

# LAC-EUROPE

**Joint Climate Action between Europe  
and Latin America and the Caribbean:**  
a common agenda for development





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#### ***Joint Climate Action between Europe and Latin America and the Caribbean: A Common Agenda for Development***

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# Introduction



The purpose of this paper is to explore areas for climate action collaboration between the European Union (EU) and Latin America and the Caribbean (LAC). Building on the core values of democracy and open trade, a climate partnership can result in a more ambitious climate policy agenda, with benefits that extend beyond the UE and LAC, as there could be global spillovers due to a broader acceleration of economic development and climate change mitigation and adaptation.

From LAC's perspective, developing a strong climate partnership with Europe can be a successful strategy for re-industrialization, with a focus on green products. Generating the revenues to effectively protect LAC's biodiversity can also be a byproduct of this partnership. Win-win opportunities are possible, but they are not assured unless both parts undertake decisive actions. ■



# 01 Underscoring the asymmetries between LAC and the EU

**Pointing out the asymmetries between LAC and the EU –beyond the obvious fact of differences in historic emissions-- remains fundamental to understanding why efforts to provide joint climate action must consider different capabilities and require different roles.<sup>1</sup>**

To start, differences in geographical conditions must be acknowledged. Geography has reemerged as an important factor in explaining developmental outcomes mainly because it is a primary driver of climate change exposure. In fact, an index of exposure to climate change, measuring exogenous risks based on the physical characteristics of natural disasters, indicates that countries that are located closer to the equator, such as those in Latin American and Caribbean, are more exposed to climate change (IMF, 2022).<sup>2</sup> Initial average

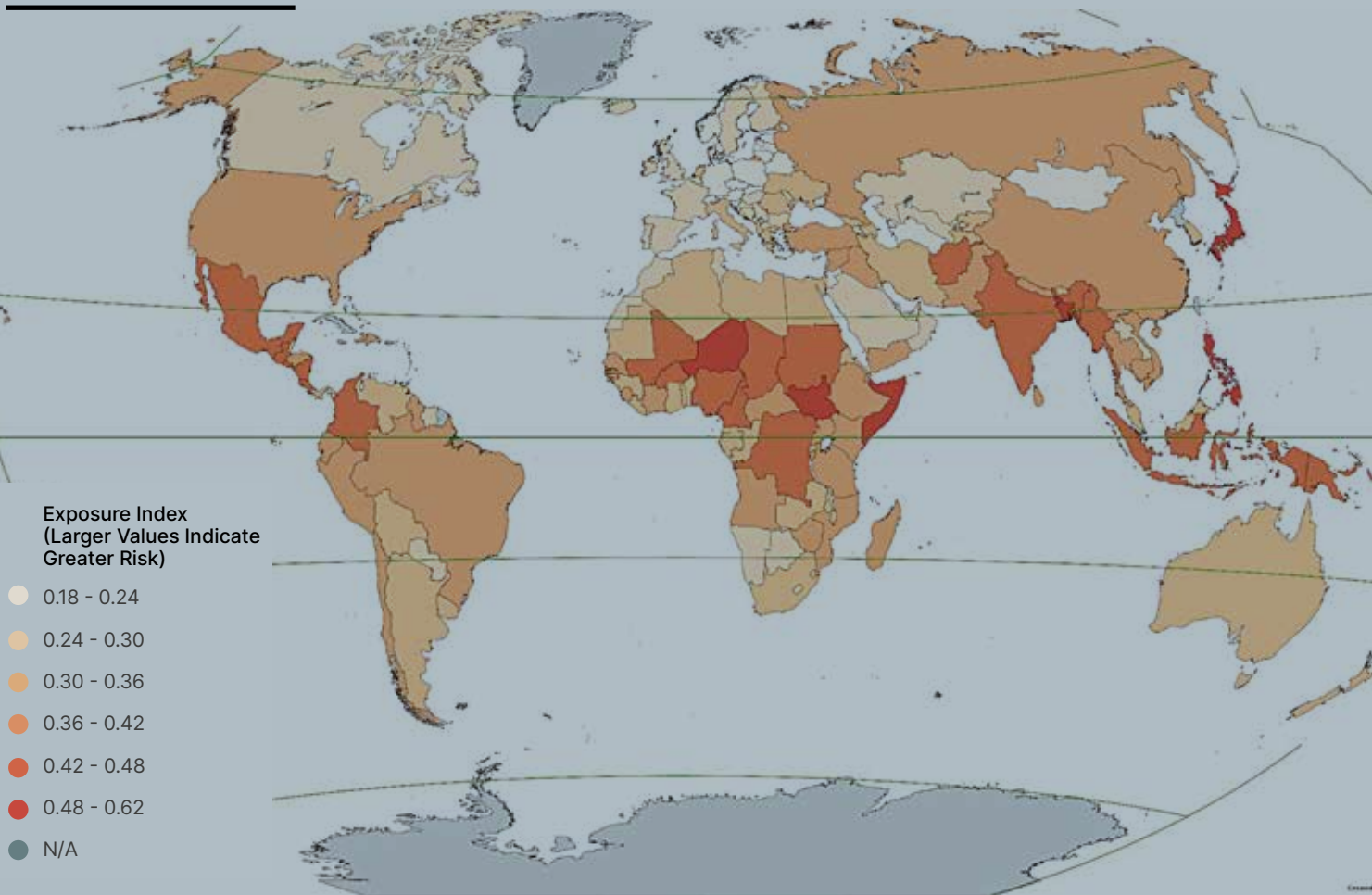
1. Based on data from the PIK PRIMAP-hist database spanning from 1850 to 2020, the European Union (EU) has contributed a total of 403.61 gigatons of CO2 equivalent in cumulative greenhouse gas emissions, which excludes land use, land-use change, and forestry (LULUCF) emissions. In contrast, the cumulative emissions in the Latin American and Caribbean region (LAC) were 159.04 gigatons of CO2 equivalent, that is less than 40% of the EU's total.
2. The exposure index comes from Bellon and Massetti (2022) using the "Hazard and Exposure" sub index from European Commission's Index for Risk Management INFORM Index, the "exposure" sub index from the World Risk Index (WRI) produced by the UN University Institute for Environment and Human Security, and the "exposure" sub index from the University of Notre Dame's Global Adaptation Index (ND-GAIN). The three subcomponents are normalized individually and then averaged to produce the 0-1 exposure index considered in this paper.



temperatures are also higher in the majority of countries in LAC relative to Europe, so that the negative effects of increases in global temperatures are significantly greater. As shown in Figure 1, more than half of the countries in LAC have a greater exposure index than Greece, the country in the EU with the highest exposure index.

The composition of the emissions is another source of asymmetries between both regions. Energy --including electricity generation, transportation and the use of fuel in industrial processes-- accounts for 43 percent of total CO<sub>2</sub>-eq emissions in LAC relative to 72 percent in the EU (European Environment Agency, 2023).

Figure 1.  
**More exposed countries are closer to the Equator**



Source: Own calculations based on data from the IMF. Note: The figure uses the Exposure Index for 186 countries (data for 2022). The following countries have no data: Cuba, North Korea, Hong Kong, Taiwan, San Marino, Kosovo, Vatican City, Nauru, and Monaco.



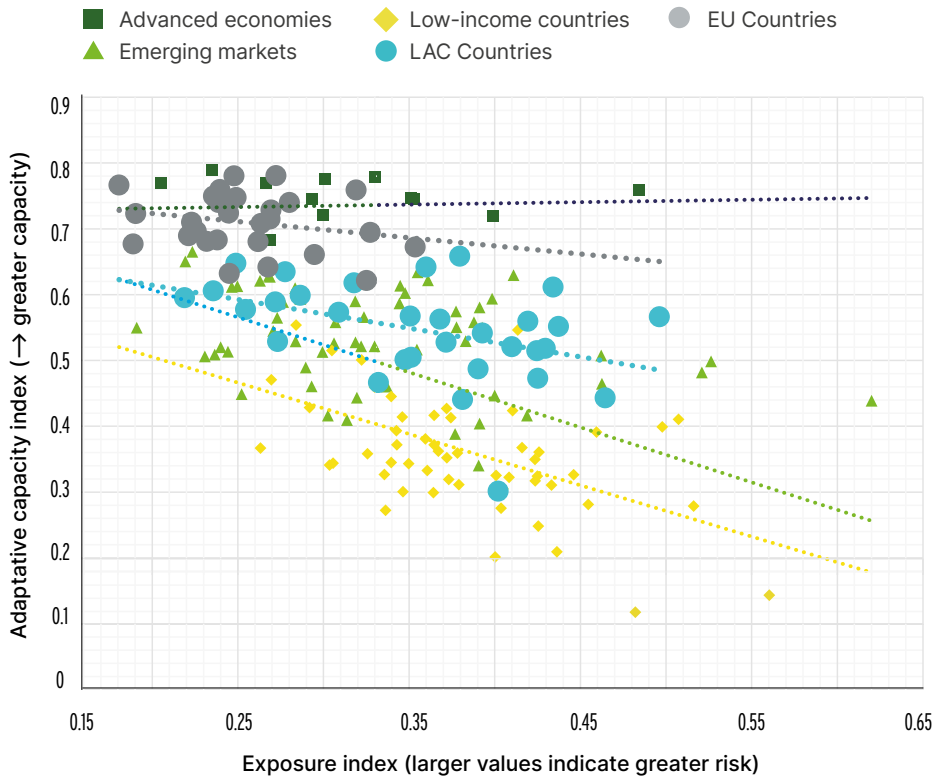
In contrast, the Agriculture, Forestry and Other Land Use (AFOLU) sector accounts for 40 percent of LAC's total emissions (Cardenas, 2023) as opposed to the EU, where negative land use emissions have been observed since 2020.<sup>3</sup>

Another key difference is related to investment in adaptation, which is indispensable to prevent the economic backsliding caused by climate change.<sup>4</sup> To measure adaptive capacity, Bellon and Massetti (2022) use the average of "Vulnerability" and "Lack of adaptive capacity" from the European Commission's Index for Risk Management INFORM Index, "Vulnerability" from the World Risk Index (WRI) by the UN University Institute for Environment and Human Security, and the "Sensitivity," "Adaptive capacity," and "Readiness" sub-indicators from the University of Notre Dame's Global Adaptation Index (ND-GAIN).

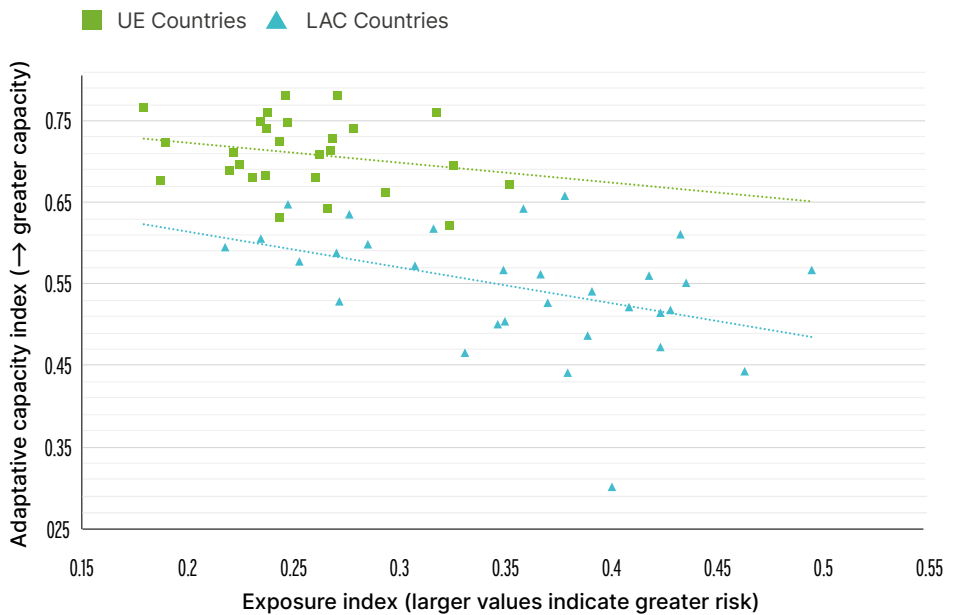
Figure 2 compares the exposure index from Figure 1 with the adaptive capacity index described above. Countries with higher exposure also show lower adaptive capacity, especially across LICs and EMDEs.<sup>5</sup> Greater physical risks, associated with geography, are amplified by

3. However, the EU's consumption is responsible for 16% of tropical deforestation worldwide, according to the World Wide Fund for Nature (WWF).  
 4. According to the Intergovernmental Panel on Climate Change, adaptation refers to the process of minimizing losses and maximizing benefits from climate change (IPCC, 2021a).  
 5. In what follows the standard definitions of Low Income Countries (LIC) and Emerging Market and Developing Economies (EMDE) from the IMF are used.

Figure 2.  
**More exposed countries have lower adaptive capacity**

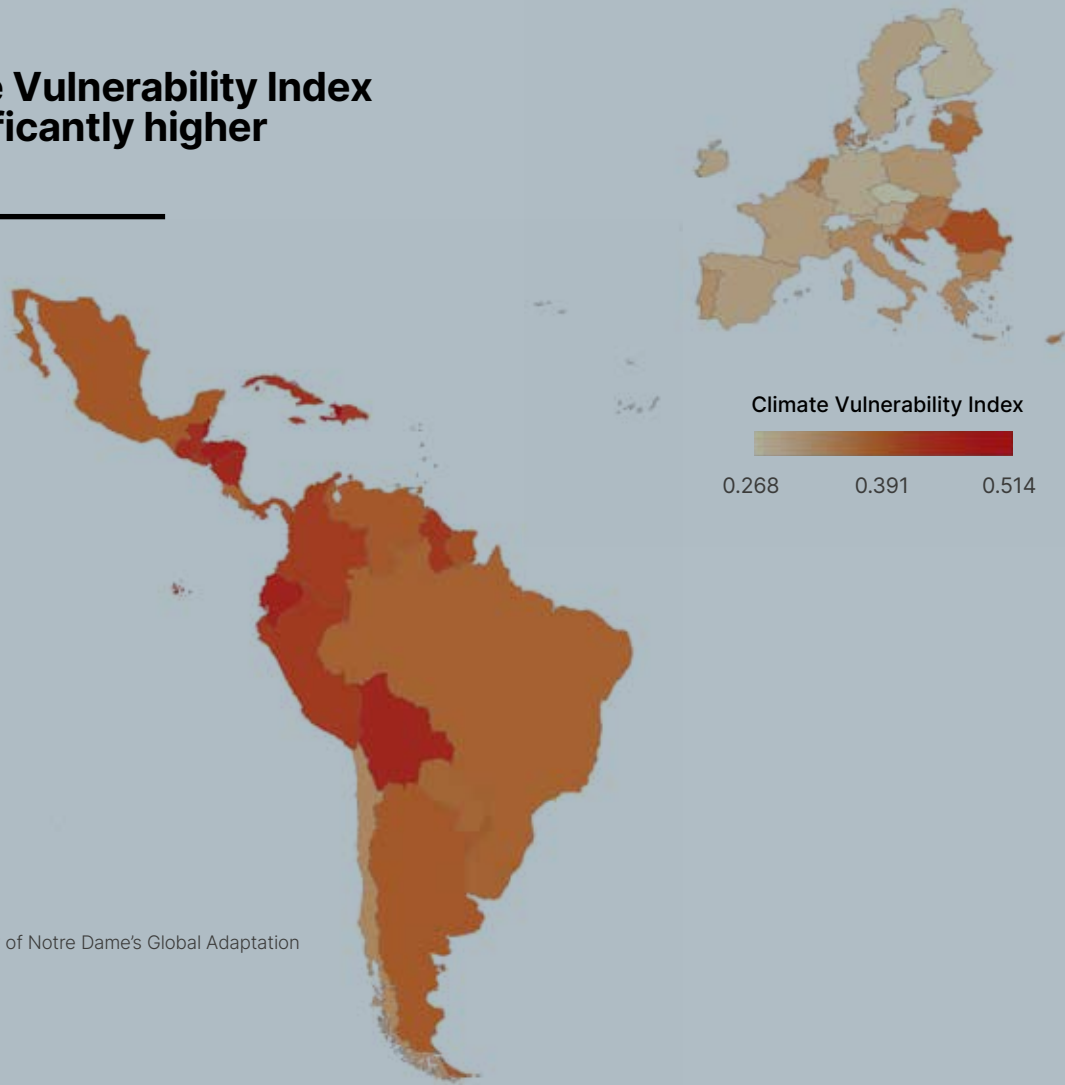


**Exposure Index vs Adaptive Capacity Index for EU and LAC Countries**



Source: IMF (2020). Missing Information for Suriname.

Figure 3.  
**Climate Vulnerability Index  
 is significantly higher  
 for LAC**



Source: University of Notre Dame's Global Adaptation Index (ND-GAIN).

institutional factors that constrain the capacity to adapt. EU countries not only have lower exposure levels, but also have a significantly higher adaptive capacity relative to LAC countries. To reiterate the point, Figure 3 compares the climate vulnerability index from ND-GAIN in LAC relative to the EU<sup>6</sup>. The crucial message is that LAC is much more

vulnerable, has lower capacity to cope with climate change, and has a lower per-capita level of greenhouse gas (GHG) emissions<sup>7</sup>.

Low adaptive capacity is often compounded by fiscal and financial factors. For example, LAC's higher cost of capital reduces the number of bankable and implementable

6. ND-GAIN assesses the vulnerability of a country by considering six life-supporting sectors: food, water, health, ecosystem services, human habitat and infrastructure. Each component is in turn measured by six key indicators. 1) Indicators for Food: Projected change of agricultural cereal yield, Projected population change, Food import dependency, Rural population, Agriculture capacity, Child malnutrition. 2) Indicators for Water: Projected change of annual runoff, Projected change of annual groundwater recharge, Freshwater withdrawal rate, Water dependency ratio, Dam capacity, Access to reliable drinking water. 3) Indicators for Health: Projected change

**ALTHOUGH CLIMATE CHANGE VULNERABILITY DOES NOT HAVE A SIGNIFICANT IMPACT ON CREDIT RATINGS IN ADVANCED ECONOMIES, IT IS NEGATIVELY CORRELATED WITH SOVEREIGN CREDIT RATINGS IN EMERGING AND DEVELOPING (EMDE) COUNTRIES.**

climate projects (relative to the EU's). Differences in interest expenditure on public debt (as a percentage of GDP) illustrate this point (see Figure 4). While European countries have much larger public debts (as a share of GDP), they paid on average 1.26% of GDP in interest in 2020 (down from an average of 5.02% of GDP in 1993), almost half of what LAC countries paid (2.54% of GDP in 2022).<sup>8</sup> Higher interest payments also create budgetary rigidities that reduce the ability to finance climate action.

Also, countries with a higher climate vulnerability index face a higher likelihood of debt default compared to

more climate resilient countries (Cevik and Jalles, 2020). Although climate change vulnerability does not have a significant impact on credit ratings in advanced economies, it is negatively correlated with sovereign credit ratings in Emerging and Developing (EMDE) countries.

For LAC countries this implies a vicious circle: while it is hard to finance climate projects, climate risks worsen credit ratings and increase the cost of funds, restricting even further the possibility of effective climate action. For the reasons outlined above, the EU is in a much better position to fund climate action.



of deaths from climate change induced diseases, Projected change in vector-borne diseases due to changes in length of transmission season, Dependency on external resources for health services, Slum population, Medical staffs, Access to improved sanitation facilities. 4) Indicators for Ecosystem Services: Projected change of biome distribution, Projected change of marine biodiversity, Natural capital dependency, Ecological Footprint, Protected Biomes, Engagement in international environmental conventions. 5) Indicators for Human Habitat: Projected change of warm periods, Projected change of flood hazard, Urban concentration, Age dependency ratio, Quality of trade and transport infrastructure, Paved Roads. 6) Indicators for Infrastructure: Projected change of hydropower generation capacity, Projected change of sea level rise impacts, Dependency on imported energy, Population living in LECZs, Electricity access, Disaster preparedness.

7. According to 2021 data from the Potsdam Institute for Climate Research PRIMAP-hist national historical emissions time series, excluding Land Use and Forestry (LULUCF), Latin American and Caribbean (LAC) per capita emissions were 4.95 metric tons of CO2 equivalent. In comparison, the European Union (EU) recorded per capita emissions of 7.74 metric tons of CO2 equivalent (a 36% difference). Including LULUCF, per capita emissions in LAC were 6.33 metric tons of CO2 equivalent in 2019 in contrast to 7.24 metric tons in the EU (Climate Watch) (a 13% difference).

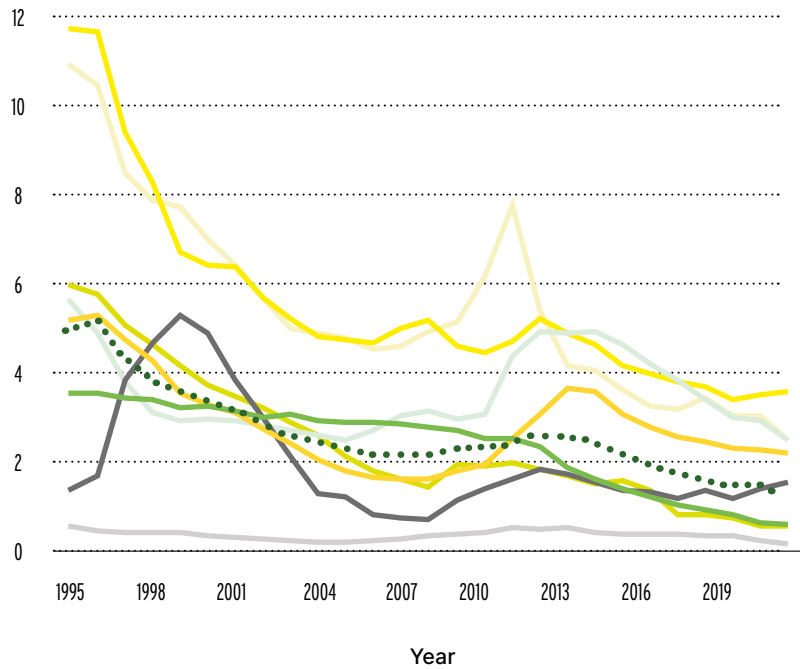
8. Public debt in the EU is 93% of GDP (Eurostat, 2023) (2022 Q3) in contrast to 69.4% of GDP in LAC (end of 2022).



Figure 4.  
**Interest paid on public debt by EU countries and major Latin American economies, percent of GDP.**

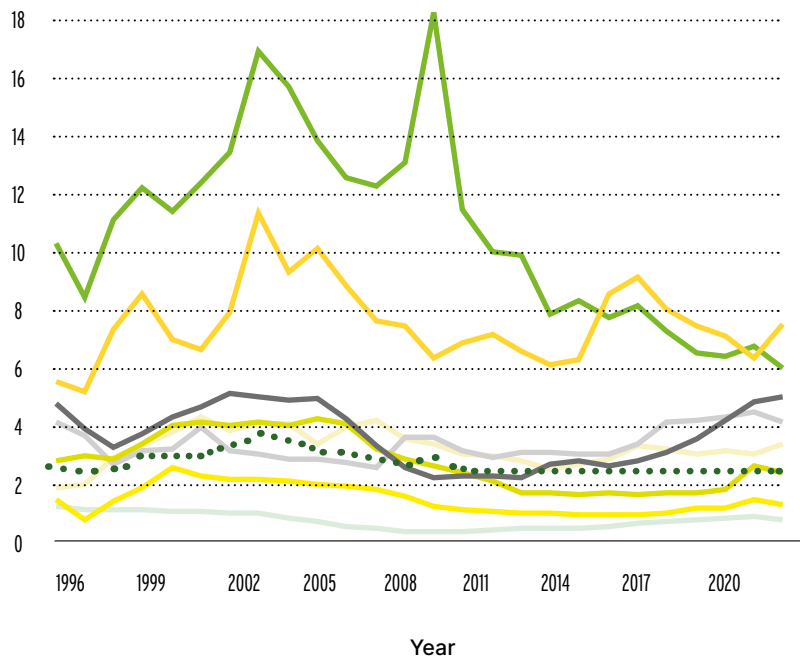
- EU Average
- Germany
- Italy
- Portugal
- Spain
- Denmark
- Greece
- Luxembourg
- Romania

Interest Paid  
 On Public Debt  
 as a % of GDP



- LAC Average
- Jamaica
- Peru
- Chile
- Brazil
- Panama
- Colombia
- Mexico
- Costa Rica

Interest Paid  
 On Public Debt  
 as a % of GDP



Source: IMF (2022).



Finally, progress across various Sustainable Development Goals (SDGs) should be an issue of concern. Critical lags in the case of LAC are related to SDG No. 1 (No Poverty), SDG No. 4 (Quality Education), and SDG No. 8 (Economic Growth and Decent Work). While the transition to a low-GHG economy is expected to lead to a net creation of jobs (ILO, 2018a), there are doubts as to where the extra jobs will be allocated. In a similar spirit, differences in exposure and adaptive capacity can cause a significant setback in terms of inequality in LAC,

already the region with the highest income inequality in the world in 2020 (WID, 2020). Climate action should be framed in the context of ensuring continued progress in addressing inequality.

Despite these differences, a partnership between the EU and LAC can become a prototype of cooperation between Advanced Economies and countries in the Global South. The specific areas for collaboration are addressed in the remaining sections of this note. ■

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**FOR LAC COUNTRIES THIS IMPLIES A VICIOUS CIRCLE: WHILE IT IS HARD TO FINANCE CLIMATE PROJECTS, CLIMATE RISKS WORSEN CREDIT RATINGS AND INCREASE THE COST OF FUNDS, RESTRICTING EVEN FURTHER THE POSSIBILITY OF EFFECTIVE CLIMATE ACTION.**



# 02 Framework of European Climate Policies

The European Union (EU), set an agenda in 2019 to address climate change, mostly through the European Green Deal and the Climate Law. This law commits the EU to achieving carbon neutrality by 2050 and reducing greenhouse gas (GHG) emissions by 55% by 2030 compared to 1990 levels, representing a resolute commitment, unlikely to be reversed.

The impetus behind the Climate Law stems from robust scientific evidence furnished by authoritative bodies like the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). Both have predicted different warming scenarios and their implications on the interconnectedness of ecosystems. In less than 20 years, discernible differences in trends of global surface temperatures will start to arise due to natural variability (IPCC, 2023), which underscores the urgency of effective climate action and the imperative to transition toward a climate-neutral economy while addressing biodiversity decline.



One of the milestones in legislation to address climate change was the introduction of the EU Emissions Trading System (ETS) in 2005. This scheme obliges more than 10,000 power plants and factories to hold a permit for each ton of CO2 they emit (European Parliament, 2023), with the aim of incentivizing the private sector to invest in technologies with lower carbon intensity. Like other carbon pricing mechanisms, the ETS is well suited to induce energy efficiency investments and reduction of GHG emissions in a cost-effective manner.

One of the limitations of the ETS and other European decarbonization policies, though, has been the risk of inducing an increase in emissions

in other parts of the world, through embodied emissions in traded products, also associated with some degree of deindustrialization of the European economy (Wood et al., 2019). Leakages also give rise to virtual decoupling, consisting of deeper emission reductions observed directly in the European economy in comparison with an accounting that integrates the effect of trade (Moreau et al., 2019).

To scale up climate action through industrial policies, the EU adopted several policies initially proposed in the context of the Fit-for-55 package. One of the main revisions involves ensuring the effectiveness of the ETS, by including new provisions such as:



The extension to emissions from maritime transport, road transport and buildings.



Carbon reduction scheme for aviation (European Union, 2023a)



Faster reduction emission allowances in the system, including in particular a progressive phasing-out and ultimately an exclusion of free allowances in sectors – including a number of heavy industries.



The introduction of a “Market Stability Reserve” (i.e., a mechanism aimed to limit the volatility of the CO2 price and therefore improve the EU ETS’s resilience to future shocks) (European Union, 2023b).

**THE REVISED ETS IS ALSO PAIRED WITH THE SOCIAL CLIMATE FUND, WHICH AIMS TO PROVIDE SUPPORT MEASURES FOR VULNERABLE HOUSEHOLDS, MICROENTERPRISES, AND TRANSPORT USERS.**





**TO SCALE UP CLIMATE ACTION THROUGH INDUSTRIAL POLICIES, THE EU ADOPTED THE FIT-FOR-55 PACKAGE. ONE OF THE MAIN REVISIONS INVOLVES PRECISELY ENSURING THE EFFECTIVENESS OF THE ETS.**

The revised ETS is paired with increasing funding for investments in climate change mitigation, specifically by supporting innovation in low-carbon technologies, carbon capture and utilization, transport and geological storage, renewable energy and energy storage via the Innovation Fund. The new ETS includes the Social Climate Fund, which aims to provide support measures for vulnerable households, micro-enterprises, and transport users who have been disproportionately impacted by the Fit-for-55 package.

Another important addition is the introduction of the Carbon Border Adjustment Mechanism (CBAM), which is intended to reduce “carbon leakages” outside the EU’s borders, where looser policies would allow companies to maintain their emissions high through the production of carbon-intensive goods. The CBAM, which is expected to become fully operational in 2026 (European Union, 2023a), is designed to ensure equivalent carbon pricing for imports and

domestic products. It is also meant to encourage producers from third countries trading with the European Union to use technologies that are more efficient in reducing GHGs, so that fewer emissions are generated. The mechanism was designed to be compliant with rules set in the context of the World Trade Organization, which – as of June 2023 – was reviewing it (European Commission, 2023a).

CBAM targets carbon leakages by attaching an import levy in line with the EU-ETS emissions allowance price. The proposed method to calculate the CBAM is based on the carbon content of the product concerned (including direct and indirect emissions) and the difference in terms of carbon price between what is in place in the European Union and in the country trading with it (European Union, 2023c). While the full methodology is yet to be finalized, it intends to apply a deduction for the carbon price in the country of origin to avoid double taxation. During



a 9-year gradual phase-in period (2025 to 2034), importers would be obliged to submit CBAM certificates and pay the carbon pricing differential (European Union, 2023c).

In sectors that were not covered by the EU emissions trading system (ETS), such as road and domestic maritime transport, buildings, agriculture and waste, the Fit-for-55 package sets binding member state-specific targets to cut greenhouse gas emissions. This implies a 40 percent reduction of GHG by 2030, in contrast to the 29 percent decline that was set previously. The European Council also set a binding commitment to reduce emissions and increase removals in the AFOLU sectors, with an increased EU-level target of at least 310 million tons of CO<sub>2</sub> equivalent net removals of greenhouse gasses for 2030 (European Union, 2023a).

The Fit-for-55 package also includes major policy milestones for the improvement of energy

efficiency and the increase of renewable energy shares in the EU energy mix. The recast of the Energy Efficiency Directive (already finalized) and the Renewable Energy Directive (with a plenary vote in the European Parliament expected by September 2023), which bind EU countries to collectively ensure an additional 11.7% reduction of energy consumption by 2030 and raise the share of renewables in the EU's overall energy consumption to 42.5% by 2030 (European Commission, 2023; European Parliament, 2023). The overall renewable energy share is complemented by sectoral targets in industry, transport, buildings, heating and cooling, some of which are of a binding nature. Policies addressing the reduction of direct and indirect energy use and GHG emissions in road transport, also focus specifically on electric mobility (IEA, 2023b; BNEF, 2023). These policies include:



The regulatory phaseout of vehicles emitting CO<sub>2</sub> at the tailpipe (European Council, 2023a).



Minimum requirements regarding the roll out of charging infrastructure (European Commission, 2023b).



Specific measures regarding the production, use and end-of-life management of batteries and their materials (European Commission, 2022a) – including on carbon intensity and transparency regarding mineral sourcing.





Finally, the Global Gateway is a EU climate-neutral strategy to speed up sustainable development and recovery, create inclusive growth and jobs and transition to a cleaner and more circular global economy (European Commission, 2021). With a pledge of up to €300 billion in infrastructure investment until 2027 in countries that are close geopolitical, ideological, and strategic allies for the EU. The Global Gateway has specific targeted projects across all LAC countries.<sup>9</sup> They key areas of partnership are the digital sector, climate energy, transport, health, and education and research. ■

**THE EUROPEAN COUNCIL ALSO SET A BINDING COMMITMENT TO REDUCE EMISSIONS AND INCREASE REMOVALS IN THE AFOLU SECTORS, WITH AN INCREASED EU-LEVEL TARGET OF AT LEAST 310 MILLION TONS OF CO<sub>2</sub>.**

9. In contrast with China's Belt and Road Initiative (BRI) –which finances infrastructure projects in 147 member countries with a worrisome precedent for climate action – the Global Gateway puts climate sustainability at the top of the agenda (Council on Foreign Relations, 2021).



# 03 Latin America and the Caribbean NDCs

**As signatories to the Paris Agreement, LAC countries have established nationally determined contributions (NDCs), pledging to significantly reduce greenhouse gas (GHG) emissions by 2030 and in some cases become carbon neutral by 2050.**

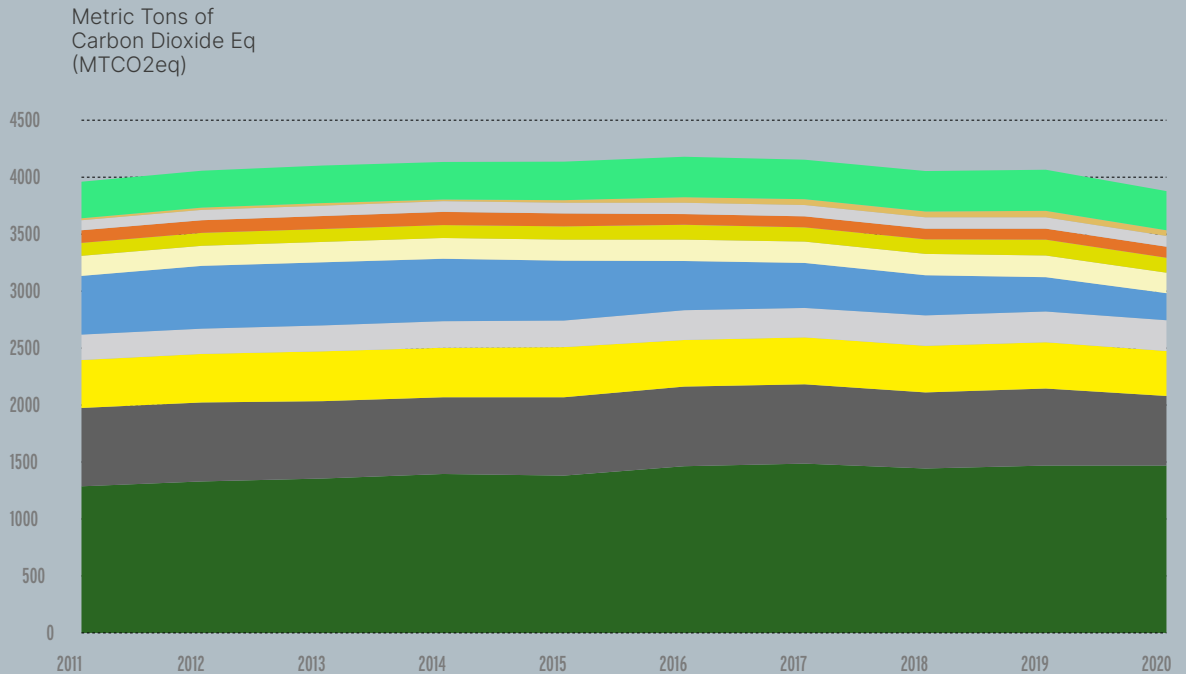
Over the last three years, 28 out of the 33 LAC countries, including the six largest economies—Argentina, Brazil, Chile, Colombia, Mexico, and Peru—have updated or submitted new NDCs, raising their climate mitigation ambition. These pledges were conceived in the context of increasing climate risks as well as the necessity of an agroecological transition, given the composition of emissions in the region.

Beyond the composition of emissions, the largest emitters in the region by 2020 were Brazil, Mexico, Argentina, Colombia, Venezuela, Peru, Bolivia, Paraguay, Ecuador. These ten countries account for over 90% of the region's emissions, as shown in Graph 5. Brazil and Mexico alone represent more than 53% of the emissions from all LAC countries. Therefore, the ambition of the NDCs established by these countries will determine the effectiveness of climate action in the region.



Figure 5.  
**GHG Highest Emission Contributors for LAC Countries**

- Brazil
- Mexico
- Argentina
- Venezuela
- Chile
- Colombia
- Peru
- Ecuador
- Bolivia
- Paraguay
- Other LAC countries



Source: Climate Watch (2021).

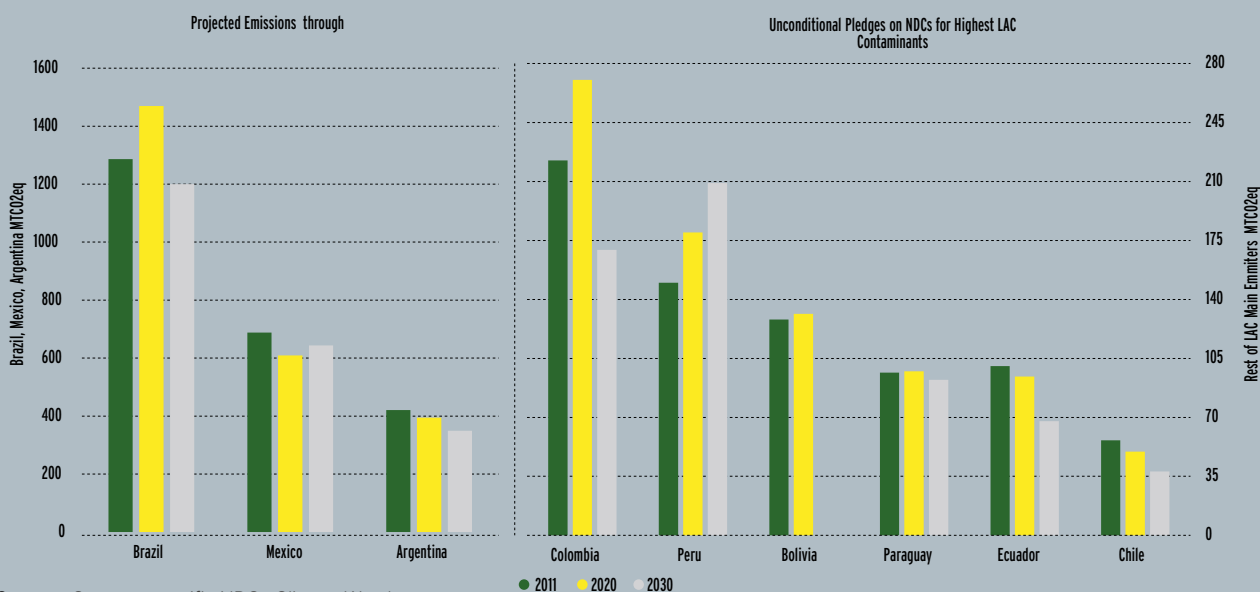
In their revised NDCs, Argentina and Chile increased their targets to reduce GHG emissions in absolute terms while Peru, Mexico and Colombia increased their targets as a percentage of a baseline. Argentina and Chile have pledged to be carbon neutral by 2050 while Peru and Colombia are developing national strategies aimed towards this goal. In contrast, Brazil did not expand its climate commitments (adopting a higher reduction percentage but changing the baseline year). Although GHG emissions in Brazil reached their highest level in 2021, deforestation decreased by 34% in the first six months of President Lula da Silva’s administration. Brazil has also pledged to be GHG neutral by 2050. Mexico, Venezuela, and Bolivia have not set a carbon-neutrality target. As shown in Table 1 and Figure 6, Paraguay has maintained a 10% unconditional

mitigation goal, while Ecuador has not updated its NDC since 2019. On the contrary, Guatemala has built institutional capacity and established governance arrangements to link national mitigation and adaptation priorities to global commitments and meet the requirements of the UNFCCC (UNDP, 2022).

In terms of long-term strategies, LAC-6 countries have designed emission reduction goals aligned with NDCs, primarily centered around the AFOLU sector. The most significant initiatives encompass stopping deforestation. Within the energy sector, a shift towards non-hydro renewable energy is a focal point, coupled with energy-efficiency measures. Enhancing renewable electricity generation features prominently in Argentina, Chile, and Colombia. Brazil and Uruguay are early

Figure 6.

## Projected Emissions through Unconditional Pledges on NDCs for Highest LAC contaminants



Source: Country-specific NDCs Climate Watch

adopters where progress has been remarkable. In transportation, biofuels and electrification (mostly in public transportation) are central to plans. Hydrogen production is a stated goal in Brazil, Chile and Colombia.

However, concrete climate-financing plans do not correspond to the level of ambition of LAC climate agendas. Adjusting fiscal policies, and developing a policy framework to attract private-sector investments into carbon abatement actions is crucial for a realistic transition to a low carbon economy.

The transition to a low carbon economy will require significant capital expenditure for the region, which is constrained by significant risks – related to political stability, legal enforcement, reputational concerns and macroeconomic management

– that are difficult to diversify (BlackRock, 2021). Moreover, for LAC-6, the low-carbon transition will require an average investment of 7–11 percent of GDP per year between 2021 and 2050, compared to around 6 percent of GDP per year for the European Union and United States over the same period (Figure 6). Countries with higher ambitions and lower GDP, such as those in Central America and the Caribbean, will face higher transition costs (Cardenas, 2023). ■

**IN TERMS OF LONG-TERM STRATEGIES, LAC-6 COUNTRIES HAVE DESIGNED EMISSION REDUCTION GOALS ALIGNED WITH NDCS, PRIMARILY CENTERED AROUND THE AFOLU SECTOR.**



Table 1.

## NDCs for the 10 Highest LAC Contaminants

| Country          | First NDC submission date | Second or Updated NDC submission date | 2030 GHG target (MtCO <sub>2</sub> e) |             | Notes   | Carbon Neutrality           |
|------------------|---------------------------|---------------------------------------|---------------------------------------|-------------|---|-----------------------------|
|                  |                           |                                       | Unconditional                         | Conditional |   |                             |
| <b>Brazil</b>    | September 2016            | April 2022                            | 1,200                                 | N/A         | Commitment to reducing its GHG emissions by 37 % by the year 2025 and by 50 % by the year 2030 as compared with 2005. Climate neutrality by 2050.   | Climate Neutrality by 2050. |
| <b>Mexico</b>    | September 2016.           | November 2022                         | 650.83                                | 603.75      | Mexico has increased its mitigation targets, aiming for a 35% reduction in greenhouse gas (GHG) emissions by 2030 with respect to its baseline (quantified at 991 MtCO <sub>2</sub> e), compared to a 22% reduction established in its previous submission in 2020.                             | No                          |
| <b>Argentina</b> | November 2016             | November 2021                         | 349                                   | N/A         | Equivalent to a 19% reduction in emissions compared to the historical peak reached in 2007. Argentina further raised its mitigation target by not exceeding the net emission of 349 MtCO <sub>2</sub> e in 2030, representing a reduction of 27.7% compared to the first NDC submitted in 2016. | Yes, by 2050.               |
| <b>Colombia</b>  | July 2018                 | December 2020                         | 169                                   | N/A         | 51% reduction in emissions by 2030 relative to a revised 2030 scenario. The NDC also embraces carbon neutrality by 2050   | Yes, by 2050                |
| <b>Venezuela</b> | July 2017                 | November 2021                         | N/A                                   | N/A         | Venezuela commits to reducing its emissions by 20% by 2030 conditionally compared to a Business as Usual Scenario, which is not specified in the NDC.   | No                          |



| Country          | First NDC submission date | Second or Updated NDC submission date | 2030 GHG target (MtCO <sub>2</sub> e)                                    |             | Notes  | Carbon Neutrality |
|------------------|---------------------------|---------------------------------------|--|-------------|--|-------------------|
|                  |                           |                                       | Unconditional  | Conditional |  |                   |
| <b>Peru</b>      | May 2016                  | December 2020                         | 209  | 179         | Increase in mitigation goal from 30% to 40% against the BAU scenario in 2030.  | Yes, by 2050.     |
| <b>Bolivia</b>   | October 2016              | April 2022                            | N/A  | N/A         | NDC does not include emissions reduction target  | No                |
| <b>Paraguay</b>  | October 2016              | July 2021                             | 92.287   | 82.036      | Maintained the same level of mitigation ambition, with a 10% unconditional greenhouse gasses (GHG) reduction target, and increased by 10% the conditional GHG reduction target by 2030 compared to the business as usual scenario.   | No                |
| <b>Ecuador</b>   | March 2019                | N/A                                   | 67.7   | 60.8        | Emissions reduction potential within the Energy, Agriculture, Industrial Processes and Waste sectors of 9% (unconditional scenario) and 11.9% (conditional scenario) compared to the 2025 baseline, aiming at a reduction of 20.9% if the conditional scenario is fulfilled. | No                |
| <b>Chile</b>     | February 2017             | April 2020                            | 95 (excluding the forestry sector, which experiences negative emissions) | N/A         | Absolute target of 95 MtCO <sub>2</sub> e unconditional reduction by 2030 (excluding the forestry sector) and committed to peak emissions in 2025.   | Yes, by 2050.     |
| <b>Guatemala</b> | January 2017              | May 2022                              | 64.99  | 56.6        | Commitment to reduce projected emissions by 11.2% by 2030 and up to 22.6% with international support.  | No.               |



# 04 Areas for collaboration between the EU and LAC

**EU green integration model and LAC countries' overall climate ambition, combined with a pre-existent clean energy matrix and the availability of critical minerals provide the basis for an effective collaboration between the two regions. The complementarity and like-mindedness between both regions create the possibility of developing a common agenda.**

Both regions can benefit from a climate partnership. However, understanding differences in initial conditions and in the desired speed of the transition is fundamental. In addition, LAC has many developmental needs as it is lagging in terms of a number of SDGs, notably poverty reduction and food security. Despite this, there are few doubts that the profound transformational nature of the European policy choices could match well the large resource base and renewable energy potential available in Latin America and the Caribbean. The partnership should go beyond LACs role as a raw material provider for the EU. Unless LAC is better inserted in Global Value Chains (GVC) the partnership will reproduce a model that had resulted in low total factor productivity growth. In other words, a partnership should aim at facilitating economic convergence in per-capita income with advanced economies.

Both regions can gain from increasing trade relations (LAC's share in European trade is less than 5%, according to EEAS, 2022), This is clearly shown by the pro-active efforts Europe has developed to modernize existing trade agreements – in particular with Chile and Mexico – and ratify other associations – in particular with Mercosur (EEAS, 2022, Nolte, 2023).



# Electrification of transport

One of the key points of this agenda is the electrification of transportation for both regions. Under the Fit-for-55 plan in Europe, the increase in the production of EVs and the manufacturing of their batteries (including different steps in their value chain) are part of the supply-side policies covered by the Green Deal Industrial Plan (European Commission, 2023d), which encompasses the Net Zero Industry Act and the Critical Minerals Act, on the top of eased rules on state aid and other policy tools.

While Europe is stepping up a profound transition of its automotive sector to EVs and batteries – including through measures supporting domestic manufacturing, Latin America has started considering actions that also facilitate this transition. On the demand side, best practices are strongly focused on highly utilized vehicles, those for which the better energy efficiency of EVs can deliver net savings in terms of total cost of ownership. Chile and Colombia have the second largest fleet of electric buses after China (ICCT, 2022). LAC is also a growing market for automobiles and other road vehicles (e.g., two-wheelers).

A number of countries in Latin America (Brazil, Mexico, Argentina and Colombia) have internal combustion engine (ICE) vehicle manufacturing plants (OICA, 2022) that, as the market share of EVs will increase (thanks to gains in cost competitiveness), risk having diminishing asset values. To reverse this trend and seize opportunities from



a technology transition that is being strongly and effectively pursued by all major global economies (including the United States and China, and not only the European Union), LAC needs to find opportunities to leapfrog towards EVs, both in terms of technology adoption and participation to the value chain. As some of the existing plants in LAC are owned by European car manufacturers, the adoption of policies stimulating an EV transition in LAC could help (thanks to reductions in the risk profile of the necessary investments) ensuring that their conversion for EV production becomes an element of a climate partnership.

In the case of LAC cities, the electrification of public transport can have a greater impact on emissions reduction. The EU's Global Gateway may be a relevant instrument to help facilitate capital investments to do such a transition, as one of the goals of this EU strategy is to explore the potential for joint investments in e-mobility and increasing safe and sustainable air connectivity (European Commission, 2023e). ■

**ON THE DEMAND SIDE, BEST PRACTICES ARE STRONGLY FOCUSED ON HIGHLY UTILIZED VEHICLES, THOSE FOR WHICH THE BETTER ENERGY EFFICIENCY OF EVS CAN DELIVER NET SAVINGS IN TERMS OF TOTAL COST OF OWNERSHIP.**

# Green Hydrogen

**SINCE LAC COUNTRIES HAVE A HIGHER PERCENTAGE OF RENEWABLE SOURCES IN THEIR ENERGY MATRICES, THEY ARE IN A GOOD POSITION TO BE EARLY DEVELOPERS OF GREEN HYDROGEN.**

One renewable energy source both regions have been considering as a low-carbon alternative to fossil fuels is green hydrogen. This technology is based on the generation of hydrogen through electrolysis - using renewable electricity to separate the hydrogen from oxygen in water. Electrolysis is commercially available and green hydrogen is expected to generate a rapid uptake in markets where hydrogen demand already exists, provided CO<sub>2</sub> is adequately priced (WEF, 2021). While there is global ambition to develop this technology, costs of production remain high due to high electricity use, which are expected to be lowered with solar and wind energy.

Under Fit-for-55, the EU has placed a greater focus on the so-called “renewable fuels of non-biological origin”, or RNFBOs which include green hydrogen. Likewise, a few LAC countries (Chile, Colombia, Uruguay, Costa Rica, Trinidad and Tobago, and Panama) have developed strategies for the production, utilization and export of these fuels. Chile and Colombia are already updating their strategies. Paraguay and Argentina have laid out initial hydrogen roadmaps, while Bolivia,

Brazil, Ecuador, and Peru are in the process of developing their strategies (IDB, 2023).

Since LAC countries have a higher percentage of renewable sources in their energy matrices, they are in a good position to be early developers of green hydrogen. A reduction in the cost of electricity will reinforce this advantage. High solar radiation rates and relatively steady climate conditions around the year reduces intermittency, which may allow for electricity prices to fall. In fact, Latin America has the potential to increase its utility-scale solar and wind power capacity by more than 460% by 2030 if all 319 gigawatts (GW) of prospective new projects in the region come online (GEM, 2023), with Brazil, Chile, Colombia, Peru, and Mexico having the highest prospective utility-scale solar and wind capacity additions. In the recent EU-CELAC meeting, the EU already pledged €2 billion to support Brazil's production of green hydrogen and to promote energy efficiency (European Commission, 2023f).

As such, renewable hydrogen and RNFBOs<sup>10</sup> are a significant area for collaboration between both

10. The New Agenda for Relations between the EU and Latin America and the Caribbean mentions explicitly the production of renewable hydrogen in Chile, Argentina, Uruguay European Commission, 2023g).



regions due to Europe's intention to become a leading producer of solid oxide electrolyzers (in a market that is still small).<sup>11</sup> This would provide opportunities for LAC countries to also become part of this value chain, as well as providing the EU with a reliable supply of ammonia and products that use renewable hydrogen and RFNBOs. LAC should seize specific opportunities to become part of the EU 'Hydrogen Supply Corridors.'<sup>12</sup> Doing so would likely require a focus on the market for hydrogen derivatives, such as ammonia, as the volumes of trade for long distance transport of hydrogen are

likely constrained to pipeline transport (Kneebone and Piebalgs, 2023). Latin America can become a market for European electrolyzer production, while at the same time seizing opportunities for low-cost domestic production of renewable energy-intensive finished (and semi-finished) products. This trade pattern would offer advantages for its domestic industry and other low-carbon energy carriers.<sup>13</sup> This is especially relevant for products that can directly be affected by carbon border adjustment mechanisms (such as fertilizers, chemicals and low-carbon forms of virgin steel).<sup>14</sup> ■

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**AS SUCH, RENEWABLE HYDROGEN AND RFNBOs ARE A SIGNIFICANT AREA FOR COLLABORATION BETWEEN BOTH REGIONS DUE TO EUROPE'S INTENTION TO BECOME A LEADING PRODUCER OF SOLID OXIDE ELECTROLYZERS.**

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11. The EU is directing significant efforts to reduce the cost gap between renewable hydrogen and fossil fuels. For example, the European Commission is currently supporting major renewable projects – including two Important Projects of Common European Interest (IPCEIs), and setting targets to produce (10 Mt) and import (10 Mt) renewable hydrogen by 2030 (European Commission, 2023h). The European Commission also aims to accelerate electrolyzer manufacturing via its Electrolyser Partnership platform and the Net Zero Industry Act. Europe filed 28% of all international hydrogen patent families in 2011-2020 (IEA, 2023c), and, in order to continue to remain competitive in this area of innovation, the European Commission has also increased hydrogen R&D funding via REPowerEU (Clean Hydrogen Partnership, 2022). More ambitious renewable energy targets have been set which indirectly benefit hydrogen development, and clarity has been provided on additionality rules for RFNBOs.

12. Most likely via RFNBOs, for reasons related with cost and technical feasibility limitations of hydrogen transport (limited volumetric energy density in particular), despite greater energy losses for RFNBO production (Cazzola et al., 2023).

13. Arbache and Estevez (2023) consider that the abundance of low-cost low-carbon energy will become a driver industrial location globally (a process they call "powershoring" in contrast to offshoring, reshoring, nearshoring or friendshoring). In their view, the combination of resilience and efficiency of clean energy in LAC will attract export-oriented industrial plants into LAC. However, the needs in terms of investment, technology and innovation can actually offset the energy advantages, making the insertion of the region in global value chains a contingent outcome.

14. Despite investment risks due to unclear prospects for a scale up in demand (in the absence of policies orienting demand in that direction) and also due to a likely increase in focus on increased efficiency in the way these products are utilized, if their production cost will increase with a reduction in carbon intensity.

# Exports of Liquefied Natural Gas (LNG)

While infrastructure for the generation of renewable electricity sources requires future investments to be deployed in a scalable manner, existing technologies for the production of Liquefied Natural Gas (LNG) are both scalable and necessary to deal with LAC's energy poverty. As long as upstream methane emissions are effectively managed, LNG use produces roughly 40% less carbon dioxide than coal and 30% less than oil, on a life cycle basis. Its market value is also generally lower than oil, per unit of energy. On this basis, LNG can assure a cost-effective way to ensure access to reliable and less carbon intensive energy. Its relevance is limited to the near term as renewable technologies become more affordable and widespread.

Given Europe's interest in securing an adequate and reliable LNG supply, especially in the near term, Latin American and Caribbean (LAC) can play a strategic role. Peru and Trinidad and Tobago engage in LNG exports, and other countries could become LNG exporters throughout this decade. Although LNG imports have been increasing (68.7% in 2021), largely propelled by Brazil and Argentina (IGU, 2022), the region (led by these two countries but also Mexico and Venezuela) could develop LNG projects with an export potential.

Increased production of fertilizers is another possibility in countries that have natural gas reserves. If investments are made to ensure that upstream methane emission are effectively minimized and gas-based hydrogen is effectively produced with low-emission pathways (Romano et al. 2022), this has the potential to remain a viable option also in the longer term.

Only 10% of the EU's gas needs are currently met by domestic production, with imports done by pipeline or via LNG. Pipeline gas imports have been dominated by Russia in the past years (around 40% of all pipeline imports). However, following the Russian invasion of Ukraine in February 2022, EU imports of LNG have increased over the past year (European Commission, 2023i). EU's LNG imports rose to 130 bcm in 2022 from 80 bcm in 2021 (IEA, 2023).<sup>15</sup> LNG imports will remain a key source of energy for Europe, especially in the near term; securing additional production in LAC would help reaffirm the EU-LAC partnership. ■

**AS LNG PRODUCES 40% LESS CARBON DIOXIDE THAN COAL AND 30% LESS THAN OIL, IT ASSURES A COST-EFFECTIVE WAY TO ENSURE ACCESS TO RELIABLE ENERGY IN THE SHORT TERM.**

15. Between January and September 2022, the largest LNG exporters to the EU were the United States (44%), Russia (17%) and Qatar (13%). [https://energy.ec.europa.eu/topics/oil-gas-and-coal/liquefied-natural-gas\\_en](https://energy.ec.europa.eu/topics/oil-gas-and-coal/liquefied-natural-gas_en)





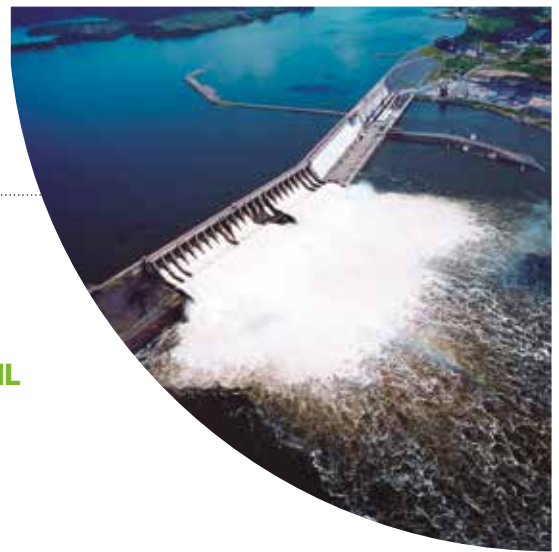
# LAC-EU's Potential for other Renewables

Several LAC countries rank highly in terms of solar photovoltaic (World Bank, 2020) and offshore wind electricity potential (World Bank, 2019). Emblematic examples of significant wind and solar deployment include Chile and Uruguay, followed by Brazil (Ember, 2023a). These developments are consolidating LAC's electricity generation mix as having the largest share of renewables in the world – 61% in 2021 (OECD/ECLAC/ European Commission/CAF, 2022). In the case of Paraguay, Ecuador, Colombia, Costa Rica, more than 70% of electricity is generated from hydro. The hydroelectricity share in Peru and Brazil also exceeds 50% (Ember, 2023b).

Possibilities of cooperation are related to the opportunity for LAC to access European clean energy technologies, and especially long-term capital, but also with investment in the production of a range of goods with a low carbon footprint. This should facilitate both a process of re-industrialization and environmental benefits. The New Agenda for Relations between the EU and Latin America and the

Caribbean, the EU's Global Gateway, meant to be a facilitator of a stronger and modernized strategic partnership between the EU and LAC countries, can be an important vehicle for investments to ensure secure supply of affordable and clean energy (European Commission, 2023g). One relevant area of collaboration is wind electricity. This could imply Europe having a significant presence in the global industry value chain, as it still imports many of the raw materials for generators, especially from China (European Union, 2022). With Latin America having significant growth potential in terms of new capacity to be installed (especially in the Southern Cone), mineral availability, and domestic production of wind turbine components, both regions could gain a higher share of the production and deployment of these technologies. Additionally, grid-related infrastructure investments could also be bolstered. ■

**IN THE CASE OF PARAGUAY, ECUADOR, COLOMBIA, COSTA RICA, MORE THAN 70% OF ELECTRICITY IS GENERATED FROM HYDRO. THE HYDROELECTRICITY SHARE IN PERU AND BRAZIL ALSO EXCEEDS 50%.**





# Access to Long-term Financing for LAC countries

According to the IEA, reducing financing costs by 2 percentage points would bring down the investment needed to reach net zero emissions in emerging and developing economies by a cumulative USD 16 trillion over the period to 2050 (IEA, 2022). The long-term financing required to establish ambitious climate policies in LAC can be supported by the EU through with a range of mechanisms, including:



- The European Fund for Sustainable Development (EFSD+) will deploy up to €135 billion in a variety of Global Gateway sectors to reduce risks for private investors (European Commission, 2023j). Financial institutions will make program requests to the European Commission to guarantee support for their loan and equity portfolios (European Commission, 2023j). Access to European investors engaging in LAC projects is a way to finance climate action without increasing the debt burden of LAC countries.

- The Green Economy Financing Facility program (GEFF) developed by the European Bank for Reconstruction and Development (EBRD) and the Green Climate Fund have provided US\$ 175.5 million to local financial institutions to on-lend to the private sector for investments in climate change mitigation and adaptation projects in Egypt (EBRD, 2023a). This could be an example followed in LAC countries. Another option is the Green Value Chain credit line program, which incentivizes private sector Small and Medium Enterprises to invest in advanced technologies and climate solutions with free technological assistance and a grant component of up to 10% after completion of a project, and laxer repayment schedule and grace period (EBRD, 2023b). In LAC, the EBRD could also provide similar loans to banks that are then on-lent to small and medium businesses, aiming to create long-term incentives to support green innovation and sustainable growth in the region. Given LAC's emissions matrix and green agenda, developing sustainable agriculture practices, as well as providing R&D for green technologies could help shift the pattern of dependency on the export of raw materials. These projects could complement bigger scale projects that have been already pledged by Global Gateway, granting long term financing strategies for smaller and medium businesses focused on region-specific opportunities.

On a different front, EU influence on Multilateral Development Banks (MDB) should be leveraged. MDBs require additional capital to support the provision of Global Public Goods. Recent action from the US government should be emulated by European capitals. ■



# Joint efforts to reduce deforestation

The 2022 landmark Kunming–Montreal global biodiversity framework provides another front for collaboration to maintain, enhance or restore the sustainability of ecosystems, increase the area of natural ecosystems by 2050; halt human-induced extinction of known threatened species; preserve genetic diversity; ensure that biodiversity is sustainably used and managed. Securing financial resources, capacity-building, technical and scientific cooperation, should help in closing a biodiversity finance gap of USD 700 billion/year (UN CBD, 2022).

The European Commission proposed in 2022 the Nature Restoration Law with binding restoration targets for specific

habitats and species in the EU's land and sea (European Commission, 2023k). The law sets out legally-binding targets for biodiversity-rich areas, pollinating insects and different ecosystems, with measures that should cover at least 20% of the EU's land and sea by 2030, and all ecosystems in need of restoration by 2050.

The EU Nature Restoration Law adds to a range of regulatory and non-regulatory actions to deal with the challenges of deforestation and forest degradation, outlined in a Communication on Stepping up EU Action to Protect and Restore the World's Forests (European Commission, 2019). This sets priorities for EU action:

- The reduction of the EU consumption footprint on land and lower support for products from deforestation. New EU requirements for operators and traders of products reliant on cattle, cocoa, coffee, oil palm, rubber, soya and wood (European Commission, 2023l). These products are of great relevance in LAC's export basket.
- Investments to be developed in partnership with producing countries to reduce pressures on forests and to 'deforest-proof' EU development cooperation.
- Strengthened international cooperation to halt deforestation and forest degradation and encourage forest restoration. These include the integration of Trade and Sustainable Development chapters in trade agreements, with the obligation for all parties to effectively implement multilateral environmental agreements, in particular the Paris Agreement and the Kunming–Montreal framework.
- The redirection of finance to support more sustainable land-use practices, by supporting producing countries in designing and implementing policies and instruments that can encourage better land and forest governance. This can also leverage recent developments of emission reduction verification standards, favoring a jurisdictional rather than project-level approach.

The commitment of the EU to progress with respect to both the Paris Agreement and the Kunming-Montreal framework is also aligned with the adoption of binding sustainability criteria in the Renewable Energy Directive. Even before its recent update, the Directive already included rules to minimize the risk of deforestation: an overall cap on biofuels produced from food and feed and biofuels from feedstocks with high indirect land use change risks, unless they are certified to be low-risk (European Commission, 2018).

The pro-active European and international developments regarding the protection, restoration and improved land management (including forests) not only have large mitigation potential for greenhouse gas emission and biodiversity loss, but they may also become both a development and an economic opportunity in Latin America. A key signal, adding to the EU intention to redirect finance to support more sustainable land-use practices, comes from the pledge to increase the level of financial resources to implement national biodiversity strategies and action plans, by 2030, mobilizing at least 200 billion USD/year, contained in the Kunming-Montreal framework.

This is particularly relevant in countries with jurisdiction over tropical forests, such as the Amazon rainforest, El Chaco and the Maya biosphere in South and Central America. Leveraging

opportunities from sustainable forest management and nature restoration practices is also crucial in a context where sustainability criteria regarding bioenergy production are being tightened.

A vehicle for common progress for the EU and LAC is related to compliance and voluntary markets for carbon credits. Recent estimates range between USD 5 and 50 billion in 2030 for markets where more than half of the credits are supplied by nature-based solutions and avoided nature loss – including deforestation (McKinsey, 2021).

Greater cooperation between Latin America and the European Union regarding sustainable forest management could be another effort. LAC countries need to develop the various components of a complex value chain that requires labor training, technological developments and access to long term capital. The EU is certainly very well placed to support the supply of transparent carbon credits. Effectively addressing remaining pitfalls in carbon and

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**A VEHICLE FOR COMMON PROGRESS FOR THE EU AND LAC IS RELATED TO COMPLIANCE AND VOLUNTARY MARKETS FOR CARBON CREDIT MARKETS.**





biodiversity credits markets regarding monitoring and verification, additionality, permanence, and leakage will be a key prerequisite for progress. The same applies to the avoidance of double counting.

Putting in place the right institutions and policies required to benefit from opportunities from carbon- and/or biodiversity-linked forest management credits and/or financial products will not be easy. To create a liquid, deep and transparent market for these products, LAC countries need to develop the various components of a complex value chain. Sector-specific skills, technological developments and access to long-term capital are all essential. Supporting LAC countries to be prepared for the acceleration

of international action regarding sustainable forest management is likely to be a priority for the EU, to gain buy-in from LAC countries on the implementation of the Paris Agreement and the Kunming-Montreal framework.

The EU's Global Gateway, and in particular the Amazon Basin Team Europe Initiative, specifically meant to prevent deforestation, but still to be detailed (European Commission, 2023m), could be a relevant vehicle of implementation of supportive actions.

Building on recommendations by Steele et al., 2023, priority actions having the capacity to achieve progress in the protection of LAC's rainforests and biodiversity, and to promote sustainable value chains include:

**TO CREATE A LIQUID, DEEP AND TRANSPARENT MARKET FOR THESE PRODUCTS, LAC COUNTRIES NEED TO DEVELOP THE VARIOUS COMPONENTS OF A COMPLEX VALUE CHAIN.**

- The development and scaling up of innovative nature finance, including biodiversity-positive carbon credits and nature certificates, following pilot and testing experiences in LAC countries.
- Support by the EU for the identification and inventory of suitable areas to develop and scale-up biodiversity-positive carbon credit programs, also leveraging the establishment of the EU-LAC Observatory on Deforestation, forest degradation, changes in the world's forest cover and associated drivers.
- The adoption of policies, incentives and institutional frameworks to foster demand for credits in the EU, including by increasing positive impacts of business and financial institutions on biodiversity and reducing their biodiversity-related risks.
- The establishment of a solid governance and stakeholder engagement framework in LAC countries, including indigenous people and local communities, private sector, philanthropies, and multilateral and bilateral financing partners, to enable the development of the various components of a complex value chain.



- The provision of labor training, technological developments and access to long term capital by the EU.

- The development of joint efforts, by LAC and EU countries, to achieve international convergence of measurement, verification and accounting methodologies.

- Improved efficiency of measurement, verification, and enforcement mechanisms for credits, with a focus on simple, cost-effective and scientifically robust measures for carbon and biodiversity. Adopting an inclusive approach for local communities to ensure that rules and requirements for quantifying and reporting biodiversity and carbon benefits are understood and followed.

- The equitable sharing of benefits with indigenous people and local communities in LAC countries, necessary also to continue ongoing stewardship of vital reserves of carbon and biodiversity. The agreed share of revenues from credit schemes should enhance the autonomy of local communities.

- The use of part of the revenues from new value chains in LAC countries to minimize or reverse risks of negative externalities, such as population displacement, increases in food prices, the erosion of biodiversity, and the transformation of agriculture/livestock activities into land-intensive carbon- and biodiversity-focused projects. ■



# 05 Areas of Tension Between LAC and EU



Progress in articulating a common climate agenda beneficial for both regions may face some challenges. Two potential areas of tension include agreeing on carbon pricing and, relatedly, the speed of the energy and agriculture transitions. The EU's Carbon Border Adjustment Mechanism (CBAM) and LAC's proposed Debt-for-Climate swaps could cause some disagreement, but should be part of an open dialogue.



# CBAM and its potential impacts on trade and energy affordability in LAC

**THE SIGNIFICANT GAP REFLECTS THE EARLY STAGE OF CLIMATE POLICY IN MANY EMERGING ECONOMIES, AS WELL AS THEIR STRONGER FOCUS ON OTHER DEVELOPMENT GOALS.**

Progress through bilateral and sub-regional trade negotiations has been slow. Sorting out a way forward to unlock the potential partnership between both regions will require a revamping of trade negotiations. One contentious issue for LAC is the EU's Carbon Border Adjustment Mechanism (CBAM). An agreement regarding carbon pricing and CBAM rules –reflecting the ability to pay— can be the cornerstone of global action on this front. Yet, a coordinated response requires considering the different stages that LAC and EU face both not just in terms of development, but also in climate policy in general, and carbon pricing in particular.

The decrease in the supply of emission allowances due to growing ambition of European climate regulations has resulted in higher carbon prices. Updates to the Market Stability Reserve's parameters have further restricted the quantity of available emission allowances. Recent spikes in gas prices prompted a shift towards more carbon-intensive coal-fired power with carbon emission permits now trading within the range of €80 to 100/t. This stands in stark contrast to the €20-30/t range observed during 2019-2020 and the earlier range of €5-10/t (Trading economics, 2023).

In LAC, in contrast, carbon prices (mostly in the form of carbon taxes rather than ETS) do not exceed USD 5/t (World Bank, 2023), and even in the few countries where they are in

place they sometimes coexist with fossil fuel subsidies so that the net effect of taxation is uncertain. The significant gap reflects the early stage of climate policy in many emerging economies, as well as their stronger focus on other development goals (such as increased energy access and affordability).

Given the abysmal carbon pricing gap between LAC and the European Union, there are valid arguments to consider a progressive phase-in of carbon prices. At the same time, it is clear that a key driver for CBAM is the impact that unilateral carbon pricing has on the relocation of industrial facilities. Redistributing and reinvesting carbon pricing revenues to foster innovation should also be prioritized. In Europe, the impact of the CBAM's phase-in on LAC's exports should be considered. Another option – likely requiring a political agreement – could also be a transitional phase characterized by the application of EU-equivalent carbon prices in LAC countries, initially focusing this on products exported to the EU, and then progressively expanding in scope. This could help keep carbon pricing revenues in LAC exporting countries, avoid the risks of deindustrialization due to carbon pricing, and provide a clear signal towards a progressive shift towards global carbon pricing. Other factors to consider include the extent to which CBAM will lead to LAC competitors to introduce carbon pricing (a choice that will also have impacts on competitiveness, influencing policy



decisions) and the tensions that can arise with countries that are currently exporting these same products to the LAC region.

According to the World Bank, LAC's exports to the EU covered by the CBAM represent only 0.5% of total LAC exports. The main products affected are iron and steel, in the case of Brazil and Costa Rica, and fertilizers, in the case of Chile (World Bank, 2022). In particular, exports of iron and steel from Brazil represent only 15% of Brazilian exports to EU countries (OEC, 2023a,c). Other sectors, such as cement, aluminum, electricity, and hydrogen will also be covered in the first phase of CBAM (European Commission, 2023n). Trinidad and Tobago could be particularly affected, as it is one of the highest suppliers of ammonia to the EU market (and 44% of the hydrogen demand in LAC) (IEA, 2021).

Additional pressures resulting from the adoption of domestic carbon pricing for CBAM-affected products include the possibility that other EU trade partners (that also engage in trade with LAC) could opt to follow the EU climate policy (including their own CBAM). For countries in this situation, this is largely a question of whether carbon price revenues would go to the EU or be reinvested domestically, supporting a low-carbon technological transition and managing equity related implications resulting from the cost increases (World Bank, 2023).

Importantly, if LAC does not follow Europe's CBAM it would sacrifice fiscal revenue that would be received by Europe in form of higher tariffs. This would be problematic as Europe would have more capacity to invest in the technologies to reduce emissions, experiencing continued reductions in renewable energy costs. Perhaps more relevantly, lack of convergence on the importance of carbon prices would generate major obstacles in building a working coalition between the EU and LAC countries.

Further incentives to embrace carbon pricing could also come from other major drivers:

● The initiative – spearheaded by Germany in the G7 – to launch, in 2022, a “Climate Club”, intended to advance international partnerships and cooperation agreements with a view to supporting countries in their transformation (Reuters, 2022).

● Recent calls to Multilateral Development Banks (largely backed by funding from advanced economies) to boost their investing capacity to build a socially, environmentally and economically sustainable path forward (G20, 2022), having a concrete potential to significantly increase development aid funding for investments that are aligned with the achievement of the SDGs, including but not limited to climate change mitigation.

LAC needs to take gradual but significant steps in the direction of reducing energy subsidies and adopting carbon pricing. Products initially covered by CBAM are a good start, as they mainly affect business-to-business exchanges and have limited impacts on end-use product prices, even if attention will need to be paid to potential losses of competitiveness for trade with other global regions. Fiscal revenues raised from carbon pricing can be used to invest locally in the promotion of innovation and the management of disproportionate risks for vulnerable groups. ■



# Speed of Agriculture, Forestry and Other Land Use (AFOLU) emissions' reduction

Another potential area of tension may arise given the mismatch between the pace of the green transition in agriculture in both regions. A progressive agricultural transition in LAC is needed, due to the following reasons:



- The high transition and physical risks, also underline the importance to ensure that LAC countries can effectively scale up their capacity to urgently engage in an agricultural transition. Enhancing this capacity is an area of possible expansion of the scope of the EU Global Gateway, along the lines of what is starting with the Amazon Basin Team Europe Initiative in the case of deforestation.

- A sudden disruption in agricultural production would imply severe risks for the livelihoods of small and mid-sized farmers. This is particularly important, since LAC is the world's largest net food-exporting region, yet many food producers lack adequate irrigation systems, access to arable land, and face extremely high rural poverty

rates. Disruptions in the livelihoods of smallholders in agriculture would also jeopardize food security for the poorest sectors of the rural and urban population. Likewise, any major disruptions in the LAC food system (from input price spikes to health crises) have major implications for the global food system (IFPRI, 2021).

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## LATIN AMERICAN AND CARIBBEAN COUNTRIES TEND TO FACE HIGHER AGRICULTURAL DEPENDENCE AND/ OR LAND-USE RELIANCE.

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● Latin American and Caribbean countries tend to face higher agricultural dependence and/ or land-use reliance. Agriculturally dependent nations face high transition risks due to the substantial contribution of agriculture to their economies and the need to lower sectoral emissions. Their vulnerability includes exposure to physical climate risks stemming from

shifts in weather patterns that can impact agricultural output. Additionally, changing consumer preferences favoring low greenhouse gas (GHG) footprint can have a negative effect on LAC's agricultural exports. The same applies to countries heavily reliant on land-intensive activities that face risks tied to their significant dependence on natural capital and land-based sectors, like extensive cattle raising and forestry.

The dependence on land-use and agricultural production not only implies higher transition risks, but also higher physical risks due to climate disruptions. Cooperation efforts to reduce emissions related to the Agriculture, Forestry and Other Land Use (AFOLU) should focus on investments to improve crop yield, assure a more effective use of the land, and thus reduce the necessity of expanding agricultural frontiers, and implementing more sustainable and efficient livestock management practices. ■



# Debt-for-climate swaps vs. other support mechanisms

There is significant interest in exploring ways to engage in debt-for-climate swaps to effectively support climate action. Recent examples, in Barbados, Belize, Ecuador have received significant attention, with some governments in LAC proposing a taskforce to analyze the potential of this mechanism to be scaled-up.

Recent analysis from the International Monetary Fund (IMF) has reached the following conclusions:

## 1.

Debt-for-climate swaps are valuable when the primary limitation to climate investment is the absence of fiscal space. In cases where standard climate finance options like green loans or bonds would lead to unsustainable debt levels, transfers become essential for promoting climate investments.

## 2.

Debt-for-climate swaps are generally less efficient forms of fiscal support compared to options like conditional grants and broad debt restructuring. The latter mechanisms tend to better ensure that transferred resources directly contribute to climate investment or debt reduction, rather than benefiting other creditors.

**EACH PARTICULAR COUNTRY INTERESTED IN USING SWAPS HAS TO ANSWER TWO KEY QUESTIONS: WHAT THE NET BENEFITS OF THESE INSTRUMENTS ARE AND ARE SWAPS MORE EFFICIENT THAN OTHER INSTRUMENTS.**



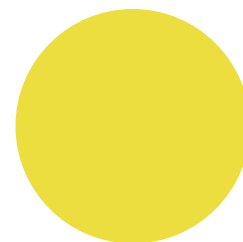
However, some studies have raised questions on the limited fiscal space they create, the additionality of the funding, high transaction costs, cross-subsidization of non-participating creditors, and the complexity and opacity of the transactions. All these issues need to be taken into consideration if these instruments were to be scaled-up in the region. Each particular country interested in using swaps has to answer two key questions: what the net benefits of these instruments are and whether swaps are more efficient than other instruments.

It is important to underscore that although public debt increased during the pandemic, LAC demonstrated resilience against rising debt stress, inflation, and uncertainties stemming from global events. Income and employment largely recovered, and markets display cautious optimism about

the region's near future (World Bank, 2023). The region as a whole cannot be characterized as debt-distressed, in comparison with some low-income countries that have higher Debt-to-GDP ratios and are facing a strong negative terms of trade shock.

Even in the cases of low-income countries without fiscal space, such as Afghanistan, Chad, Sudan, Zimbabwe, as well as climate-vulnerable island economies in the Pacific, debt-climate swaps are not the most effective instruments to finance the climate transition (direct fiscal transfers being more effective). If the EU is considering scaling debt-for-climate swaps, LAC would not be the region with the highest priority for their implementation and alternative instruments need to be identified. ■

**ALL THESE ISSUES NEED TO BE TAKEN INTO CONSIDERATION IF THESE INSTRUMENTS WERE TO BE SCALED-UP IN THE REGION.**





# Conclusions



This note has highlighted asymmetries, potential areas of collaboration, and potential areas of tension between Europe and Latin America and the Caribbean in the context of climate action. The suggested areas for action are rooted in a shared agenda to decarbonization and the protection of biodiversity, in a partnership guided by democratic values, multilateralism, and free trade.

Choosing to embrace an ambitious climate and sustainability agenda has a real potential to unlock win-win opportunities, contributing to economic diversification, scaling up investment and enabling the emergence of resilient supply chains. A common thread in the specific proposals is Europe's role as provider of capital for LAC. Lowering the current cost of capital for LAC countries is indispensable to advance in the various fronts. This is in line with an expansion of European-backed MDBs presence in Latin America.

To bridge the gaps to combat climate change on a global scale, multilateralism needs to be at the center. For example, targeting deforestation would be a cost-effective way to rapidly reduce global greenhouse emissions and preserve biodiversity. The EU's commitment to the reduction of deforestation can allow LAC countries with extensive tropical forests to implement affordable, scalable, and traceable policies to reduce forestry and land-related emissions.

The opportunities for a mutually beneficial agenda should go beyond LACs role as a raw material provider for the EU. Capital investments in the region can generate economic and social benefits for both regions, while ensuring energy security and sovereignty. This agenda should be developed through transparency in carbon markets, a real commitment to preserve biodiversity, and an acknowledgment of the developmental challenges that LAC still faces, which should be properly addressed as the green agenda rapidly consolidates among both blocs. ■



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