



SPEYSIDE

CORPORATE AFFAIRS & PUBLIC POLICY

Latin America, a green gold mine for global investors

4 trends that will shape the energy market in LATAM in 2024

Content

Overview



Trends



Conclusions



Sources



LATIN AMERICA, A GREEN GOLD MINE FOR GLOBAL INVESTORS

4 TRENDS THAT WILL SHAPE THE ENERGY MARKET IN LATAM IN 2024

Follow us:





Overview

In 2024, **Latin America will play** a vital role in the world’s new green economy. Its geography and abundant natural resources, according to economic predictions, could make it a global leader in renewable energy by 2030.

This vast region that covers Mexico, Central and South America has enormous potential to develop and export advanced biofuels and low-emission hydrogen. Brazil, the green giant, leads the market with more than 86% of its electricity production coming from renewable sources, and smaller countries such as Panama and Costa Rica, who use almost 100% renewable energy to generate electricity.

Brazil, Mexico, Chile, and Argentina also lead in developing solar photovoltaic and wind energy, and public-private investment in wind farms is growing throughout Latin America. In the future, it will be the region with the capacity to supply the world’s demand for hydrogen.

In hydroelectric power, one of the world’s largest dams is located on the border between Paraguay and Brazil. Others in South America already provide half of the electricity supply in their respective countries and hydroelectric projects have excellent growth prospects in the short term.

Along the same lines, Bioenergy is growing in importance. In the coming decade, South America will become a significant producer of hydrogen and low-cost, low-emission fuels, especially in Argentina, Brazil, Colombia, and Chile, where key projects have been announced.

Another aspect to highlight is the extraction of raw materials for sustainable energy alternatives. Chile and Argentina, together with Bolivia, are the second and fourth-largest lithium producers in the world, respectively. As for copper, Latin America accounts for 40% of world production, with significant extraction of other minerals such as graphite, nickel, and magnesium.

For investors interested in these markets, there are now national government regulations involving the public and private sectors and international cooperation agencies to invest in the economic and social development in México, Central and across South America.

Below are four trends that will shape the energy market in LATAM in 2024.





Trends

TREND 1: LATAM continues to grow its diversified energy production

The Latin American and Caribbean economy is emerging from a period of slow, but sustained growth over the past ten years. At this pivotal point in the global economy, Latin America can unlock powerful economic growth with sound energy policies, and projects that favor investment in the latest clean energy production, storage and distribution technologies, as well as infrastructure development.

How the countries of Latin America and the Caribbean use their vast resources will determine the role each will play in the new global energy system that is being reshaped.



- **Solar PV and Wind-based generation** is led by Brazil, Mexico, Chile and Argentina, with a foreseeable increase in scale in the near future.
- **Hydropower** has been the bedrock of South America's electricity supply for decades, providing the bulk of electricity today in Brazil, Colombia, Costa Rica, Ecuador, Panama, Paraguay and Venezuela. While its growth prospects are limited, the hydro source represents a huge margin of flexibility for the entire continental output.
- **Bioenergy** The decade-long bet on bioethanol from Brazil and Argentina is proving to be a great way to soften sudden shifts in international oil prices, and is likely to continue growing as an export industry in the coming years.
- **Green Hydrogen** Latin America has the capacity to produce more than the current global demand for hydrogen in the near future, and at competitive prices. Chile stands out as a pioneer in hydrogen projects, while Colombia, Brazil and Uruguay are not far behind.
- **Critical Minerals Extraction** for sustainable technologies is very likely to be one of the fastest growing industries in the next decade, thanks to the exponential increase in demand of the so called "critical minerals" which act as key elements for a wide range of renewable energy and electronic technologies.

TREND 2: Brazil, continues its positioning as the green giant of renewable energy in Latam

The renewable energy industry has shown its greatest growth over the past decades in the biggest country in Latin America. Most of the power consumed in Brazil is from water-generated energy. A very popular vehicular fuel, ethanol alcohol, is a biofuel which comes from sugarcane. Both energy sources contributed to cement the country as a major player and a pioneer in hydropower and biofuel technologies for over 50 years. Energy autonomy is considered by the State as a key priority to preserve national sovereignty.

- The current landscape is characterized by a search for new energy sources to move the country and the world forward to a green energy paradigm, developing a sustainable economy, engaging national programs and exploring new approaches to promote private investments.
- Brazil is also becoming a global leader in solar and wind energy and is now seeking to expand into hydrogen and other low-emissions solutions. The energy matrix transition is a global topic discussed by all world leaders and has been a major thread in the most important international summits, such as the Conference of the Parties (the COPs) of the United Nations and the World Economic Forum. The Federal Government has been investing in the green economy and has created a Secretariat of the Green Economy, Decarbonization and Bioindustry which is meant to represent the interest of the State in fostering a healthy and productive political environment and facilitate private and public actions.
- To address some remaining legal uncertainties, the Legal Framework for Solar Energy was launched in 2022 (Marco Legal da Microgeração e Minigeração Distribuída - Law 14300/2022). With this act, a National Decree ([Decreto n. 11.456](#)) signed in 2023 by





President Lula boosted the National Program to support technological development in industries, including solar panels and related equipment.

- Brazil's ultimate goal in 2024 is to leverage green hydrogen energy production to a higher level with strategic partners across the world. Last year, the European Union announced it is stepping up investments in the region, with EUR 10 billion through the EU's global investment plan, the Global Gateway. This will be complemented by private investments and by contributions from the EU member states.

TREND 3: Mining for sustainable energy inputs will continue growing

In its [Latin America Energy Outlook](#) and an article entitled [Latin America's Opportunity in Critical Minerals for Clean Energy Transition](#), the International Energy Agency (IEA) underscores Latin America's pivotal role as a producer of essential minerals for clean energy technologies, emphasizing the region's potential for significant expansion in this domain:

- **Latin America contributes about 35% of the global lithium supply**, with Chile and Argentina being major players. These nations, along with Bolivia, form the so-called **lithium triangle**, ranking as the second and fourth largest lithium producers worldwide. Over the last decade, investment in lithium exploration within Latin America and the Caribbean almost doubled, culminating in an expenditure of **USD 120 million in 2022**.
- Some of the world's largest mining industries reside within Latin America and are now planning on **expanding critical minerals' extraction** operations to supply the world's exponential increase in demand for renewable energy technologies. These include **graphite, nickel** (integral for battery production), **manganese, and rare earth elements** (essential for electric vehicles, motors and wind turbines). Brazil is notably prominent, possessing approximately one-fifth of the world's reserves of each of these resources, while Chile and Colombia are some of the most active in developing new extractive projects.
- **The region accounts for 40% of global production of critical minerals**. Chile leads with a 27% share, followed by Peru and Mexico, contributing 10% and 3% respectively. The past decade, specifically from 2012 to 2022, has seen a remarkable increase in the region's share of global copper exploration expenditure, climbing from 30% to nearly 45%. This trend indicates a significant surge in investment and interest in copper exploration.

TREND 4: Countries will continue supporting regulations to promote clean energy

- Latin American countries have made significant [strides](#) in developing the energy market, marked by various regulatory milestones. These include Argentina's establishment of a [Special Commission for Biofuels](#) responsible for studying and analyzing the development of the sector; Brazil's formation of the ENBpar (the National Nuclear Energy Participation and Binational Company), as well as the National Nuclear Safety Authority and the Inter-ministerial Committee on Climate Change and Green Growth.





- Other Latin American countries have launched forward-thinking energy policies and plans. Colombia’s National Energy Plan sets the path for the development of new technologies (wind, geothermal and low-emission hydrogen production), as well as the promotion of energy efficiency. Costa Rica’s regulatory framework encourages renewable electricity production with benefits for consumers. [Chile has institutionalized long-term energy planning](#) through the Electricity Services Act and Ecuador’s “Normative Framework for Distributed Generation for Self-Supply of Regulated Energy Consumers” applies to consumers who install and operate their energy generation systems.
- Likewise, Guatemala and Panama are focusing on renewable and clean energies. Guatemala’s Indicative Generation Expansion Plan aims to reduce greenhouse gas emissions and ensure secure and competitively priced electricity supply. [Panama](#) approved the Action Plan for the Implementation of Solar Thermal Energy, aiming to install one million square meters of solar thermal technology by 2050.
- Despite these advancements, Latin America’s energy model still heavily relies on fossil fuels, contributing significantly to greenhouse gas emissions ([around 55% in the region](#)). In this context, the Economic Commission for Latin America and the Caribbean (ECLAC) recommends designing climate change mitigation policies, establishing regulatory frameworks for energy efficiency, promoting renewable energy policies as state policies, and encouraging the use of low energy consuming equipment and clean cooking methods in countries where wood burning will remain significant in the coming years.





Conclusions

Latin American renewable energy markets are standing out worldwide due to the region’s massive natural resources and unique geographical features, as well as some of its vast potential for further development and some national industries’ decades-long expertise on specific renewable technologies (most notably, Chile and Brasil).

As new technologies begin to unlock the possibilities for clean energies storage and export (Green hydrogen), the region’s potential as a clean energy export powerhouse has begun to be noticed by investors around the world. The regions’ well-known leadership in mining and richness of critical minerals is a great complement to a vibrant renewable technology sector, in the broader context of fossil fuels price increases.

Technological improvements will also tend to favor private investment and competition in these sectors and make State-funded mega-projects less relevant. This trend can already be seen with solar and wind technologies become increasingly productive and cost-efficient, entry barriers for these types of infrastructure products being lowered and the potential for private investments raised. In contrast, hydro generation infrastructures will be less common, although already installed capacities will remain relevant in the mid-term.

On the risks side, there are relevant issues that could undermine these relatively new markets full development that must be addressed within each Latin American country; inconsistent renewable energy policies, security and effective rule of law within territories and corruption and mismanagement of local communities are concerns routinely raised around new infrastructure projects.

The collective information above makes clear that Latin America is poised to be a critical player in the Green energy paradigm. The challenges are multiple and often unique to the region, or to specific countries. Therefore, understanding the nuances, cultural dynamics and government agendas and policies across LATAM will be key for any company or investor that hopes to succeed in the region in the coming decade.



If you want to know more about this topic **contact us**

Silvia Ardila
Regional Director LATAM
Silvia.ardila@speyside-group.com





Sources

1. Latinometrics
https://www.linkedin.com/posts/latinometrics_from-hydroelectric-power-in-costa-rica-to-activity-7041770828643880961-yJr3/?utm_source=share&utm_medium=member_desktop
2. International Energy Agency (IEA) 2023, Latin America Energy Outlook 2023
<https://www.iea.org/reports/latin-america-energy-outlook-2023>
3. International Hydropower Association 2022
<https://www.hydropower.org/region-profiles/south-america>
4. International Renewable Energy Agency (IRENA)
<https://www.irena.org/Energy-Transition/Country-engagement/Long-term-energy-scenarios-network>
5. Market Insight mobility
<https://www.statista.com/outlook/mmo/electric-vehicles/colombia#:~:text=Colombia%20is%20projected%20to%20experience,US%24488.1m%20by%202028>
6. Colombia E-mobility
<https://mitigation-action.org/projects/colombia-e-mobility/>
7. Precise market intelligence and advisory
<https://www.mordorintelligence.com/>
8. Germán Arce, Presidente del Consejo Gremial Nacional. Exministro de Minas y Energía
<https://www.economicolombiana.co/economia/una-transicion-necesaria-para-la-transicion-energetica-3649>
9. Cree (2021), Hoja de Ruta de la Transición Energética Colombia 2050
https://www.minenergia.gov.co/documents/10442/3._Escenarios_nacionales_TEJ._Rutas_que_nos_preparan_para_el_futuro.pdf
10. Renewable energy in Brazil
<https://www.in.gov.br/web/dou/-/decreto-n-11.456-de-28-de-marco-de-2023-473390191>

