina has fundamental advantages in renewable resources, successfully leveraging these assets requires accelerating the implementation of both federal and provincial legislation, addressing the bureaucratic and jurisdictional complexities that have hindered the current renewable energy law, and maintaining investor confidence through a more coordinated and multi-level governance approach.

5. Direct Lithium Extraction (DLE) Cements Argentina's Sustainable Mining Leadership

Technological Innovation Drives Water Conservation in the Lithium Triangle

Argentina's lithium sector is undergoing a fundamental transformation through Direct Lithium Extraction (DLE) technology, offering a revolutionary alternative to traditional evaporation ponds. Rio Tinto's \$2.5 billion³⁸ Rincón project showcases this shift, deploying closed-loop systems that reduce water usage by 50% compared to conventional methods. DLE technology³⁹ selectively extracts lithium using adsorbents or ion-exchange resins, dramatically shortening production cycles from 18 months to just days. This technological pivot addresses critical environmental concerns in Argentina's arid regions, with Rio Tinto's system recycling 80% of process water. The success of DLE pilots at Livent Corporation's Fenix operation has accelerated industry-wide adoption, with Jujuy and Salta provinces establishing expedited permitting⁴⁰ specifically for DLE projects, cutting approval timelines in half from 24 to 12 months.

Environmental Stewardship Becomes Competitive Advantage in Global Markets

As global battery manufacturers and automakers face increasing pressure to secure environmentally responsible supply chains,⁴¹ Argentina's embrace of DLE technology creates a strategic market advantage. The establishment of a federal lithium consortium, proposed in early 2025, aims to standardize environmental protocols across provinces and strengthen Argentina's "green lithium" branding. This focus on sustainable extraction methods comes at a critical time, following court interventions in Catamarca that suspended new licenses after traditional operations depleted local

35 Secretariat for Strategic Affairs (2023). [National Strategy for the Development of the Hydrogen Economy](#).

36 Global Trade Alert. [Argentina: Government proposes a new law for incentivising projects in the hydrogen sector](#).

37 Argus (2024). [Argentina H2 group proposes investment promotion scheme](#).

38 Rio Tinto (2024). [Rincón Lithium Project](#).

39 Clean Tech Lithium (2024). [DLE is moving into the mainstream](#).

40 S&P Global (2023). [Argentina could be epicenter of new stage of lithium supply](#).

41 Goldman Sachs (2023). [Direct Lithium Extraction: A potential game changing technology](#).

aquifers. By prioritizing water conservation through advanced extraction technologies, Argentina positions itself to command premium pricing in an increasingly environmentally conscious global market, even as lithium carbonate prices fell 70% from 2022 peaks to \$13,000/t in late 2024.⁴² This sustainable approach not only helps preserve Argentina's fragile ecosystems but also aligns with international ESG standards that increasingly influence investment decisions in the critical minerals sector.

Clay and Geothermal Deposits Expand Beyond Traditional Brine Resources

Argentina's lithium landscape is diversifying beyond the traditional brine operations that have defined the Lithium Triangle. The groundbreaking discovery in San Juan's Iglesia region revealed substantial lithium concentrations of 824 mg/l within clay deposits—a geological setting previously unexploited outside Nevada's Clayton Valley. Canadian firm Origen Resources identified the Los Sapitos site, where volcanic debris has enriched clays with lithium, offering a cost-effective alternative to conventional extraction methods. This find has attracted significant Chinese investment, with one consortium pledging \$1.1 billion for feasibility studies in adjacent areas. Meanwhile, exploration in La Rioja's geothermal lithium brines represents another next-generation target. Together, these non-traditional lithium sources could potentially triple Argentina's reserves by 2035, dramatically expanding the country's production capacity beyond the current projection of 261,000 tons by 2027.

Strategic Resource Development Strengthens Global Supply Chain Resilience

As geopolitical tensions reshape global supply chains, Argentina's diversified lithium resources serve as a strategic hedge against market volatility. The country's lithium exports have traditionally flowed predominantly to China, which absorbed 65% of 2024 production through partnerships with Ganfeng, Zijin, and CNNET. However, U.S. and European automakers are gaining momentum in the Argentine market, exemplified by Ford's 2024 offtake agreement with Rio Tinto

that secures 15,000 tons annually for North American battery production. The planned Norpatagónico Railway, linking Salta to Buenos Aires, promises to reduce export costs by 30% after 2030, addressing persistent transportation bottlenecks that currently route 80% of lithium shipments through Chile's Antofagasta port. By developing diverse lithium sources and strengthening export infrastructure, Argentina is positioning itself as a reliable, long-term supplier in a critical minerals market characterized by increasing competition and strategic realignment. With 22 million metric tons of lithium resources—second only to Bolivia—Argentina's expanding resource portfolio will play a crucial role in meeting global demand for battery materials through 2050.

6. Future-Proof Consumer Good Industries Will Provide A Stable Investment Opportunity

The Growing Global Innovative Nicotine Alternatives Market

The rapid evolution of the nicotine product landscape presents a transformative economic opportunity. As current smokers shift toward safer nicotine alternatives, this transition creates cascading opportunities across the value chain, from agricultural adaptation to advanced manufacturing. The development of this market segment holds particular promise for economies seeking to leverage existing tobacco-related capabilities while moving up the value chain. As a result, the cigarette market – estimated at 1 billion USD – is gradually being supplanted by Innovative Nicotine Products (INPs) such as Heated Tobacco Products (HTPs), vapes, and nicotine pouches.⁴³

What is more, the HTP market alone is projected to grow at a compound annual growth rate (CAGR) exceeding 50% through 2030.⁴⁴ Similarly, the global nicotine pouches market is experiencing rapid growth, dri-

⁴² c&en (2024). [Firms start up direct lithium extraction plants in the Americas.](#)

⁴³ Imarc (2024). [Cigarette Market Report by Type \(Light, Medium, and Others\), Distribution Channel \(Tobacco Shops, Supermarkets and Hypermarkets, Convenience Stores, Online Stores, and Others\), and Region 2025-2033.](#)

⁴⁴ Grand View Research (2017). [Heated Tobacco Products Market Size, Share & Trends Analysis Report By Product \(Stick, Leaf\), By Distribution Channel \(Online, Offline\), By Region, And Segment Forecasts, 2019 - 2025.](#)

ven by increasing consumer demand for smoke-free alternatives to traditional tobacco products. In 2023, the market was valued at 3 billion USD and is projected to reach 63 billion USD by 2032.⁴⁵

This market transformation catalyzes several economic development opportunities. The sophisticated nature of alternative nicotine products necessitates significant investment in research and development, fostering the creation of high-skilled technical positions and driving innovation in adjacent fields. The ripple effects extend beyond direct employment, spurring advancements in precision engineering, materials science, and digital technologies that can benefit broader industrial applications. For emerging economies, this presents a unique opportunity to transition from primary production to value-added manufacturing.

This evolving landscape encompasses three main categories of INPs, each representing different technological approaches and market opportunities. These products not only demonstrate varying levels of sophistication in their development and manufacturing processes but also offer distinct possibilities for economic growth and industrial development. Understanding their characteristics and success in different markets provides valuable insights into their potential economic impact.

Vaping products represent an innovative approach to nicotine delivery that has revolutionized smoking alternatives. Unlike traditional cigarettes, these electronic devices use battery-powered heating elements to vaporize a liquid solution containing nicotine, without any tobacco or combustion. Advanced technology allows these products to deliver consistent nicotine doses while eliminating many of the harmful compounds associated with smoking, making them increasingly popular as a smoking cessation tool.

HTPs combine innovative technology with traditional tobacco in a novel approach to nicotine delivery. These devices heat specially prepared tobacco to temperatures around 250-350°C, well below the point of combustion, creating an aerosol that delivers nicotine

while significantly reducing harmful byproducts compared to conventional cigarettes. The success of heated tobacco products in Japan has led to a staggering 52 percent reduction in cigarette sales.

Nicotine pouches and snus represent a smoke-free innovation in nicotine delivery that builds on centuries of Nordic tradition. These small pouches, placed between the lip and gum, deliver nicotine without any combustion or inhalation. While traditional snus contains tobacco, modern nicotine pouches deliver tobacco-free nicotine in a cleaner format. Sweden's experience with snus, contributing to the country's lowest tobacco-related mortality rate in Europe, demonstrates these products' potential impact on public health.

Argentina is already a major tobacco producer. In 2022, the country produced 96 thousand tons of unmanufactured tobacco, ranking as the ninth-largest producer worldwide.⁴⁶ This demonstrates the strength of its agricultural base and expertise in different varieties of high quality raw tobacco production. However, the country reported no exports of manufactured tobacco products, while imports of these goods reached 66 million USD in 2022.⁴⁷ This trade gap highlights an opportunity for Argentina to develop domestic manufacturing capabilities, reduce reliance on imports, and create added value locally. By building on its foundation in unmanufactured tobacco, Argentina could expand into higher-value products, such as HTPs and nicotine pouches.

Argentina Can Capitalize On The Tobacco Industry's Shift And Position Itself As The Regional Hub For Investments

Global leaders in the tobacco industry are shifting almost all investments toward INPs. These investments often encompass manufacturing facilities, distribution networks, R&D to improve the product portfolio, and marketing hubs. Regrettably, Argentina's restrictive legal framework for INPs has indeed blocked investment. Since 2011, the country has banned the sale and promotion of e-cigarettes.⁴⁸ In 2023, restrictions were tightened, restricting the import, distribution, and promotion of products such as HTPs.⁴⁹ The si-

⁴⁵ Business Research Insights (2023). [Nicotine Pouches Market Size, Forecast, 2032.](#)

⁴⁶ Global Action to End Smoking (2024). [Argentina | Tobacco and Health Around the World.](#)

⁴⁷ Trademap (2024). [Import by products.](#)

⁴⁸ Ecig Intelligence (2022). [Regulatory report: Argentina, March 2022.](#)

⁴⁹ Ecig Intelligence (2024). [Argentina e-cigarette tax proposal gives local industry hope for vaping regulation.](#)

tuation is reflected by the recently launched Path to smoke-free platform, which ranks the country at the bottom 10 countries.⁵⁰

This approach creates uncertainty and deters foreign direct investment (FDI). However, the current political and economic landscape provides a window of opportunity to establish itself as a leader in innovation and production within Latin America. The country is gradually opening up to novel nicotine products as they plan their legalization as part of the Omnibus law, while many neighboring Latin American countries have yet to adapt regulatory frameworks to accommodate

novel nicotine products.⁵¹ The original bill of the Omnibus package planned for all tobacco products to be regulated equally, implying a legalization of INPs. This measure was not passed in the slimmed-down version of the law but is still in the pipeline. Such legislation would attract foreign investments, increase exports, and open new economic opportunities.

Investments In INPs Could Trigger A Chain Of Economic Benefits For Argentina, Including Job Creation, Higher Tax Revenues, And Expanded Export Opportunities

First, investments in INPs would create new jobs in manufacturing, distribution, and research. Skilled industrial workers would gain better opportunities if new factories were built. R&D's investments would generate high-quality positions in research and innovation, making better use of the country's potential and promoting social progress.

Secondly, investments in these products would generate tax revenues including VAT, excise taxes, profit tax, and property taxes among others, from expanded industrial and commercial activities. Consumer goods markets like INPs are stable and generate reliable tax revenues, providing a steady income stream for government budgets. The new employees would also pay income tax. Such fiscal contributions can help reduce Argentina's fiscal deficit and improve its ability to service foreign debt.

Investments can also create a ripple effect, raising incomes in related industries. Tobacco farmers, for example, could expand by producing higher-quality

leaf varieties suited for HTPs, improving both techniques and yields. HTP producers that invest in countries help develop innovative agricultural management models to ensure commercial predictability, long-term sustainability, and improved competitiveness. Logistics companies gain from the need for specialized transport systems to handle sensitive products. Packaging industries would thrive too, as INPs often require innovative designs, including net-zero options. This indirect economic effect would strengthen the economy over time, boosting resilience.

Actions are needed for Argentina to secure a notable supply portion in the anticipated global HTP demand surge. For example, it is necessary to expand the agricultural tobacco leaf sector to HTP production to amplify already existing sizeable exports in the sector, improving quality (and goods value) as a result. Trade policy can also be used to fuel economic development within industrial parks, thereby promoting the economic transformation towards technologically intense sectors.

Ag-Tech, Green Hydrogen, Lithium, and INPs Are A Perfect Symbiosis As They Offer Synergy Effects

The INPs market, together with green hydrogen and ag-tech, would establish a new and balanced innovation portfolio. The stable agricultural sector, the sustainable green hydrogen market, and the forward-looking INPs market create a connected ecosystem that fosters innovation. For instance, locally produced green hydrogen could supply energy to manufacturing facilities of INPs, be used to produce ammonia for fertilizers, and power agricultural machinery. Moreover, the infrastructure that is needed to trade green hydrogen could also be used by agricultural products and INPs. For example, ports that are built for green hydrogen and lithium – and maybe even tax-free zones – can be used to export agricultural products and INPs. This diversified network positions Argentina to tackle macroeconomic challenges, attract foreign investment, and support long-term sustainable development. By unlocking its potential across these interconnected sectors, the country can build a more dynamic, competitive, and resilient economy.

⁵⁰ Path to smoke free (2024). <https://pathtosmokefree.global/ranking/>

⁵¹ Ecig Intelligence (2024). [Argentina e-cigarette tax proposal gives local industry hope for vaping regulation.](#)

7. Argentina needs to take both short-term and long-term actions to seize its opportunities

Outdated legislations are the main barriers to unlocking investments in key industries

Argentina risks losing its competitive edge without a supportive regulatory framework. To unleash its innovation potential, the government must prioritize the following reforms:

- » **Create clear roadmaps:** Collaborate with international stakeholders to build trust and attract partnerships. Set timelines and milestones for policy changes to reassure investors and reduce uncertainty. The implementation of national guidelines such as the “National Strategy for the Development of the Hydrogen Economy” sends clear signals to foreign investors which areas could be profitable.
- » **Reduce trade barriers:** Eliminate excessive import tariffs and restrictions on essential technologies and simplify foreign currency regulations to ensure smoother capital flows. This includes the elimination of strict capital controls, among other trade barriers.
- » **Increase fiscal incentives:** Offer tax exemptions or reductions for investors in sectors like green hydrogen, ag-tech and INPs, and establish fast-track procedures for foreign companies. President Milei has already introduced favorable investment schemes that have shown effectiveness. Continuing this approach and expanding the RIGI framework to embrace sectors not yet contemplated by current regulations would create valuable new pathways for investment across Argentina’s diverse economic landscape.
- » **Establish tax-free zones:** Introduce favorable legal frameworks such as free or reduced taxes for key areas to stimulate the agglomeration of

transformative industries.

Argentina stands at a crossroads where proactive reforms can transform its economic trajectory. By implementing clear roadmaps, reducing trade barriers, increasing fiscal incentives, and fostering tax-free zones, the nation can position itself as a global hub for innovation and investment. A forward-thinking regulatory framework will not only restore investor confidence but also unlock Argentina’s full potential in emerging industries, driving sustainable growth and long-term prosperity.

Argentina needs long-term strategies to achieve sustainable growth

Milei’s austerity course aims to achieve 0% inflation while driving economic growth, a bold and ambitious vision. Therefore, Argentina must adhere to long-term principles that provide a foundation for both economic stability and growth. These principles include:

- » **Conclude free-trade agreements:** Build on the momentum following the EU-Mercosur agreement’s signature⁵² by actively engaging with European and South American diplomats to accelerate its ratification. Following Chile’s successful approach of securing multiple trade agreements, Argentina should leverage this opportunity to establish additional trade partnerships. The announced⁵³ free trade agreement with the United States would be a major milestone.
- » **Infrastructure:** Improve infrastructure to reduce costs. To export products, Argentina needs to build more inland waterways and improve rail and road networks, which would reduce retail prices and ultimately also make Argentina more competitive.⁵⁴ This initiative is fundamental to give connectivity to those investment projects in the Northern provinces and in the Patagonia region.
- » **Strengthen public-private partnerships (PPP):** Collaborate with private companies to share risks, pool resources, and leverage expertise. This can accelerate progress in critical

⁵² Euractive (2024). <https://www.euractiv.com/section/economy-jobs/news/eu-seals-long-stalled-mercotur-trade-deal/>

⁵³ Cronista (2024). <https://www.cronista.com/economia-politica/javier-milei-confirmando-el-tratado-de-libre-comercio-con-estados-unidos/>

⁵⁴ Farm Progress (2023). [Farmers report Argentina behind on infrastructure.](#)

areas such as infrastructure development, renewable energy, and technology, and ensure better outcomes.

- » **Develop sector-specific strategies:** Create sector-specific strategies for key areas like ag-tech, green hydrogen and INPs, with measurable objectives and outcomes. These strategies should signal commitment to long-term stability, encouraging investors to commit.
- » **Leverage and invest in human capital:** Tap into the country's educated and ambitious workforce to drive productivity. Provide opportunities for skill development, entrepreneurship, and job creation in emerging industries to harness the potential of Argentina's growth engine.

Argentina stands at a crucial moment, uniquely positioned to leverage its abundant resources, educated workforce, and strategic location. To seize this opportunity, Argentina must adopt a cohesive, long-term strategy that balances immediate stabilization with transformative reforms. By addressing challenges and unlocking its strengths, Argentina can establish itself as a globally competitive economy and a model for sustainable growth.

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