

## **From Coal to Bright: Embracing Trends of Energy Transition in Latam**

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Natural disasters and the acceleration of climate change effects are proof that our planet urges a major change in terms of how we consume and the industry generates electricity. Experts estimate that climate change effects for some Latin America (“Latam”) countries such as Guatemala, Honduras, El Salvador, and Nicaragua will extend the dry seasons from three to six months and risk significant loss of biodiversity through species extinction in many tropical<sup>2</sup> areas in other Latam countries such as Mexico, Brazil, and Costa Rica.

Climate change is an urgent crisis that is damaging our economy, and our planet. But as Jack Nicklaus said once, “crises are part of life and everybody has to face them.” In that regard, energy transition is a pathway to facing and limiting climate change effects while transforming the global energy sector from fossil-based to zero-carbon. Reducing greenhouse gas emissions is a global issue that requires global actions such as increasing renewable energy resources and implementing energy efficiency measures that can potentially achieve 90% of the required carbon reductions.<sup>3</sup>

The International Energy Agency (“IEA”) projects global energy demand will rise more than 25% by 2040, driven primarily by population growth and increasing incomes. Even in the IEA’s most aggressive low-carbon scenario, oil and natural gas will meet approximately half of that demand. With energy demand forecast to rise over the coming decades, the energy industry, governments, and energy professionals must take measures to ensure affordable and secure energy supplies in a sustainable manner.<sup>4</sup>

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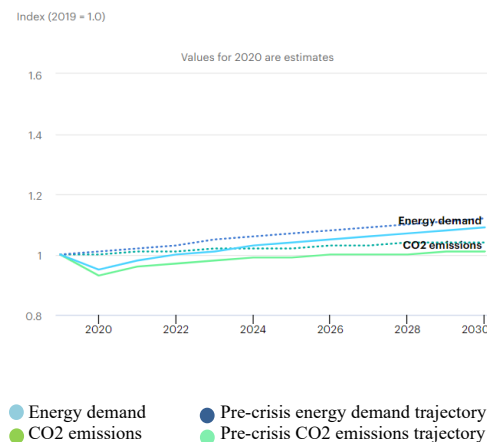
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<sup>2</sup> United Nations Report: Nature’s Dangerous Decline ‘Unprecedented’; Species Extinction Rates ‘Accelerating’, <https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/>.

<sup>3</sup> United States Environmental Protection Agency, Sources of Greenhouse Gas Emissions, <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.

<sup>4</sup> International Energy Agency, World Energy Outlook 2019, <https://www.ica.org/reports/world-energy-outlook-2019>.

GLOBAL ENERGY DEMAND AND CO<sub>2</sub> EMISSIONS TRENDS IN THE STATED POLICIES SCENARIO, 2019-2030<sup>5</sup>



In my perspective, there are three main drivers that could trigger or slowdown the path towards energy transition in the Latam region: a) economic growth, b) investments in renewables, and c) regulatory uncertainties.

**Economic Growth** is a natural concern across the region. As noted in the International Monetary Fund’s recent World Economic Outlook, growth in the region is projected to rebound to 1.6% in 2020 and 2.3% in 2021, supported by a gradual increase in global growth and commodity prices, continued monetary support, reduced economic policy uncertainty, and a gradual recovery in stressed economies.<sup>6</sup>

**Investments in Renewables** should be a top priority for investors and energy companies around the globe. It is well known that the Latam “region has significant wind and solar potential that can help to relieve reliance on large hydro and biofuels / biomass during droughts and other extreme weather events.”<sup>7</sup> Nevertheless, according to the 74th United Nations General Assembly, despite significant efforts, the industry is still moving slowly in terms of investments in clean energy. According to the IEA, in 2018 alone global energy-related CO<sub>2</sub> emissions rose 1.7% to a historic high, driven by higher energy demand.<sup>8</sup> But, as expressed on several occasions by Dr. Birol from IEA, we should never forget that the region has the potential to build a bright energy future. For example, Colombia’s ranking on the World Energy Council’s (“WEC”) Energy Sustainability Index rose by 14 positions due to recent initiatives lead by Minister Diego Mesa.<sup>9</sup>

<sup>5</sup> IEA, Global energy demand and CO<sub>2</sub> emissions trends in the Stated Policies Scenario, 2019-2030, IEA, Paris <https://www.iea.org/data-and-statistics/charts/global-energy-demand-and-co2-emissions-trends-in-the-stated-policies-scenario-2019-2030>.

<sup>6</sup> International Monetary Fund, World Economic Outlook, January 2020, <https://www.imf.org/en/Publications/WEO/Issues/2020/01/20/weo-update-january2020>.

<sup>7</sup> <https://www.worldenergy.org/impact-communities/members/regional-networks/entry/latin-america-the-caribbean-network>.

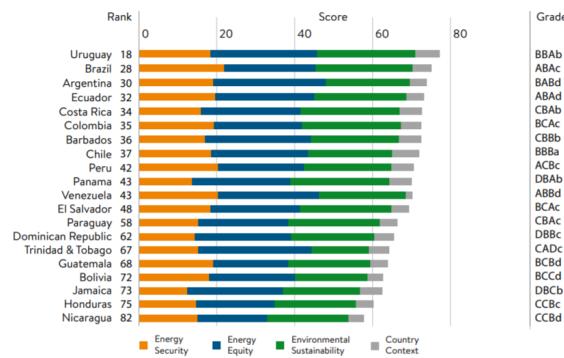
<sup>8</sup> IEA, Global Energy & CO<sub>2</sub> Status Report 2019, <https://www.iea.org/reports/global-energy-co2-status-report-2019/emissions>.

<sup>9</sup> World Energy Council, World Energy Trilemma Index 2020 <https://www.worldenergy.org/publications/entry/world-energy-trilemma-index-2020>.

**Regulatory Uncertainty** is one of the top issues impeding the path towards energy transition. Uncertainty about the course of energy policy and regulatory measures against private investments contributes to the slowdown in real GDP and creates concern in future investments.

According to the WEC, Latam has some of the most abundant and competitive renewable energy resources on the planet, consisting primarily of hydroelectric, wind, and solar power. Those resources should trigger the energy transition progress, make the region a world leader in renewable energy, and may facilitate a similar stimulus for clean hydrogen production during this decade. In the Latam region, the major decarbonisation opportunities have been identified in transportation, mining, and other large industries. The abundant and cost competitive renewable energy resources allow production at very competitive prices and provide a long-term forecast of exports.<sup>10</sup>

THE LAC COUNTRIES AND THEIR 2020 TRILEMMA PERFORMANCE<sup>11</sup>



Finally, in order to be consistent with the Paris Agreement’s goal of limiting any rise in global temperatures to well below 2 degrees Celsius, the discussion should not simply be between fossil fuels and renewable energy. Rather, the Latam region and the planet must focus on how academia, industry, and governments can accelerate the growth of renewables projects while reducing greenhouse gas emissions from the use of fossil fuels. Achieving the energy transition dream in the Latam region requires policies that guarantee steep reductions in emissions, facilitate massive investments in renewable energy, and find ways through nature and technology to remove carbon from the atmosphere.

<sup>10</sup> World Energy Council, World Energy Trilemma Index 2020, LATIN AMERICA AND CARIBBEAN, page 46 <https://www.worldenergy.org/publications/entry/world-energy-trilemma-index-2020>.

<sup>11</sup> World Energy Council, World Energy Trilemma Index 2020, LATIN AMERICA AND CARIBBEAN, page 47 Figure 46: The LAC countries and their 2020 Trilemma performance [https://www.worldenergy.org/assets/downloads/World\\_Energy\\_Trilemma\\_Index\\_2020\\_-\\_REPORT.pdf](https://www.worldenergy.org/assets/downloads/World_Energy_Trilemma_Index_2020_-_REPORT.pdf).