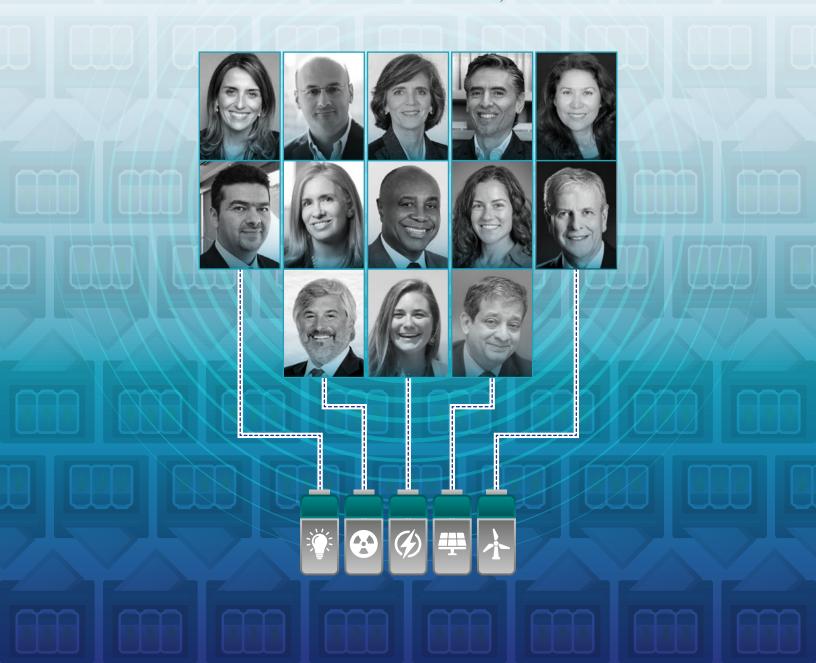


2025 OUTLOOK: ELECTIONS HAVE CONSEQUENCES

Perspectives from the Institute of the Americas Energy & Sustainability Program Featuring our Non-Resident Fellows, University of California San Diego and University of San Diego Graduate Students and Guest Contribution from former Guyana Ambassador to the US.



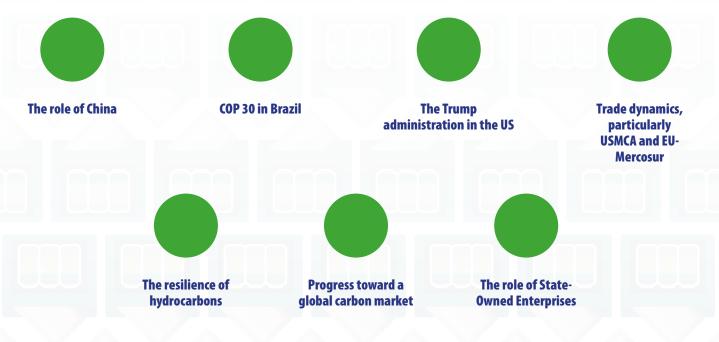




If 2024 was the year of elections across the globe, then 2025 is poised to be a year of change as a result of new governments.

As we do each December, and just before the holiday break, our Non-Resident Fellows convened for a virtual discussion. As is our fashion, we began with a celebratory toast that reflected our pride in all that we accomplished in 2024. But once we dispensed with self-congratulations, we pivoted to a deep dive into the key trends and aspects we are thinking about for the coming year. That discussion informed our content for this year's outlook document from our unique vantage points across the hemisphere and globe.

We have oriented our 2025 outlook document around the consequences of last year's elections while further contemplating:



Each of our Non-Resident Fellows has penned a contribution that sets forth the outlook from their respective home countries, or in some cases, a more specific topical essay. Additionally, Riyad Insanally, former Guyanese ambassador to the United States and a participant and contributor to our research and programs, has also authored an essay.

Beyond these perspectives, again this year we are pleased to include contributions from graduate students as part of our Future Energy Leaders Initiative (FELI): Emily Cary from the University of San Diego and Katrina Haidari from the University of California San Diego.









The main agreements reached at COP28 (Dubai, 2023) involved decisions to phase-out the use of hydrocarbons, committing countries to transition away from fossil fuels to achieve net-zero emissions by 2050 and to triple renewable capacity by 2030. More recently, during COP29 (Baku, 2024), participants further decided to facilitate the development of an international market for carbon credits allowing countries to trade permits to meet their emission quotas and keep global temperature from rising above 1.5 degrees.

Is the world on the right track to meet these laudable goals? The capacity of renewable energy sources increased by **14%** during 2023. To meet a target of tripling its capacity by 2030, however, would require an annual growth rate of almost **17%**. Moreover, the share of clean energy as a percentage of total installed capacity in developing countries remains at a stubborn **15% and at only 17%** in the US. Meanwhile, the International Energy Agency's 2024 World Energy Outlook shows that two thirds of the overall increase in energy demand is still being met by fossil fuels (mostly oil and coal, and to a lesser extent natural gas) and that fossil fuels met **80%** of global energy demand during 2023. Furthermore, oil, natural gas and coal production and demand continue to increase at a steady pace and are expected to peak only by 2030.

There are several reasons for the resilience of both supply and demand for fossil fuels. The first is low prices due to increased production brought about by fracking and the development of a global market for Liquified Natural Gas. LNG commoditized natural gas, thus increasing competition among producing countries and consequently lowering prices.

The second, and often overlooked reason, is that oil, coal and (now) natural gas are tradeable commodities that can be bought and sold in international markets, while electricity, and therefore renewables, cannot. Molecules enjoy travelling overseas, electrons do not. This is why oil, coal and gas producing countries will always find it more profitable to attract investment in hydrocarbon production for export than in renewables, which remain a rather domestic endeavor and subject to more regulatory oversight and higher expropriation risk.

Take Argentina for example. The South American country has bet heavily on renewables increasing its installed capacity from almost zero MW in 2026 to the current 7,000 MW, meeting on average 15% of the country's local power demand. These investments were made after granting investors formidable guarantees and a regulatory framework specially designed so that their assets would never be expropriated by a future administration. These guarantees were neither required by foreign investors nor offered by the government in the unconventional oil and gas sector in the Vaca Muerta fields. Vaca Muerta boasts the second largest reservoir of unconventional oil and gas in the world. Today however, Argentina continues to break records of oil and gas production. It is building oil and gas pipelines and LNG terminals to turn the country into an oil and gas exporting powerhouse without the need of any sectorial regulation or special regime.

Molecules are less risky to produce because unconventional oil and gas production faces lower expropriation risks: it has a lower sunk to avoidable cost ratio than that of renewables, which is entirely sunk and therefore highly vulnerable to government expropriation. Second and again, molecules like to travel and can be exported as either oil or LNG thereby contributing directly to GDP growth. Electrons on the other hand are essentially domestic and can be exported only to neighboring countries and only if transmission grids are interconnected.







Falling costs of fossil fuel production due to fracking coupled with highly competitive oil and LNG international markets will ensure both low prices and supply resilience whereas the need for more flexibility in power generation (to offset renewable intermittence) will ensure demand resilience and growth. Both hydrocarbon supply and demand resilience therefore will call for a necessary truce with renewables, at least in the short and medium term, until electricity storage becomes economical and widely available.

On the hydrocarbons side, the priority should be to replace both coal and liquid fuels with natural gas, so we should expect an increase in LNG processing capacity and trade in the short and medium term as coal and liquid fuels are substituted. On the electricity side though, global demand is expected to grow at a healthy 3.4% through 2026. Drivers seem to be higher GDP growth, continued electrification of both residential and transportation sectors and most notably, Al and data centers that will require a clean but also firm source of power with nuclear SMRs as the most likely candidates to meet demand.

The additional traction renewables will need to take up a larger portion of supply should come from their commoditization through the implementation of an international enforceable trade rule to measure and control the carbon footprint of products (CFP) that are traded worldwide, plus the development of an international market of carbon credits. This new international rule should impose on countries the obligation to demand from their trade partners that the products they import comply with a maximum level of CFP. If, however, the exporters of goods have a CFP higher than the allowed upper limit, they should be able to buy carbon certificates in the market to compensate for the difference. Such a rule will allow the commoditization of renewables and therefore provide the necessary traction to be massively adopted.

In sum, the relative abundance and low prices of natural gas and LNG, coupled with the fact that it is a tradeable commodity contributing to GDP growth, especially in developing countries, should not be understated. Natural gas and renewables can (should) coexist to replace coal and liquid fuels while the development and implementation of an international trade rule limiting CFP and allowing carbon certificates to be traded should help curb emissions and further promote electrification and storage build-up.









Nelson Narciso & Carla Lacerda



A View from Brazil: In 2025, petroleum and the green agenda will go hand-in-hand

President Lula will have to reconcile hosting COP30 in Belém, Pará, with the defense of oil exploration in the Foz do Amazonas Basin.

President Luiz Inácio Lula da Silva will have two challenges to balance in 2025: on one hand, Brazil will host COP30 (2025 United Nations Climate Change Conference), in November, in Belém, in the State of Pará; on the other hand, Petrobras wants to drill the oil well of the FZA-59 block, located in the Foz do Amazonas Basin, a new Brazilian oil frontier with exploratory potential that may resemble that of neighboring Guyana and Suriname.

COP30 is a major bet by President Lula to consolidate the country's leading role in global discussions on climate change. For this reason, the Brazilian Congress approved in 2024 several bills of the so-called Green Agenda, including:



The regulation of offshore wind energy generation



The Fuel of the Future, which creates tax incentives for the production of biofuels (bioQAV, green diesel, biodiesel and biomethane)



The creation of a regulated market for carbon credits



The regulation of low-carbon hydrogen production



PATEN, the energy transition acceleration program, which creates a Green Fund to finance clean energy projects

One of the biggest obstacles to COP30, however, is the fact that U.S. President-elect Donald Trump is an ideological opponent of the Brazilian president. He will not, therefore, support any initiative that could increase the political capital of the Brazilian president, especially one related to the climate issue since Trump had the United States withdraw from the Paris Agreement in his first term and has threatened to do so again.

A major goal of COP30 will be to pick up where COP29 in Baku left off, that is to shore up financing to combat climate change, both in terms of the total amount available which was deemed insufficient at COP29, as well as a greater variety of sources including from the private sector. Financing climate change is challenging, especially with the recent departure of several American banks from the UN's Net Zero Banking Alliance, largely due to pressure from President-elect Trump's agenda. Given Brazil's green movement, several Brazilian private banks such as BTG Pactual and Itaú Unibanco, in addition to government banks such as BNDES, have set aside meaningful funds for sustainable infrastructure projects. In the 12 months before the end of May 2024, BTG Pactual issued approximately \$8 billion in bonds, in addition to helping raise \$3 billion in financing for renewable energy projects. Itaú plans to mobilize \$160 billion in sustainable finance by 2030. These values may only address a local- or country-specific agenda, but they serve as an example of Brazil's efforts to showcase support for climate financing, which may offset somewhat the recent departures from the Net Zero Banking Alliance.





In parallel to the green agenda, Petrobras seeks to advance exploration of the new oil frontier in the Foz do Amazonas Basin, an area in which the EPE (Energy Research Company), an organization linked to the Ministry of Mines and Energy, estimates to have 10 billion recoverable barrels. It will be Petrobras' great bet to replace, in the future, the decline in pre-salt production and prevent Brazil from losing its self-sufficiency.

There are, however, political challenges to make the drilling of the pioneer well in the Foz do Amazonas Basin viable. Ibama, the federal environmental agency, has already denied the concession of the exploratory license to Petrobras several times. It is an internal dispute that the head of the Executive will have to arbitrate between Petrobras and Ibama. The proposed location of FZA-59 block is approximately 500 km from the mouth of the Amazon River, and 160 km off the coast. According to the ANP National Petroleum Agency, the Foz do Amazonas basin has been drilled in years past, with over 90 wells in areas of shallow water, closer to shore. Therefore, there is precedence of industry experience and preparedness for exploration drilling in the area.

At the same time that Lula wants to project Brazil in international geopolitics with the green agenda, the president knows that the national production of oil and gas is a valuable instrument of energy independence, wealth generation, employment and income. Currently, oil is the main export of the Brazilian trade balance – in 2024, the commodity's exports totaled US\$ 44.8 billion, representing 13.3% of GDP.

Petrobras has just announced a new 5-year Strategic Plan for 2025-2029, indicating a total investment of USD \$ 111 billion, an increase of 9% over its last plan, of which \$77 billion will be in the upstream (approximately \$15 billion/yr). This investment will sustain a net production of over 3 MOEB/d for the 5-year timeframe, with ten new production systems coming online to offset a decline in production from existing fields. The focus will be on reserve replacement (Foz do Amazonas has an important potential role), production with a lower carbon footprint, and increasing supply of sustainable fuels. At the same time, the company has a long-term vision of balancing petroleum production with a low-carbon business, utilizing oil and gas revenues to drive energy transition and fund greener sources of energy supply.

The above factors may yield President Lula electoral dividends in 2026, when he will probably seek reelection. Negotiations between Petrobras and Ibama are advancing. It is likely that the Brazilian company will start exploring the Foz do Amazonas Basin in 2026, the year in which Lula will possibly seek reelection. If Petrobras announces a major discovery in that region, it could be a valuable electoral instrument for Lula's ambitions, just as the discovery of the pre-salt represented for his presidential campaign in 2006.









At the end of the year, while reflecting on the energy discussion in my country versus the significant global conversations about emissions in our sector, new energy sources, renewable and low-carbon options, and carbon capture, among others, it is increasingly clear that there is no single recipe, much less a single solution, that will lead us to a carbon-neutral, distributed, digitized, decentralized world that meets all demands.

The diagnoses are clear, and even the most skeptical of climate change have at least witnessed with their own eyes that something is happening in nature that warns us we must change course because we are on trajectories that lead us to greater natural disasters and, consequently, multiple irrecoverable losses.

To drive change, we must have a lot of courage and conviction. Human beings are by nature averse to change, and we live in survival mode in our subconscious, trying to "save energy" in our organism for those "unexpected moments" or threatening situations where we will require strength to defend ourselves.

Given this, change faces significant resistance: that of human nature and the inertia of many years of "doing the same thing" make it difficult to look at, explore, and implement other alternatives.

However, there are moments in life when we have no choice but to change course. When a storm is approaching, ships seek other routes to reach their destination; the same happens with birds migrating in search of better conditions to survive, and so on -an immense array of changed processes occur due to certain external situations prompting the redefinition of objectives.

And this is what we are experiencing in our energy system worldwide. The multiple geopolitical conflicts, the climate emergency, the "post-COVID" life, and a fragmented environment where distrust prevails make it difficult to reach agreements and engage in dialogue to reach solutions.

Our energy system impacts the lives of millions of people today and hundreds of thousands in the future. Therefore, our task is of utmost relevance, as the decisions we make today determine the lives of future human beings.

Being a "FOAK" (first of a kind) is very difficult. In fact, there are significant losses involved with taking on this challenge. Being the first to explore low-emission or zero-emission fuels, pioneering the use of hydrogen cells to power an industry, or being the first country to generate modern, agile and disruptive regulations for our system, is not simple.

Of course, it requires knowledge, preparation, hard work, and also money. That is the obvious part. However, what is not so obvious is that it requires conviction and leadership. People are the ones who mobilize others to make things happen, and that is very important. Our energy system requires multiple solutions -some smaller, some larger- but there are thousands of solutions simultaneously needed to achieve a balance in time to provide accessible, safe, and sustainable energy to all people.

There is no single solution, much less a recipe that fits all the realities of the world. We live in an environment where energy transitions, in plural, are diverse and particular.

The invitation is to dare to change, to explore all the possibilities to reduce our emissions, to find solutions that allow businesses to coexist with our environment and, in short, to build a more sustainable energy system that places the greater well-being of all people at the center without leaving anyone out.









In 2025, the region faces up to an extremely complex energy scene shaped by new government policies, geopolitical tensions, a war on its eastern flank, volatile power dynamics in the nearby Middle East, and the unknown stance of the incoming US government. Add to these, substantial climate & environmental commitments, and an ongoing transition towards low carbon energy that includes a phaseout of both fossil fuels & the internal combustion engine.

The ugly parts are policy flip-flops, political divisions & military conflicts that increase energy vulnerability. Currently, the biggest issue is Russia-Ukraine. Europe/UK is desperate for incoming President Trump to find a solution that stops the conflict. The massive cut to Russian natural gas imports and fuels drags heavily. For the consumer, power & fuel costs are around 2-4x that in the US. Electricity prices are highest in Germany, UK & Italy. The energy costs hit competitiveness, particularly manufacturing and cost of living.

The energy crisis of 2022 underscored Europe's vulnerability to supply disruptions. This was overcome by diversifying, particularly to LNG from the U.S., expanding Regas terminals, producing more domestic natural gas where possible such as by Norway, and a rapid build out of renewables. Still, pre-conflict Russian piped gas was 2-3 times cheaper than today's U.S. LNG.

The reality for Europe/UK is heavy reliance on fossil fuels & high energy taxes, with heavy regulation. Oil is less of a concern. The world has abundant oil supply; markets are soft and oversupplied. The expectation is that oil prices will drift around the current US\$60-90/bbl levels with OPEC making efforts to limit supply and prop up prices. In natural gas, a significant early winter drawdown of stored gas implies 2025 Europe/UK prices will stay strong. In 2024, major European oil & gas companies each delivered significant profits & dividends -Total, Shell, BP, Equinor, ENI, Repsol; the outlook for 2025 is similar.

Public support remains very high (60-70%) for a Net Zero climate-neutral economy by 2050. Rollout of wind, solar and nuclear power is occurring at speed driven by both climate policies and energy security. Europe now regularly produces more electricity from wind than natural gas. Biomethane, green hydrogen and hydrogen infrastructure are important additions. In 2024, UK power generation from fossil fuels reached record lows and a phase out of coal was completed -the first G7 country to achieve this. There's no stopping solar build-out while Germany, the UK, Spain & France are global leaders in installed wind capacity. Significant M&A activity is expected in 2025 as investors seek scale, better returns and a re-set of asset quality.

The transmission issues associated with the variability of wind & solar, and multiplicity of connection points needed are receiving attention; infrastructure is being modernized and expanded. It is a slow, expensive process. Long distance HVDC undersea interconnector cables are adding resilience. Significant utility-scale battery systems (BESS) are being added; this is becoming an essential component of grid management.





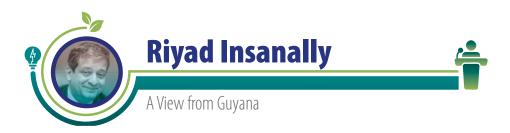
Geothermal is advancing; projects for power are challenging, however there is steady growth in low-medium enthalpy heat projects using aquifers, mine waters, and old oil & gas wells. Systems usually include heat pumps to raise the output temperatures. These provide low carbon heating for homes, horticulture, offices, hospitals. District heat networks have proven successful, for example in Italy, Germany, France, Hungary, and many more they are under development. In 2025, new concepts are being tested in Germany, Denmark and the UK, which if successful, can cause a step change in geothermal uptake for both heat & electricity.

EV prices now have parity with some ICE models because battery prices have fallen sharply. In 2025, expected market share is **25%.** Used EVs now sell faster in the UK than any other vehicle type. Heavy tariffs on Chinese vehicles are limiting their market penetration. Car manufacturers have dropped diesel engines and shifted to hybrids to meet their emissions reduction targets whilst playing to the recharge & range anxiety caused by limited charging infrastructure. In late 2024, the EU signed a trade deal with Mercosur -Argentina, Brazil, Paraguay & Uruguay. Ratification may take time but it can help secure lithium & nickel for Europe's car makers, reduce dependence on China, and result in lower tariffs on selling vehicles into Mercosur.

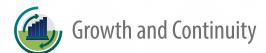








By the time Guyanese go to the polls in November 2025, the country should have experienced another year of exceptional growth and transformation, driven by the continuing and rapid expansion of the oil and gas sector, along with a correspondingly heightened profile in regional and hemispheric affairs.



Guyana was the world's fastest growing economy in 2024, with real GDP growth estimated at 42.3 percent overall and 11.8 % for non-oil activity. According to World Bank forecasts, Guyana's GDP should grow by a more moderate but still impressive 12.3% in 2025. This will be due mainly to increasing oil production by the ExxonMobil-led consortium in the prolific Stabroek Block, with output expected to reach as much as 900,000 bpd by the end of 2025.

The People's Progressive Party (PPP) government, led by President Irfaan Ali and Vice President Bharrat Jagdeo, is eager to increase the country's share of the oil wealth and will therefore support the continued expansion of the industry and work to attract new producers. At the same time, the administration will promote renewable energy as part of its Low Carbon Development Strategy (LCDS). Committed to battling climate change, the Ali-Jagdeo administration will hold the LCDS up as a global model for climate resilient development and will not be deterred from making the most of the country's hydrocarbon resources, especially as Guyana is a carbon sink. All this, while maintaining a laser focus on being re-elected in November.



More Reliable and Cheaper Electricity

A major deliverable for the government in time for the elections is more reliable and cheaper electricity. It is therefore banking on the country's biggest infrastructure undertaking ever, the gas-to-energy (GtE) project, now slated for completion in the third quarter of 2025, following approval by the U.S. ExIm Bank of a loan of \$526m to support U.S. companies involved in the construction and operationalization of a 300 MW gas-fired electricity plant. The project, apart from being a key component of Guyana's energy transition, aims to slash electricity costs by half, as part of a strategy to transform the economy by stimulating greater economic activity, improving the investment climate for manufacturing, and easing financial burdens on both businesses and private households. Phase 2 of the project, which should begin in 2026, also envisions a natural gas liquids processing facility and another plant which would add 250 MW to the grid. Both projects will feed industrial clients from the country's gas reserves and are potential game changers for Guyana.







The Guyana-Venezuela Border Controversy

Venezuela has until August 11, 2025, to submit to the International Court of Justice (ICJ) its rejoinder to Guyana's reply to its arguments on the validity of the 1899 Arbitral Award settling the border between the two countries. The ICJ is unlikely to pronounce on the case before 2027 and Venezuela is expected to escalate its war of words and strategy of military provocation, while maintaining its claim to the Essequibo region and most of Guyana's maritime area. None of this, however, will affect oil production or discourage investors from flocking to Guyana. In the meantime, Guyana will continue to place its faith in the merits of its case at the ICJ and the rule of international law, even as it strengthens its diplomatic alliances to counter the Venezuelan threat.



Since the discovery of oil offshore Guyana in May 2015, Guyana-U.S. relations have gone from strength to strength. As production is ramped up, Guyana will become an increasingly important player in the international energy market. Its hydrocarbon resources, in addition to its location next door to an undemocratic, impoverished and unstable Venezuela, have given this small and hitherto relatively unknown country unprecedented geoeconomic and geo-strategic significance for the United States and a higher profile in the affairs of the regional integration bloc, the Caribbean Community (CARICOM). All this was underlined by the visits of two Secretaries of State, Mike Pompeo in 2020 and Antony Blinken in 2023.

Relations between Guyana and the U.S. were noticeably strengthened when Pompeo and the first Trump administration firmly supported Guyana's democracy during the prolonged elections crisis of 2020. President Ali also met with Senator Marco Rubio, Trump's Secretary of State-designate, in September 2023, with Rubio calling on the Biden administration to "put together more robust support for Guyana so that the ally nation can benefit from its natural resources." There is every expectation that the bilateral relationship will get even stronger, with the Trump administration encouraging increased oil production and the United States continuing to view Guyana as a strategic partner in the region. It would also be reasonable to expect more aggressive U.S. policy to boost American private sector investment in Guyana at the expense of the Chinese.









In last year's outlook, I believed that the campaigns, elections, and the interregnum between the outgoing and incoming administrations and legislatures would represent a lame-duck period for both the Executive and Legislative branches. However, I was very wrong.

The former President (2018–2024), with a daily presence since his inauguration, introduced a new way of governing through press conferences, signaling that he was in charge and effectively setting the day's agenda. He sent clear and simple messages to connect with his supporters and advocated for changes that were, at best, cosmetic and, more often, detrimental to the dynamics of the sectors affected. This approach effectively amounted to a six-year campaign, so successful that it culminated in a landslide victory for the Morena party again in 2024.

Despite the popular support enjoyed by Mexico's first female president, a political shift and institutional reconfiguration are setting the country on a path of regression.

A contentious interpretation of the governing coalition (the Morena Party and its allies) granted them overrepresentation in Congress, securing 74% of the seats. This has generated discontent among the opposition and distrust among mainstream media, despite the incumbent party receiving a comfortable 54% of the popular vote. Furthermore, the government pushed legal reforms to augment its coalition in the Senate, paving the way for the Morena party to secure enough seats for a supermajority capable of amending the Constitution at will. As a result, all checks and balances have been dismantled, eliminating the possibility of passing new legislation, improving existing laws, or strengthening minority rights unless the Morena party supports it. This new political structure has led to sixteen constitutional amendments, implemented without meaningful discussion or consideration of their potential costs —such as the reform of the judiciary and the elimination of economic regulators.

The judiciary reform unnecessarily eliminates a civil service for highly skilled and specialized legal professionals, including clerks, judges, and magistrates, replacing it with a popular vote system. This system, with rules and regulations so underfunded that only candidates with off-the-books funding could win, skews the balance of power in favor of its financial backers. This will increase the cost of doing business, resulting in a regressive justice system where the party with the most resources —be it money, political influence, or coercive power— can manipulate decisions at the expense of the rule of law and Mexico's attractiveness as an investment destination.

The elimination of economic regulators, including the Energy Regulatory Commission and the National Hydrocarbons Commission, has created significant uncertainty for market participants. It is unclear whether all responsibilities will be transferred to an office within the Department of Energy, given the tighter operating budget for 2025 and ongoing austerity measures affecting the entire government. The creation of a new unit with sufficient technical and personnel resources to match the former commissions' activity seems unlikely. Additionally, there is a conflict of interest, as the Secretary of Energy chairs the boards of two state-owned enterprises (SOEs): CFE and Pemex. This raises critical questions: What happens in cases of conflict between the SOEs and other market participants? How will regulations be enforced if the SOEs fail to comply? Such issues will disrupt the energy sector's dynamics and potentially create international conflicts, particularly with the United States under a Trump 2.0 administration, which has already announced new tariffs on Mexican products. This stance fails to account for the adverse impacts on U.S. companies dealing with unequal treatment and regulatory uncertainty.





The outlook for 2025 appears grim. Domestically, fiscal and security crises are placing increasing pressure on the administration. On the finance front, pledges to reduce the fiscal imbalance will limit the government's ability to sustain existing social programs or implement the new ones promised during the campaign. On the security front, austerity measures and escalating armed conflicts between cartels are exacerbating safety issues, further weakening regional economies. This will reduce economic activity and tax revenues, compounding the strain on public finances.

Internationally, with changes in the judiciary and legislative branches, the ease of doing business, the rule of law, and democracy are all eroding. Despite global geopolitical shifts driving nearshoring and friendshoring by the U.S. and Europe, Mexico is losing its competitive edge due to the weakening of its democratic and institutional frameworks.

Nevertheless, opportunities remain. Mexico and the U.S. share deeply interconnected value chains. A shift in the narrative —from illegal immigration and drug trafficking to a future-focused agenda centered on energy and technology— could benefit both nations. Currently, the two countries only trade electricity in emergencies. Strengthening and expanding interconnections could eventually lead to an interconnected grid. For example, the solar resources of Sonora could complement California's wind resources, meeting energy demands in both regions. Such initiatives would improve binational energy security, create new business opportunities, promote technological exchange, and foster regional development. These possibilities depend on the leadership of Presidents Sheinbaum and Trump.









Mexico's 2025 energy sector Outlook is mainly shaped by the election of Claudia Sheinbaum as president, marking a continuation of the nationalist and statist energy policies established by Andrés Manuel López Obrador (AMLO). However, under a more pragmatic Sheinbaum administration, the critical role of the private sector in addressing the country's growing energy demand **–especially against the backdrop of nearshoring opportunities, clean energy commitments, and significant fiscal constraints–** will be recognized.



Continuity and Change in Energy Policy

Sheinbaum's administration remains committed to strengthening PEMEX and CFE as pillars of "energy sovereignty." These state-owned enterprises will maintain their dominant position, particularly in the electricity sector where the public sector will try to account for 54% of electricity generation (mainly but not only, through CFE). Yet, Sheinbaum's government acknowledges that meeting Mexico's clean energy goals —notably increasing renewable energy generation to 45% by 2030— and supporting nearshoring demand will require private investment. This dual approach reflects a pragmatic shift from AMLO's policies, which were more resistant to private sector involvement.

The government's nearshoring strategy includes infrastructure projects such as industrial parks and investment in the electricity grid to attract foreign investments. Collaboration with the private sector will be crucial to achieve these objectives. To facilitate this, certainty (defined as regulatory clarity and streamlined permitting processes) will be necessary.



Challenges from Fiscal and Trade Dynamics

Fiscal constraints remain a pressing challenge. The administration's adherence to austerity policies limits the state's capacity to invest in infrastructure through CFE and PEMEX. Also, the reliance on U.S. natural gas imports —constituting over 70% of Mexico's natural gas supply—poses an additional vulnerability. Potential trade tensions with the U.S., including a 2026 USMCA revision and disputes over Mexico's energy policies, could disrupt supply chains and investment flows.

Moreover, the Trump administration's return to power in the U.S. introduces uncertainty. Policies prioritizing U.S. energy exports and stricter enforcement of USMCA provisions may pressure Mexico to resolve outstanding trade and investment disputes, particularly those stemming from AMLO's policy decisions.







Global Climate Commitments and the Role of China

COP30 in Brazil will be an opportunity to show Mexico's commitment to reducing greenhouse gas emissions. However, achieving this target is closely linked to allowing the private sector to accelerate investments in renewable energy. CFE's projects and government programs, like solar panel installations for households, align with these goals but remain insufficient to make a significant impact.

China's influence as a global leader in renewable energy technology and investments in solar and wind energy projects offers opportunities for collaboration. However, balancing this relationship with U.S. trade dynamics will require careful navigation.



Strategic Opportunities and Risks

The energy sector's future hinges on balancing state-led development with private sector participation. While the government's emphasis on "energy sovereignty" aligns with nationalistic goals, the private sector's role in renewable energy expansion and infrastructure development cannot be overstated. Nearshoring offers a unique opportunity to attract investments, but inadequate energy infrastructure could hinder Mexico's competitiveness.

Simultaneously, climate commitments necessitate a robust policy framework that incentivizes clean energy adoption while addressing fiscal and regulatory barriers. The Sheinbaum administration's ability to reconcile these competing priorities will determine the success of its energy policy and its broader economic strategy.

In conclusion, 2025 represents a pivotal year for Mexico's energy sector. Claudia Sheinbaum's pragmatic approach **–combining continuity of AMLO's nationalist policies with an openness to private sector collaboration**– could present opportunities for growth and sustainability. However, navigating fiscal limitations, trade tensions, and climate imperatives will require strategic foresight and collaborative governance.









Anti renewable rhetoric from President-elect Donald Trump will have little impact on the growth of renewable energy markets in the United States thanks to bi-partisan legislation led by the Biden Administration. For example, the Inflation Reduction Act (IRA) became law in part to help the United States regain technology leadership vis-a-vis China, to create local jobs, and to fight climate change. The IRA has already attracted billions of U.S. dollars' worth of investments benefitting mostly Republican leaning states. Many factories of clean tech (electric vehicles, solar, wind, batteries, clean hydrogen, etc.) are on schedule to ramp up in 2025.

Amidst Trump's threats to repeal the IRA, the renewable sector has many reasons to remain optimistic. First, only Congressional action can change the law. Second, the slim Republican majority seems more independent from Trump than originally thought and will likely protect the new factories that are creating jobs. Third, even traditional fossil fuel companies are investing in blue and green hydrogen plants. Finally, most if not all the high-tech companies want reliable clean energy to meet their decarbonization goals, therefore clean energy demand will continue to rise. Market forces and states will keep the U.S. renewable industry moving forward because it has become a bedrock of sustainable economic development.



The EV market could grow without clean transportation mandates as all the major car makers are already transitioning to clean fuel vehicles. Even if Trump succeeds in removing federal mandates and standards, domestic demand for EVs will grow as prices decrease and charging infrastructure expands. Lower sticker prices will benefit the American consumer as the cost of operation and maintenance of EVs is much lower than conventional cars.

Thankfully, California intends on accelerating its decarbonization goals and is prepared to fight the Trump Administration to keep its mandates in place. The state has done it before, except this time it might have Republican states as allies. Elon Musk's influence at the White House might also benefit EV manufacturing and help fast-track decarbonization of the transportation sector.

EVs are also becoming an important benefit to the power sector. States might look to EVs as energy storage to stabilize the grid during hours of peak electricity demand. EVs along with demand response and batteries can avoid costly peaker plants. Even car companies are now investing in battery, EV charging, and grid technologies.







The United States is already the largest producer and exporter of oil and natural gas surpassing even Saudi Arabia and is on course to increase output. More drilling is unlikely to reduce U.S. consumer prices anytime soon. This would cause unnecessary demonstrations and lawsuits from environmentalists and local communities. It might be wiser for Trump to take credit for the current production growth and promote local use of renewables, then more oil and gas would be available to increase exports.

Transition to clean energy will move forward worldwide. Falling behind energy technology innovation will go against making America great again. In addition, the idea that Trump would allow China to grow its global leadership in the EV and other high-tech markets is unfathomable. Nonetheless, California, along with other states and the private sector, will move the U.S. energy transition forward, mostly because it is good for the American economy, the environment, and the people.









At the turn of the year, Uruguay hosted the announcement of the long-awaited trade deal between the European Union and Mercosur. Although there is a long road ahead for it to become effective, it is an important signpost to reflect upon in the course of the tug of war in global geopolitics. While many of the Latin American countries are at the beginning of the electoral cycles and must navigate domestic issues as a priority, such background sets the context for the promotion of longer term national foreign policy interests.

Ideological and personal sympathies are a catalyst for improved relations (as in Milei-Trump) but, in substance, success in crafting trade deals, channeling foreign direct investment and building reliable supply chains is a task that outlives governments and deserves a stronger, longer term foundational consensus. The case of Uruguay can be seen as a positive example and Uruguayans -so far- seem to be committed to protecting their reputable institutions and stability. This has been evident in the recent elections and the current handover process for the newly elected government (a comeback for the leftist Frente Amplio). Even if rhetoric takes different nuances from term (where the administration has taken turns between alliances that include either the communist or extremely conservative parties), when it comes to pragmatic decisions, it is possible to see a rather straight policy line.

Let's recap briefly before stating our hypothesis for the outlook: Uruguay has no indigenous fossil resources (and nuclear is banned by a 1997 law, perhaps an issue to be reconsidered subject to the progress of SMR). This circumstance has been at the heart of the full transition to renewable power in the form of hydro, wind, biomass and solar. The next phase of the transition for 'hard to abate sectors' like transport and industry is coming with green hydrogen and its derivatives, as envisioned in the Roadmap for Green Hydrogen and hitting the ground with a first heavy duty transport pilot under construction, a big PtX project under development by HIF, and a HEFA project by SOEs ANCAP/ALUR. In this space, Uruguay offers competitive hybrid (wind/solar) potential and a key differentiator: lots of concentrated biogenic CO2 (from a logistic and economic stance, more than 80% is produced by two companies in three locations). From the perspective of a Mercosur/EU trade deal, where carbon border tariffs and EU legislation such as the EU Deforestation Regulation are enforced (ensuring that no commodities associated with deforestation are placed on the EU market) could improve Uruguay's competitive advantage as an energy exporter.

Diversification has been a trade policy objective for some 20 years now and the current state of the world makes it ever more compelling. A very modest market, Uruguay will not make any difference for automotive or other manufacturers, but it is a place for friendshoring energy intensive industries that require long term stability (like Data Centers; Google is already in the country) and a pragmatic business environment, where permitting and regulations don't impose unreasonable bottlenecks.









Perched on our Linda Vista hilltop, the University of San Diego sits just 30 short miles from the San Ysidro border crossing, the busiest land port of entry in the Western Hemisphere. Over 70,000 vehicles, 20,000 pedestrians, and 60% of all fentanyl headed to the U.S. crosses this border every day. The incoming Trump administration's "Operation Aurora." tariff proposals, and renewed war on drugs are poised to drastically reshape not only San Ysidro, but the entire U.S.-Mexico relationship. And Trump's engagement with Mexico will send strong signals to the rest of Latin America.

Operation Aurora is the Trump administration's proposed plan for mass deportation via national emergency declaration and invocation of the 1798 Alien Enemies Act. The former authorizes domestic use of the military, and the latter grants the president authority to detain and deport non-citizens. This 18th century legislation faces strong sociopolitical opposition, as demonstrated by the proposed "Neighbors Not Enemies" Act. It is also complicated economically due to the \$338 billion annually contributed to the U.S. economy by Mexican immigrants, especially in the critical sectors of agriculture and construction. Nonetheless, the 11 million undocumented immigrants currently residing in the U.S. are bracing for a militarized crackdown under the incoming president.

Beyond deportation, Trump also proposes tariff increases that violate the preferential tariff treatment parameters of the current US-Mexico-Canada (USMCA) trade agreement. He has advocated for a 25% tariff on all Mexican goods and services, a 200% tariff on Mexican car exports to the U.S., and economic punishments for embracing Chinese investment. The impact of these trade policies is amplified by the fact that Mexico, the 13th largest economy in the world, sends 80% of its exports to the U.S. The peso is already devaluing (from MX\$18: \$1USD in June to MX\$20.6: \$1USD today) as inflation rises in anticipation of Trump's return to the presidency. The USMCA review scheduled for July 2026 will significantly influence the economic fate of the two countries and ripple outward into the entire global economy.

Trump's 2025 return is expected to disrupt not only human and commercial traffic across border entry points like San Ysidro, but also drug traffic. With over 70,000 Americans dying from fentanyl overdose last year, the political appetite for a harsher crackdown is growing. Trump has responded to this sentiment by suggesting the possibility of terrorist designations for various Mexican organized crime syndicates responsible for funneling the majority of fentanyl and other drugs into the U.S. Such designations would justify U.S. military interventionism on Mexican soil, a prospect that unleashes a flood of traumatic memories across the Latin American region.





In these ways, immigration, trade, and drugs are dominating the 2025 discussion in border cities like San Diego. With immigrant labor threatened, California's Central Valley harvests may diminish. An imminent trade war with not only China, but Mexico too, is likely to increase prices for consumers on both sides of the border. And a new war on drugs specifically targeting fentanyl from Mexican cartels threatens to intensify diplomatic tensions.

Yet the issues at the root of each of these contentious topics show no signs of abating in the new year. Mexico continues to receive massive influxes of Venezuelan, Haitian, and Central American migrants despite Trump's calls to "build a wall" in the way of their elusive American dreams. Inflation remains the primary concern for Americans (seen by many as the #1 reason voters chose Trump in the recent election) even though escalatory trade wars are proven to increase costs to consumers. And the underlying issues of sustained American drug demand and American guns arming drug cartels remain largely excluded from U.S. drug policy.

The University of San Diego will remain in a front row seat overlooking a critical international border as these immigration, economic, and drug-related policies unfold on our doorstep.









lentered graduate school this past fall with the goal of learning how to analyze data to make informed decisions about policy, specifically energy policy. Several of the University of California San Diego Global Policy & Strategy school classes use climate change as examples of why something seemingly mundane, such as economic externalities, is important. The social cost of carbon (SCC) is the calculated cost associated with one ton of carbon dioxide emissions. This can be used in economic models to determine how much we need to invest now to prevent higher cost mitigations in the future. During the first Trump Administration, the SCC was lowered from \$48 to \$1 by promoting less climate-friendly policies. The Biden Administration then raised it to \$51, though the current EPA recommendation is \$190, and the Trump Administration is likely to lower it again. It is frustrating to be learning about what we can do as policy analysts, policymakers, and voters, and then watch as the leaders around us seem to do the exact opposite of what we are learning.

Energy and environmental policy anywhere impacts the environment everywhere. Some regions with the lowest carbon footprint, such as Latin America, are the worst affected by climate change. This is one of the reasons why international cooperation in energy and climate policy is so crucial. I aim to attend COP 30 in Brazil next year and I was excited to take a seminar on the process and history of COP in preparation this past semester. Unfortunately, one of the things I learned is that the U.S. is not a leader in global climate policy. If anything, we are one of the countries hindering these negotiations. I am concerned that COP 30 will be the same. Though states like California are striving to meet the pledges set forth in the Paris Agreement at the state level, I am apprehensive about federal policy for renewables, methane emissions, and the Inflation Reduction Act.

Climate scientists say that every year is a pivotal year, so it feels almost like crying wolf to say that COP 30 is important for setting the precedent for the next several years, but every year we continue to emit unfathomable amounts of greenhouse gases that make mitigation and adaptation significantly more expensive. With the U.S. expected to pull out of the Paris Agreement, will other countries follow, like they did with the Kyoto Protocol? If the U.S. is not committed to taking a small economic hit now in exchange for cleaner air, improved public health, better agriculture, prevention of coastal erosion, and more, then why would developing countries agree to increased regulations and costly cleaner energy? With COP 29 being less than a success, so much weighs on COP 30 to ensure the COP process does not break down completely.

I also worry about the perpetuated dependency on hydrocarbons. Though Liquified Natural Gas (LNG) was claimed to be a "bridge fuel" during the Obama administration, the U.S. is only expanding its production and distribution. With Russian oil and gas sanctions in place since the invasion of Ukraine, the U.S. has been able to significantly increase their exports to the EU and has become the globe's leading LNG exporter.

Over two years ago, hydrogen was touted for its ability to decarbonize hard-to-abate sectors. But due to the strict IRA requirements for Production Tax Credits, a large-scale green hydrogen project has yet to be built, or even reach final investment decision (FID). Even blue hydrogen is unlikely to develop many projects with the point-source carbon capture technology, as well as the efficacy of the CO2 storage yet to be proven.

I want to believe that public support for decarbonization will help drive investment in energy technology such as long duration storage, geothermal, and small modular reactors. These technologies will be critical to wean the U.S. and the world from fossil fuels. It is encouraging that UCSD now has an undergraduate climate class requirement, and that so many graduate school classes relate the significance of material to climate change. However, with graduation only a year and a half away, GPS students need to continue to use our education and training to fight for the climate, no matter the political climate.









I have always been a bit of a political geek. Election Day for me is an amalgamation of baseball's World Series, the Super Bowl, and the World Cup. I am fascinated by what transpires on those sacred days for democracy and devote considerable time to seeking to understand what the results portend for the policy landscape.

Elections have consequences. But translating soaring campaign rhetoric to actionable and implementable policies, particularly when it relates to the energy sector, depends not only on the results but the level of public support garnered at the ballot box and tradeoffs inherent in public policy in democracy. And it bears underscoring that no majority or minority is permanent, and no policy pathway is fully aligned or realigned by one election.

With that preamble, here's what I see as three salient aspects for the coming year.



Trump's Foreign Policy Team — Latin America...for the win?

Wasting little time since his November victory, Donald Trump named several foreign policy appointees before the end of 2024. Leading the group was Senator Marco Rubio to head the State Department. He also nominated former US ambassador to Mexico Christopher Landau as Deputy Secretary of State and the former National Security Adviser and Inter-American Development Bank (IDB) President, Mauricio Claver Carone as Special Envoy for Latin America, also at the State Department.

In a chaotic world consumed with shooting wars and geopolitical tensions, Latin America has by the sheer nature of these choices been elevated to a crucial geography for Trump Part II. But how they will work with other less-Latin America centric administration officials to craft broader foreign policy is entirely unclear.

Even among these Latin America experts, will they pursue the level of pressure in places such as Venezuela, Cuba and Nicaragua as in Trump's first term? Or does the Trumpian inclination to transactional diplomacy and dealmaking demand they hone their skills more at reverse engineering foreign policy goals for the region based upon a social media post or sidebar comment departing Air Force One? Perhaps channeling the Kissinger credo of no permanent friends or enemies, just permanent interests.

The transition to the Trump administration has also brought the return of foreign policy by social media and off the cuff remarks. Quickly in the spotlight were tariff dances around North America and other key trade deals and partners, with a surprising addition of Panama and the Panama Canal just as the 25th anniversary milestone of the Canal's (successful) independent management was reached.

The full outcome of these social media and very public debates are yet to be known. But they certainly remind us to be prudent with predictions and not overestimate the experience and interests of key administration officials with any form of unique or particularly curated diplomacy here in our hemisphere.







The (Still) Golden Age of Natural Gas and LNG

Fracking and liquefied natural gas (LNG) emerged as issues during the US 2024 election cycle. With Pennsylvania again figuring as a major battleground state, Vice President Kamala Harris was challenged over her stance and views on the role of fracking in the U.S. energy policy arena.

At the same time, Donald Trump and his team moved quickly to politicize the Biden administration's decision to review the permitting process for U.S. LNG exports and effectively pause issuing any new permits. Trump and his allies indicated that on day one his administration would undo the pause. They cite the economic upside in terms of jobs and revenue as key drivers; it fits squarely into their view for U.S. energy dominance.

The new year arrived with major news as Ukraine sought to halt transit of Russian gas across the country to the rest of Europe. While an expected development, it points to the underlying geopolitical aspects that remain dominant in the global natural gas market, which have also derivative impacts for LNG.

Indeed, late in 2024, the International Energy Agency (IEA) in its Global Gas Security Review publication pointed to surging demand growth at a faster rate – 2.5% - than in 2022 or 2023; the report further indicated similar growth through 2025.

Trends from Europe, where German natural gas consumption pushed past **3%** and outpaced global demand figures, underscored that the continent's economic and energy security remains dependent on natural gas – **call it molecule realpolitik.**

While Europe remains at the center of the evolving challenges and opportunities for the new golden age of natural gas, the Western Hemisphere and countries such as the U.S. and Argentina figure to continue their ascendancy and relevance.

Undergirded by policy changes enacted by the Javier Milei administration since taking office in late 2023 and furthered by a major infrastructure investment framework –known as RIGI -Argentina's shale production surged to a 23% year-on-year increase in natural gas output in the third quarter of 2024, according to Rystad Energy. The gains are increasingly reshaping the nation's energy sector and re-establishing domestic energy security and the country as a major regional energy supplier. It has also consolidated the potential for Argentina to become an LNG exporting nation with at least two projects advancing.







This element could slot under the Trump Foreign Policy discussion, particularly related to some of the aforementioned nominees as well as Mike Waltz, National Security Advisor-designee and a noted China hawk who frequently assails China's lending frameworks and investments around the world.

But I offer it as a standalone topic given the breadth and scope of what it means for the region and how in many ways the role of China has not been diminished by elections across the hemisphere.

There are myriad layers, many only growing in complexity, when it comes to the role of China in the hemisphere. But for my 2025 outlook there are two facets which deserve the most attention: critical minerals and value chains and the related aspect of electric vehicles.

On the former, China has long asserted its dominance and advanced a position of significant strength and control over many of the critical mineral value chains, most notably in terms of lithium and lithium-ion batteries. The U.S. Inflation Reduction Act will largely survive Trump 2.0 because at its core it's a counter to China's power in this sphere.

On the latter, the Chinese have rapidly evolved into the world's largest manufacturer and vendor of electric vehicles. This has huge consequences in China. It also has created a major shift in what is occurring across Latin America in terms of electrification of transport. Of the roughly 6,000 electric buses circulating in the region, 95% are from Chinese manufacturers. Additionally, Chinese brands such as MG, Great Wall and BYD are capturing most of the growth in sales in the electric car market.

But on both of these aspects, not all is harmonious. Partnerships and investments in critical minerals and their value chains in the hemisphere produce the same points of friction as with any investor. Social license to operate and community engagement is more crucial than ever and memories of China's early missteps in Latin America's natural resources are never too far away.

Indeed, the news and resulting dispute between China and Brazil over allegations of labor violations at a BYD EV manufacturing facility in Bahia greatly echoed the issues that Chinese vertical integration brings, whether in the oil patch, mining sector or automotive manufacturing: labor and business practices that can be out of step with local norms and expectations.





The Institute of the Americas (IOA) is a non-partisan, independent nonprofit organization whose mission is to be a catalyst for promoting economic development and integration, emphasizing the role of the private sector, as a means to improve the economic and social well-being of the people of the Americas. Founded in 1981 by Ambassador Theodore E. Gildred and co-located on the campus of the University of California, San Diego, the IOA was established to encourage economic and social reforms across the Americas, enhancing private sector collaboration and strengthening political and economic relations between Latin America, the Caribbean, the United States and Canada.



The Energy & Sustainability program has played a crucial thought leadership role in shaping policy discourse and informing policymakers and investors on the most important trends in the energy sector. We focus on matters related to energy development, investment, natural resource use, and energy transformation in the Americas.

www.iamericas.org

Institute of the Americas is a 501(c)(3) organization financed by tax deductible contributions from private individuals, corporations, foundations and government grants.

Employer Identification Number (EIN): 95-3671557



