

BUILDING AN ENERGY AND CLIMATE COALITION WITH LATIN AMERICA AND THE CARIBBEAN: AN AGENDA FOR THE BIDEN ADMINISTRATION

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The initial months of the Biden administration's foreign policy have underscored the importance of defining the type of relations with China (cooperative in some areas, adversarial in others) and revamping relations with Europe on areas of common interest. However, the United States should look closer to home, where it can find some major opportunities for international policy advancement. The Biden administration has a window of opportunity to rethink its relations with and policy toward Latin America and the Caribbean (LAC). In particular, there are very good reasons—political and economic—for putting the energy and climate change agenda at the center of the hemispheric partnership. On the political front, building a hemispheric bloc will increase the influence of its members in global negotiations. On the economic front, the countries in the region offer significant opportunities for trade and investment for the United States. Canada, which earlier in the year pledged to work with the United States on addressing climate change,¹ could also have an interest in promoting and potentially participating in this initiative.

Prior to the arrival of the pandemic, the economies of LAC had already been confronting a complex series of economic growth challenges after the end of the commodities supercycle. Many countries in the region faced high levels of public indebtedness, currency depreciation, credit rating risk, insufficient tax revenue bases, and low investment rates.² The appearance of the COVID-19 crisis only served to exacerbate these conditions. The LAC region contains 8.4 percent of the world's population but represents 30 percent of COVID-19 fatalities to date.³ Forecasts now predict that per capita GDP will remain below the 2019 level at least until 2023.⁴

The continuing surge of undocumented immigration into the southern border of the United States, the social and economic impacts of COVID-19, and the growing influence of China in the region could increase political pressure on the United States to develop a coherent policy toward LAC. These urgent and competing dynamics represent an opportunity for the United States to recast its policy toward the region as one of engagement. The United States could utilize the tools of technology and financing focused on energy and climate to put the region on a path toward sustained economic growth and social progress. LAC needs technology and financing to build clean infrastructure, develop alternative energies, and reduce energy poverty.

A New Vision

Hemispheric relationships have traditionally been seen from Washington as country specific and managed mostly through bilateral channels. In a region where problems are common—lack of economic growth, the devastating effects of the pandemic, etc.—this approach lacks ambition. This is the right time to introduce a regional initiative with the capacity to transform the current status quo. This piece proposes some actions that are transnational and require significant international cooperation in areas such as technology and finance. The region needs to accelerate the energy transition while strengthening energy security and providing greater energy justice in order to reduce the large number of citizens without access to electricity. The large majority of countries in the region, with some few exceptions, have prioritized this agenda.

Indeed, such a partnership could help expand some common goals, such as developing a clean energy future, bringing more energy equity, and addressing the effects of climate change. If, in addition, the United States does not want to fall “behind China or anyone else when it comes to clean energy,”⁵ such a partnership could revitalize its relations with LAC and provide a better alternative to China’s Belt and Road Initiative (BRI).

The reengagement with LAC could be built around concrete objectives and solutions to shared problems, such as the energy transition, in which countries undertake responsibilities according to their own economic and political capacities. President Biden has demonstrated an interest in, and affinity for, collaborations in this hemisphere.⁶ This history, combined with a robust plan, could help rebuild relations with the region in a way that is mutually beneficial for the countries involved.

In fact, the US administration’s plan to build a clean energy future and achieve net-zero emissions is much more likely to succeed as part of a broader regional cooperation effort, which will include consolidating a larger market for new technologies than if it were to only focus on individual countries. Investments in developing and improving technologies resulting from a climate and energy plan provide an additional market for the United States, while LAC can gain by accelerating its transition toward an equitable clean energy future avoiding some of the pitfalls that some developing and emerging counties have found in accessing, for example, long-term concessional finance. Working at the regional level could have a greater global impact as well.

Further, such a new plan should not be regarded as a new version of the Energy and Climate Partnership of the Americas (ECPA), which was created under the Obama administration with the goal of promoting energy integration and reducing energy poverty in the Western Hemisphere. An offshoot of the Summit of the Americas, ECPA was well intentioned but lacked the commitment in terms of investments that is needed to have a real impact on growth and equity. In contrast, China is mobilizing significant amounts of capital and targeting infrastructure projects, although not to the same degree as other regions of the world that have benefited more directly from the BRI.⁷



Regional Vulnerabilities

Even though LAC is responsible for only 8.3 percent of global greenhouse gas (GHG) emissions,⁸ it is one of the most vulnerable regions to the extreme weather events caused by climate change. It is particularly exposed to hurricanes, droughts and floods, coastal erosion, increases in sea level, and desertification. According to Germanwatch's Global Climate Risk Index, 9 out of the 25 most vulnerable countries to climate change are in LAC.⁹ In the hurricane-prone Caribbean, between 1950 and 2016, 324 weather induced natural disasters have killed more than 250,000 people and have caused \$22 billion in losses, including frequent damage to electric grids.¹⁰ Given the frequency of extreme weather-related events in Central America, it is the tropical region that has been most impacted by climate change.¹¹ For example, the dry corridor—a stretch of land that extends 1,600 km from Chiapas in Mexico to Panama and includes 90 percent of Central America's population—has repeatedly suffered from the increasing physical manifestations of global warming. Last year alone, the region experienced two category 5 hurricanes (Eta and Iota) in a two-week period, which left thousands of people homeless in Nicaragua and Honduras. In 2018, surveys conducted by the International Organization for Migration at the border of recipient countries showed that 18 percent of Guatemalan migrants cited changes in climate as the primary reason driving their migratory decision, while just as many cited violence and criminality as a factor.¹² Although more surveys need to be conducted, this alone suggests that links between the US immigration crisis and a changing climate in LAC cannot continue to be ignored.

Hydropower, which accounts for 54.8 percent of all electricity generation in LAC, is also an area of concern.¹³ A hydro-dependent energy mix increases climate vulnerability as droughts, hurricanes, and reductions in water levels can compromise energy security. Several of the LAC region's larger economies—including Brazil, Colombia, Mexico, and Chile—depend on a significant component of hydropower in their generation mix, making this an issue of critical importance that further highlights the need for more innovative technological solutions in the clean energy generation matrix.

Deforestation of the Amazon is also an urgent issue for addressing climate change. The Amazon is one of the world's three most important rain forests, and its protection can therefore make a very significant contribution to combating climate change. Models show that at about 40 percent deforestation, central, southern and eastern Amazonia would experience diminished rainfall and a lengthier dry season, which could lead to a shift to savanna vegetation. Widespread use of fire to remove vegetation¹⁴ leads to the drying of surrounding forest and greater vulnerability to fire in the subsequent year. Degraded savannas in most of the Amazon would limit the natural process of carbon capture, transforming it from sink to source, making net-zero emissions targets much harder to attain.¹⁵

In 2019 alone, an area roughly the size of Lebanon was deforested in Brazil, an 11-year high.¹⁶ Sharing the preservation costs by a global compact of countries—including those with the largest emissions—and monetizing the carbon capture value of the Amazon should be part of any meaningful partnership in the region if the goal is to achieve global net-zero emissions.



These are all compelling reasons why LAC needs to act on adaptation and mitigation, with the support of the international community. When Biden was a presidential candidate, he proposed that the advanced economies give Brazil \$20 billion to stop Amazonian deforestation.¹⁷ The government of Brazil now seems to be willing to engage with the Biden administration on this issue.¹⁸ Regardless, the recent surge of deforestation is a threat to global climate efforts,¹⁹ and action would require the participation of not just Brazil but also the other countries that are part of the Amazon basin.

Recommendations

This hemispheric partnership could consider the following actions to create a regional climate and energy initiative in order to accelerate energy transition and promote economic growth with opportunity:

- **Power sector.** As part of this initiative, governments throughout the region should consider implementing plans to expand the generation of clean electricity by deploying new and existing technologies to achieve a carbon pollution-free power sector by 2035.
- **Buildings.** The US government should provide financial support for the development of technologies for low-cost building retrofit and efficient appliance manufacturing supply chains to reduce GHG emissions. Air-conditioning, in particular, is a crucial component of energy consumption in the Caribbean and many tropical areas of Latin America as it is often the number one item in electricity bills for households and retail businesses. The US government should also create partnerships between Department of Energy (DOE) labs and LAC research centers to develop buildings with high-efficiency and high-resilience attributes.
- **Innovation.** The United States, with the help of bilateral, regional, and multilateral development banks, should drive dramatic cost reductions by providing funding for innovation in critical clean energy technologies, including electric vehicles and charging stations, battery storage, negative emissions technologies, the next generation of building materials, and renewable hydrogen.
- **Energy and environmental justice.** The US government—primarily through the US Agency for International Development (USAID)—should ensure that the reduction of energy poverty is a top priority through mechanisms such as direct aid and concessional loans so that the entire population of the Western Hemisphere has access to energy, especially clean energy.

More specifically, the strategic climate and energy alliance with LAC should accelerate a just energy transition. In support of this, the alliance could do the following:

Introduce new instruments to finance the massive infrastructure investments that are required. Climate finance plays a key role in this partnership, so ministers of finance should be actively engaged, especially as it could also assist in post pandemic economic recovery efforts. The Development Finance Corporation (DFC) should be involved to mobilize the



amounts that are needed to achieve the net-zero goal in the power sector by 2035. The energy and climate regional partnership is an ideal opportunity to get the DFC off the ground and deliver on its promise.

Create in partnership with other governments in the hemisphere the Clean Energy Research Program for the Americas to promote hemispheric cooperation on solar, wind, and green hydrogen technology development. This program should be anchored at the DOE, in coordination with USAID, to target affordable technologies to help achieve the climate targets of individual countries, including their Nationally Determined Contributions (NDCs) in the context of the Paris Agreement. Targets of the program could include

- grid-scale storage at a fraction of the cost of lithium-ion batteries;
- capacity to manufacture lithium-ion batteries in Latin America (a region that holds nearly 60 percent of the world's lithium reserves);
- the widespread manufacturing and use of electric vehicles and charging stations at a cost affordable for middle-income families;
- refrigeration and air-conditioning using refrigerants with no global warming potential;
- zero net energy buildings, including through breakthroughs in smart materials, appliances, and systems management;
- using renewables to produce carbon-free hydrogen through innovation in technologies like next generation electrolyzers;
- decarbonizing industrial heat needed to make steel, concrete, and chemicals and reimagining carbon-neutral construction materials;
- decarbonizing the food and agriculture sector by reducing changes in land use, the single most important source of carbon emissions in LAC;²⁰ and
- capturing carbon dioxide through direct air capture systems and retrofits to existing industrial and power plant exhausts, followed by permanently sequestering it deep underground or using it to make alternative products like cement.

Create a data-driven regional climate and energy justice screening tool in order to measure progress for disadvantaged communities, especially among rural populations and ethnic minorities. Millions in the region lack access to electricity, including 60 percent of the population in Haiti. Governments and the private sector can use this data to direct investments to the most underserved communities in order to reduce energy poverty. This tool could be operated by the Inter-American Development Bank (IADB), which has experience on the topic and widespread regional presence.

Adopt effective strategies to reduce carbon emissions and shift away from carbon-intensive energy consumption. Potential solutions to these problems exist in the Americas—the region had a pioneering role in the development of bus rapid transit systems²¹ and now is a global leader in their electrification. Also, there has also been recent growth in unconventional



renewable energy sources in countries such as Brazil, Chile, and Uruguay.²² A sustained hemispheric partnership could help amplify these successes to the rest of the region.

Promote a hemispheric agreement to develop subregional integrated power markets. This would require confronting deeply entrenched energy (and other forms of) nationalism and special interest groups that prevent the integration of regional grids. Often, state-owned enterprises in the energy sector create tensions and mistrust that hinder regional cooperation. The initiative could help countries regain trust and confidence in arrangements that require supranational regulation and oversight, such as the African regional power pools. This agreement should include the integration of electric grids across the region because this is what would allow a cleaner and more resilient energy matrix.

The electricity infrastructure between the main power grid in Mexico and the United States is not fully integrated due to technical issues—and now also political divides. Regional agreements could help address some of these issues. This integration could enable both countries to take better advantage of significant renewable resources—both solar and wind—in northern Mexico. These steps could mirror the situation in Baja California, Mexico, where the power grid is fully integrated into the California power system and is enables the broader region to benefit from enhanced stability. These examples show how integration could be developed both through infrastructure and regulation to more efficiently use natural resources and capital to decarbonize the energy system in the region.

Provide adequate financing to integrate electric grids. This would increase efficiency and facilitate the distribution of electricity generated with clean, renewable fuels over long distances. This type of integration could bring benefits such as the need to invest less in more expensive redundancy and more in less expensive transmission, from Canada down through the southernmost tip of South America. The potential is greatest in Central America, where distances are relatively small. Integration between South and Central America can be accomplished by constructing a 200 km power grid between Colombia and Panama, which would allow Central America to benefit from lower-cost energy sources. To do so, the DFC should designate a window to guarantee energy infrastructure investments in order to share risks and develop instruments to hedge them (i.e., forex), particularly in these smaller nations in which commercial banks and sources of private equity will not operate without multilateral guarantee instruments.

Conclusion

LAC has faced a series of complex economic, social, and climate change related challenges prior to the arrival of COVID-19. The pandemic has only exacerbated these circumstances, heightening the urgency for action. In this context, the United States may choose to recast its relationship with LAC using the tools of technology and financing focused on energy and climate to build clean infrastructure, speed up the energy transition, and reduce energy poverty in the region. This collaboration can be achieved through the creative use of existing institutions, and could put LAC firmly on a path toward sustained economic and social growth.



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