Policy Brief on Mainstreaming Environment & Climate Change – Basis for Reforms Towards a Green Transition

How can environmental and climate policies contribute to the green economic transition in Latin America and the Caribbean (LAC)?

Key highlights

- Latin America and the Caribbean (LAC) is the second most disaster-prone region in the world. Between 1970-2022, around 18% of climate-related extreme weather events registered worldwide occurred in LAC[1]. Climate events are already impacting ecosystems and biodiversity, food and water security, human health and poverty, as well as urban areas, agricultural productivity, hydrological regimes and coastal livelihoods. Nearly half the population is assumed to be highly or extremely vulnerable to risks of climate-related impacts, making climate change adaptation a key and urgent priority for LAC governments.
- The region's main economic activities are dependent on natural resources use and processing. Emissions from agriculture, land use change and forestry are a major challenge, followed by those from transport. Despite important hydropower and other renewable energy deployment, energy supply in LAC is still dominated by fossil fuels. The LAC region contributed approximately 7% of global greenhouse gas emissions (GHGs) in 2019.[2] Further climate change mitigation efforts for reducing GHG emissions are necessary in the region.
- For a green transition, LAC governments should focus on introducing more ambitious and effective policies by integrating climate considerations into sectoral policies. Measuring progress and effectiveness of policy implementation and informing the public and decision-makers, developing indicators and collecting reliable and comparable data and information on the environment and sustainable developments are urgently needed. Securing public funding and strengthening domestic enabling conditions to attract finance and investment need to be enhanced to assist reaching net-zero targets and addressing climate change.

What's the issue?

Addressing environmental and climate vulnerabilities in LAC requires sectoral integration.

LAC is a region where economic development and social wellbeing are closely linked to the natural environment and the quality of the ecosystem services it provides. The region has a diverse economy, but mainly based on activities that use and process natural resources, such as agriculture, mining, forestry, and related industries. However, water scarcity water, biodiversity loss, or impacts of climate change generate significant vulnerabilities and challenges within the region, which affect agriculture, tourism, forestry, fisheries, as well as the energy production and industrial development. Climate change and its impacts, notably floods, droughts, sea-level rise and storms, are expected to increase in frequency and severity, with adverse socio-economic consequences on populations.

The LAC region has been showing signs of decoupling of GHG emissions from economic growth. However, some sectors, namely energy and transport, continue to rely heavily on fossil fuels. Limited use of carbon pricing, such as environment-related taxes, and slow phasing out of fossil fuel subsidies, are delaying LAC countries' progress in meeting their net-zero targets. Not sufficiently tackling environmental deterioration and climate change will eventually have a direct effect on the region's economy. Therefore, advancing an innovative, green, sustainable and inclusive transition is imperative.

[1] OECD (2023), The Environment at a Glance in Latin America and the Caribbean: Spotlight on Climate Change https://doi.org/10.1787/2431bd6c-en
[2] Excluding land use change and forestry.

Many LAC countries have introduced and implemented policies and measures in their effort to meet national objectives and also comply with their international commitments. However, very often these efforts are not well co-ordinated, aligned, nor coherent to achieve economic, environmental and social goals. Horizontal policies, such as technological innovation and sustainable financing, are weak or non-existent. Moreover, there is often a lack of transparent data, which would be needed to allow governments to analyse recent trends, as well as challenges and opportunities.

Relevant case studies from LAC countries [3]

The path towards a net-zero economy in Costa Rica

Costa Rica is committed to achieving net zero by 2050. Its National Decarbonisation Plan (NDP) 2018-2050 is among the few long-term decarbonisation strategies released by LAC countries, together with those of Chile, Colombia, Guatemala, Mexico and Uruguay. The NDP lays out the strategy and actions to decarbonise the economy, articulated into ten main axes and eight transversal strategies, including policy and institutional reforms (e.g., a green fiscal reform). At the heart of the NDP are Costa Rica's significant potential for renewable electricity generation and the carbon sequestration capacity of the country's extensive forest resources.

The NDP covers all sectors of the economy and all GHGs. Some key actions and targets are expected to deliver the largest emission abatement. These include the electrification of public and private vehicle fleet; increased reliance on public transport; electric trains for freight and passengers, especially in the Greater Metropolitan Area around the capital San José; upgraded electricity transmission and distribution systems to support electrification of the economy; improved energy efficiency and shifting to electricity use in buildings and industry; increased waste recycling and composting; completed sanitation and sewer system coverage; improved farming practices to reduce emissions from agriculture and husbandry; maintenance and increase of forest coverage. A reduced pace of afforestation and reforestation could severely undermine the achievement of climate mitigation targets.

The NDP implementation is divided into three phases to measure the achievement of intermediate targets: 2019-22, 2023-30 and 2031-50. Costa Rica met most of its intermediate targets for the initial phase, but implementation of actions related to transport and waste was lagging. To reach carbon neutrality by 2050, Costa Rica should address planning, regulatory and political economy barriers. There is a need to improve co-ordination of mitigation actions between the central government and the municipalities, which share responsibilities over the large emitting sectors of transport and waste management. The administrative and financial capacity of municipalities should be strengthened. Securing the necessary public funding and mobilising private finance towards low-carbon investment will be crucial for the transition to a net-zero economy. Achieving the NDP targets would require massive investments, estimated at USD 37 billion in 2020-50, and generate more than USD 40 billion in net benefits. These benefits include lower air pollution, reduced imports of fossil fuels and enhanced biodiversity, which is the pillar of Costa Rica's buoyant tourism sector.

Enabling bioenergy financing and investing in Colombia [4]

CEFIM has been closely working with Colombia considering its leading role on climate action and its commitment to reduce emissions relative to 2014 by 51% by 2030. The 2022 report Enabling Conditions for Bioenergy Finance and Investment in Colombia supports efforts to achieve the country's clean energy ambitions through measures that can strengthen opportunities for bioenergy development.

[3] Source: OECD Environmental Performance Reviews: Costa Rica 2023, OECD Publishing (forthcoming)

Colombia has set important policy strategies, that note the role clean energy solutions like sustainable bioenergy can play in supporting the decarbonisation objectives. Measures on promoting bioenergy use in transport (biofuels) and for electricity and heat generation are already in place. Colombia also introduced renewable energy auctions. However, there is much unlocked potential both in further clean energy generation and in scaling-up finance and investment in the clean energy market.

The following policy proposals could help unleash the clean energy use potential in Colombia:

- Introduce targeted policy interventions to meet political ambitions to unlock this potential, which will also provide other benefits such as reduced waste to landfills, emissions mitigation and ability to supply local, reliable electricity;
- Aim for a clearer strategy for Colombia's clean energy transition, to encourage finance and investment in renewable energy solutions. This should include both long-term power sector needs and short- to medium-term opportunities for generation expansion plans; as well as streamlining the planning and approval process for power generation;
- Strengthen the regulatory framework in waste management, to improve incentives for bioenergy projects; and introduce additional regulatory signals, such as carbon pricing mechanisms and emissions trading, to drive demand for clean energy sources for industry use;
- Improve access to finance, by extending public support and development funds to de-risking tools for bioenergy projects; and using capital market instruments;
- Improve co-ordination, co-operation and capacity across all authorities that may play a role in enabling clean energy development in Colombia.

The 2023 OECD Paper on *Distributed renewable energy in Colombia: Unlocking private investment for non-interconnected zones* considers opportunities to unlock further investment in renewable electricity, building on international experiences from LAC and other regions.

Scaling up nature-based solutions to support water related climate risks in Mexico [5]

Due to its location in between the Atlantic and Pacific oceans and its complex topography, Mexico is highly exposed to different water-related hazards, many of which are fuelled or exacerbated by climate change. Urbanisation is also contributing to the vulnerability to water risks; while deforestation is leading to the deterioration of watersheds, making them more vulnerable to heavy rains and flooding.

Mexico is creating an enabling environment for nature-based solutions (NbS), to support managing water-related climate risks. It has committed and set objectives that are relevant to NbS through several international frameworks and agreements, demonstrating high-level awareness and commitment to the issue.

To further enhance the use of NbS, the following four challenges are being tackled:

- Managing the multitude of federal, regional and local actors that work on environmental issues, are highly aware of NbS and promote their use, in a co-ordinated and collaborative way. Given the multi-faceted character of NbS, their uptake could benefit from effective institutional co-ordination and collaboration. Better monitoring of regional and municipal authorities' actions at from the national actors could also bring forth local level initiatives and promote the uptake of such good practices among subnational peers. Including non-governmental stakeholders who hold local knowledge and resources also provides better implementation of NbS projects.

[4] Source: OECD (2022), Enabling Conditions for Bioenergy Finance and Investment in Colombia, Green Finance and Investment, OECD Publishing, Paris, https://doi.org/10.1787/20f760d6-en.
[5] Source: OECD (2021), Scaling up Nature-based Solutions to Tackle Water-related Climate Risks: Insights from Mexico and the United Kingdom, OECD Publishing, Paris, https://doi.org/10.1787/736638c8-en.

- Including NbS in key environmental policy documents, such as the National Water Programme and the National Strategy on Climate Change. Such an approach is shifting Mexico's management of water-related risks away from grey infrastructure. It also allows for long-term continuity of policy objectives, which is essential for NbS. Tying specific suggested actions with budgets and implementation responsibilities can further enhance this effort.

- Identifying legal and regulatory bottlenecks to the use of NbS. There are already initiatives taken to map regulatory obstacles, and to use guidelines and manuals to support actors involves in the planning and implementing stages of NbS projects. In addition, overcoming the data gap, and lack of local information and methodologies necessary for planning NbS projects; as well as the lack of technical capacity and specialized education in ecological processes for water risk management, could support a better implementation of such projects.

- Determining public funding mechanisms and sources available for NbS projects, with criteria, programmes and timelines adjusted to the characteristics of such projects. NbS usually require an influx of capital up front that can support initial NbS implementation such as planting trees, removing invasive species, etc. However, to sustain the benefits of an NbS, ongoing maintenance is needed. Making NbS eligible for infrastructure funding, which is generally multi-annual, could help. Also, ensuring the continuity of actions once the initial funding has run its course would support long-term projects. Finally, Mexico has successful examples of associating NbS benefits with private values, translating NbS benefits into direct returns for private actors who fund NbS measures, such as the tourism industry.

How can the OECD support LAC countries?

The OECD is working alongside LAC and other countries to carry out evidence-based analyse and provide guidance on environmental policies, in accordance with OECD standards and practices. More specifically:

i)The Environment at a Glance in LAC: Spotlight on climate change aims to support LAC countries in monitoring recent trends and progress, and identifying the challenges and opportunities associated with effective climate action and a green transition. Based on long-standing OECD experience in environmental data and the OECD Core Set of Environmental Indicators, the OECD Environment at a Glance Platform offers a gateway to harmonised indicators and access to available underlying data (from OECD databases and other international data sources). It provides interactive graphics and key messages on climate-related issues in the LAC region. Further work is foreseen by OECD together with its partners to fill data gaps, improve data quality, and expand the Environment at a Glance in LAC to additional themes and indicators. This will be supported with capacity development on data production and collection.

ii) The OECD Programme of Environmental Performance Reviews (EPRs) provides an evidence-based assessment of countries' progress towards greening their economies and meeting their environmental policy objectives and international commitments. Reviews promote peer learning and enhance governments' accountability. The EPRs of Brazil, Chile, Colombia, Costa Rica (forthcoming), Mexico and Peru, released between 2013 and 2023, provide targeted recommendations to help these countries improve their environmental performance and mainstream environmental considerations into economic and sectoral policies. Building on the key findings from the EPRs, the 2018 report Biodiversity Conservation and Sustainable Use in Latin America highlights the common challenges LAC countries face in managing their rich biodiversity and the strategies being used to tackle them. The 2019 OECD Green Growth Paper Towards Green Growth in Emerging Market Economies draws on the EPRs to provide insights into the effectiveness and efficiency of green growth policy frameworks and measures in selected emerging economies, including in LAC.

iii) The OECD International Programme for Action on Climate (IPAC) supports country progress towards net-zero GHG emissions and a more resilient economy by 2050. IPAC helps countries strengthen and co-ordinate their climate action, through regular monitoring, policy evaluation and feedback on results and best practices. It complements and supports the UNFCCC and the Paris Agreement monitoring frameworks.

iv) As countries increasingly prioritise climate change adaptation, the OECD offers support on assessing progress in implementing national policies, providing guidance on designing adaptation measurement frameworks, and identifying relevant adaptation indicators. It also organises peer-learning events to allow countries to share their experiences, exchange on challenges and present their achievements.

v) The Clean Energy Finance and Investment Mobilisation (CEFIM) Programme launched in 2019, has the objective to strengthen domestic enabling conditions to attract finance and investment in renewable energy, energy efficiency and decarbonisation of industry ("clean energy") in emerging economies. CEFIM activities are designed to support the specific needs of each partner country, which may include Clean Energy Finance and Investment Policy Reviews and Roadmaps, implementation support activities, investor dialogues and regional peer learning activities.

Did you know...

...the OECD, together with the International Energy Agency (IEA), host the Climate Change Expert Group (CCXG), which provides technical support to the international climate negotiations and enhance action on climate change? The CCXG brings together experts, negotiators and delegates from developed and developing countries, who exchange on issues relating to the implementation of the Paris Agreement, including developing an impactful Global Stocktake, options to operationalise Article 6 of the Paris Agreement, and on delivering a Mitigation Work Programme that is fit for purpose, among other topics.

Suggested Policy Actions

- Introduce more ambitious, effective and efficient policies to advance transition to net-zero by strengthening policy coherence at the regional, national and local levels, and policy alignment across a range of -sectors, including transport, housing, construction and agriculture as well as considering synergies between adaptation and mitigation measures. Focus on integrating climate considerations in policies and actions that prioritise poverty reduction and vulnerability.
- Take measures to fill data gaps in official data and collect reliable and comparable data and information on the environment and sustainable development by connecting and harmonising data from different sources (international, national, local) as well as develop indicators that can serve to better design policies and assess their progress.
- Scale up public funding at the national and local level, and mobilise private finance towards low-carbon investments, as well as develop capacities to strengthen the policy implementation and the project preparation.

Further Reading

Ensuring Environmental Sustainability in LAC (OECD LACRP website)

Environment at a Glance – OECD Indicators

OECD Environmental Performance Reviews

OECD International Programme for Action on Climate (IPAC)

OECD work on climate resilience

OECD Clean Energy Finance and Investment Mobilisation (CEFIM) Programme

OECD – IEA Climate Change Expert Group (CCXG)

OECD work on Biodiversity, water and natural resource management