Accelerating climate action in Latin America

Messages from the sessions of the EUROCLIMA+ Pavilion at COP26 in Glasgow

EUROCLIMA+ Thematic Study Series

22

compendium

European Commission
Directorate-General of International Partnerships
Rue de la Loi 41 – B-1049 Bruselas
Telefax: + 32 (0)2 299 64 07
Email: europeaid-euroclima@ec.europa.eu / info@euroclimaplus.org

Internet
http://ec.europa.eu/europeaid/index_es.html

The Thematic Study is available on the Internet at:
http://ec.europa.eu/europeaid/multimedia/publications/
http://euroclima.org/es

Compendium

Accelerating climate action in Latin America

Messages from the sessions at the EUROCLIMA+ Pavilion at COP26 in Glasgow

EUROCLIMA+ Thematic Study Series

22

Euroclima+

Funded by the European Union

Credits

The Thematic Studies series is funded by the European Union, within the framework of the European Commission's EUROCLIMA+ programme. The views expressed in this study are those of the authors and do not necessarily reflect those of the European Commission. Neither the European Commission nor persons acting on its behalf are responsible for any use that may be made of the information provided below.

Writers of the Thematic Study:
- Mariana Castaño Cano
- Laura Betancur Alarcón
- Guillermo Dascal

Design:
Alexandra Cortes

Layout:
Francesc Vaquer Gregori

Photographs:
EUROCLIMA+

Quote:
European Commission, Directorate-General for International Partnerships Castaño Cano, M., Betancur Alarcón, L., Dascal, G., *Accelerating climate action in Latin America. Messages from the EUROCLIMA+ Pavilion sessions at COP26 in Glasgow*, (EUROCLIMA+ Thematic Study Series no. 22), EUROCLIMA+ Programme, Brussels, 2022.

EN PDF ISBN: 978-92-76-53662-8 ISSN: 2363-2585 doi: 10.2841/585593 MN-AL-22-006-EN-N

Brussels, Belgium, 2022

www.euroclimaplus.org

Table of contents:

Acronyms and Abbreviations IV

Summary VI

Foreword I: Jolita Butkeviciene, Director for Latin America and the Caribbean in the Directorate-General for International Cooperation and Development of the European Commission VIII

Foreword II: Mario Cimoli, Acting Executive Secretary of ECLAC X

1. Ambition for mitigation and adaptation 1

1.1 Status of Nationally Determined Contributions (NDCs) and long-term strategies 1

1.2 Multi-level coordination: instruments from local to international level 5

1.3 Transition in the energy sector 7

1.4 Development, green recovery and public health 8

2. Climate finance and the role of the private sector 15

2.1 Challenges and opportunities for climate finance 15

2.2 Private sector alignment 17

2.3 Carbon pricing instruments 20

3. Cities: epicentre of climate innovation 27

3.1. From planning to action: prioritising and financing climate action 27

3.2. In urban planning, as in health, planning is better than cure 28

3.3. Contributing to mitigation from multilevel governance 29

3.4. Investing in adaptation, safeguarding development 31

3.5. Transport and mobility: cities at the forefront of action 33

4. Biodiversity and food: nature-based solutions **41**

4.1 The Potential of Nature-Based Solutions in Latin America 41

4.2 Integration of biodiversity into climate action 44

4.3 Mobilising finance for NBS 46

4.4 Transformation of agri-food systems 47

5. Just transition and participation **55**

5.1 Empowerment and climate justice 55

5.2 Women, indigenous and rural communities in public policies 56

5.3 Information, knowledge and education 61

5.4 Parliamentary action 63

6. Impact and legacy of the EU-LAC partnership on the road to Glasgow **69**

Conclusions **73**

Annex I. Full programme 75

Annex II. In figures: EUROCLIMA+ Pavilion statistics at COP26 78

Country index **79**

Index by instruments **80**


REC
#EUROCLIMAPLUS
STD

Acronyms and abbreviations

ACE	Action for Climate Empowerment
AFOLU	Agriculture, Forestry and Other Land Use
AMPB	Mesoamerican Forest Peoples' Alliance
CABEI	Central American Bank for Economic Integration
CCAD	Central American Commission for Environment and Development
CoP	Community of Practice
COP	Conference of the Parties to the United Nations Framework Convention on Climate Change
CREO Antofagasta	Short form of the organisation "Yo CREO en Antofagasta" (I BELIEVE in Antofagasta)
CVTAS	Severe Atmospheric Weather Virtual Centre
DG CLIMA	European Commission's Directorate-General for Climate Action
DG DEVCO	Directorate General for International Cooperation and Development of the European Commission
DG REGION	Department of Regional and Urban Policy
EbA	Ecosystem-based Adaptation
ECLAC	Economic Commission for Latin America and the Caribbean
EF	Expertise France
EU	European Union
FIIAPP	International and Ibero-American Foundation for Public Administration and Policy (FIPAP)
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
ICCO	Interchurch Organisation for Development Cooperation (OICD)
IDB	Inter-American Development Bank
IISD	International Institute for Sustainable Development
ILO	International Labour Organisation
IPPC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
IURC	International Urban and Regional Cooperation
LAC	Latin America and the Caribbean

LCBA	Low Carbon Business Action
LEDS LAC	Regional Platform in Latin America and the Caribbean to advance LEDs in the region
LEDs	Low-Emission Development Strategy
LTS / LT-LEDS	Long-term low greenhouse gas emission development strategies
NBS	Nature-Based Solutions
NDCs	Nationally Determined Contributions
NGO	Non-Governmental Organisation
OPCC	Parliamentary Climate Change and Just Transition Observatory
OPIAC	National Organisation of the Indigenous Peoples of the Colombian Amazon
PPICC	Indigenous Peoples' Platform to address Climate Change
RIOCC	Ibero-American Network of Climate Change Offices
SDG	Sustainable Development Goals
SICA	Central American Integration System
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UNEP	United Nations Environment Programme (also UN Environment)
UNFCCC	United Nations Framework Convention on Climate Change, also referred to as UN Climate Change
WRI	World Resources Institute

Summary

From 1 to 12 November 2021, the EUROCLIMA+ Pavilion at COP26 in Glasgow was once again the "House of Latin America" at the United Nations Climate Change Conference. Almost two years had passed since the first edition of the Pavilion, at COP25, a Latin American COP held in Madrid under the presidency of Chile that, unexpectedly, due to the pandemic, lasted two years instead of one.

At COP26, ministers, congressmen and women, mayors, experts, indigenous peoples and local community leaders, activists and young people from across the region participated in person or virtually in the many events at the Pavilion, sharing experiences of climate action in the region.

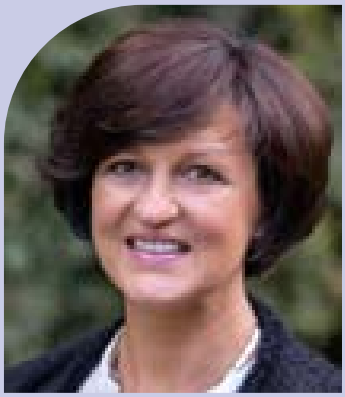
In total, 44 events were held, of which 37 were hybrid and 7 fully online. 335 experts participated as speakers, representing some 250 organisations from 42 different countries, mainly from Latin America and the Caribbean, but also from Europe, Asia and Africa.

Although, for health safety reasons, the capacity for hosting public in person at the pavilion was very limited, hundreds of people connected live to the sessions and thousands more watched them afterwards.

The sessions and exchanges were extremely rich and delved into the most pertinent climate issues. For this study, we again listened carefully to the speakers and extracted analyses, recommendations and statements on the state of climate action in Latin America. Below, we summarise them in six chapters on (1) the ambition of climate plans, (2) climate finance, (3) cities as the epicentre of action, (4) biodiversity and food, (5) participation at all levels and from all sectors of society, and (6) the centrality of climate partnership to achieve the goals of the Paris Agreement together.

Each chapter concludes with a series of key messages as a summary, as well as a selection of some of the cases presented in the sessions. Due to lack of space, the study does not mention each of the 300+ participants or all of the many examples of successful experiences presented.

In order to invite you to delve deeper into the discussions beyond the confines of this study, each time a specialist is quoted, a link is provided to the website where you can explore the contents and rewatch the video of the session.



Foreword I

Jolita Butkeviciene

Director for Latin America and the Caribbean
at the Directorate-General for Cooperation and
Development of the European Commission

Our planet, and particularly Latin America and the Caribbean, are simultaneously facing major challenges that require global, concerted responses. In addition to climate change and the COVID-19 pandemic, we now have the war in Ukraine, the consequences of which are first and foremost human, but also social and economic, with a major impact on energy, food and climate security. The urgent need to build resilient societies urges us to work more decisively towards decarbonisation.

The war in Europe also reminds us of the importance of working towards twinning between peoples. Indeed, it is the European principles and values of twinning and cooperation for peace, security and the well-being of people and planet that provide impetus in our work every day.
When COP26 took place in Glasgow, we in the European Union were concerned about pushing for enhanced ambition, focusing our efforts on moving from words to action. We developed the Green Deal, proposed post-pandemic green recovery processes and promoted partnerships with other countries that also want to be carbon-neutral by 2050.

As we did at COP25 in Madrid, we built the EUROCLIMA+ Pavilion in Glasgow, with the institutional support of ECLAC, to once again set up the "House of Latin America" at COP26, as a meeting and dialogue place between representatives of countries and organisations of the region and those of the European Union.

Despite the challenge of organising a COP during the pandemic, the Pavilion hosted face-to-face meetings with strategic partners to foster mutual collaboration. A total of 44 side events were organised in a hybrid format to encourage joint reflection, with the presence of a broad and balanced participation by different countries and also different types of organisations, ranging from governments to development banks, from cooperation agencies to NGOs, from companies to research bodies.

A total of 335 speakers and 249 organisations from 42 countries took part. A total of 40 high-level speakers, ranging from ministers to parliamentarians, governors and heads of European and UN institutions, gave presentations. Hundreds of visitors came to the Pavilion in person, while more than 12,000 people followed the events online.

In this publication, you will find the discussions that took place there, highlighting the main messages, conclusions and recommendations that were put forward. We invite readers to browse through these pages that reflect the exchanges that emerged from the 44 events that took place.

Looking to the immediate future, we believe that now more than ever we must accelerate the pace

of collaboration in the face of the health, socio-economic and security challenges that we are facing together. In this framework, we will strive to ensure that, at COP27, the countries and organisations of Latin America and the Caribbean will once again take their place in Sharm-El-Sheikh, where it will be possible to meet, exchange and move forward together to achieve ever-greater ambitions that will allow us to achieve a better future.

Jolita Butkeviciene

Foreword II

Mario Cimoli

Acting Executive Secretary of Economic Commission for Latin America and the Caribbean (ECLAC).

Transformative and progressive structural change in Latin America and the Caribbean requires an articulated set of policies that we at ECLAC have termed a Big Push for Sustainability. This transformation requires the coordination of technological and industrial, fiscal, financial, environmental, social and regulatory policies, as well as the participation of the public sector, the private sector, citizens and academia. Its aim should be to establish a new incentive structure in favour of sustainable investment, the generation of higher productivity jobs and the development of production chains for the markets of the future.

Climate action seeks compliance with the Paris Agreement to limit warming below 2°C and to maintain it at around 1.5°C above pre-industrial levels, thereby reducing damage to our natural heritage and the provision of essential ecosystem services. At the same time, climate action translates into the launch of a new phase of industrialisation with activities aiming at sustainability, carbon neutrality and respect for the integrity of ecosystems. This is a huge and urgent challenge; the actions needed to achieve climate neutrality entail drastic changes in our investment, production and consumption patterns. More sustainable development means more equality and social cohesion, with a matrix of high quality public services and an orientation for private consumption that will be consistent with the new paradigm. In this regard, the challenge of climate change forms part of the challenge of achieving more sustainable development. The transition process involves significant challenges, especially in the case of highly indebted countries with economic structures that are heavily dependent on fossil fuels, as is the case of some in the region. However, the transition towards decarbonisation also opens up opportunities in different sectors that can be at the heart of policies promoting the big push for sustainability and the circular economy, such as non-conventional renewable energies, sustainable mobility, the bioeconomy, the care economy and nature-based solutions, among others.

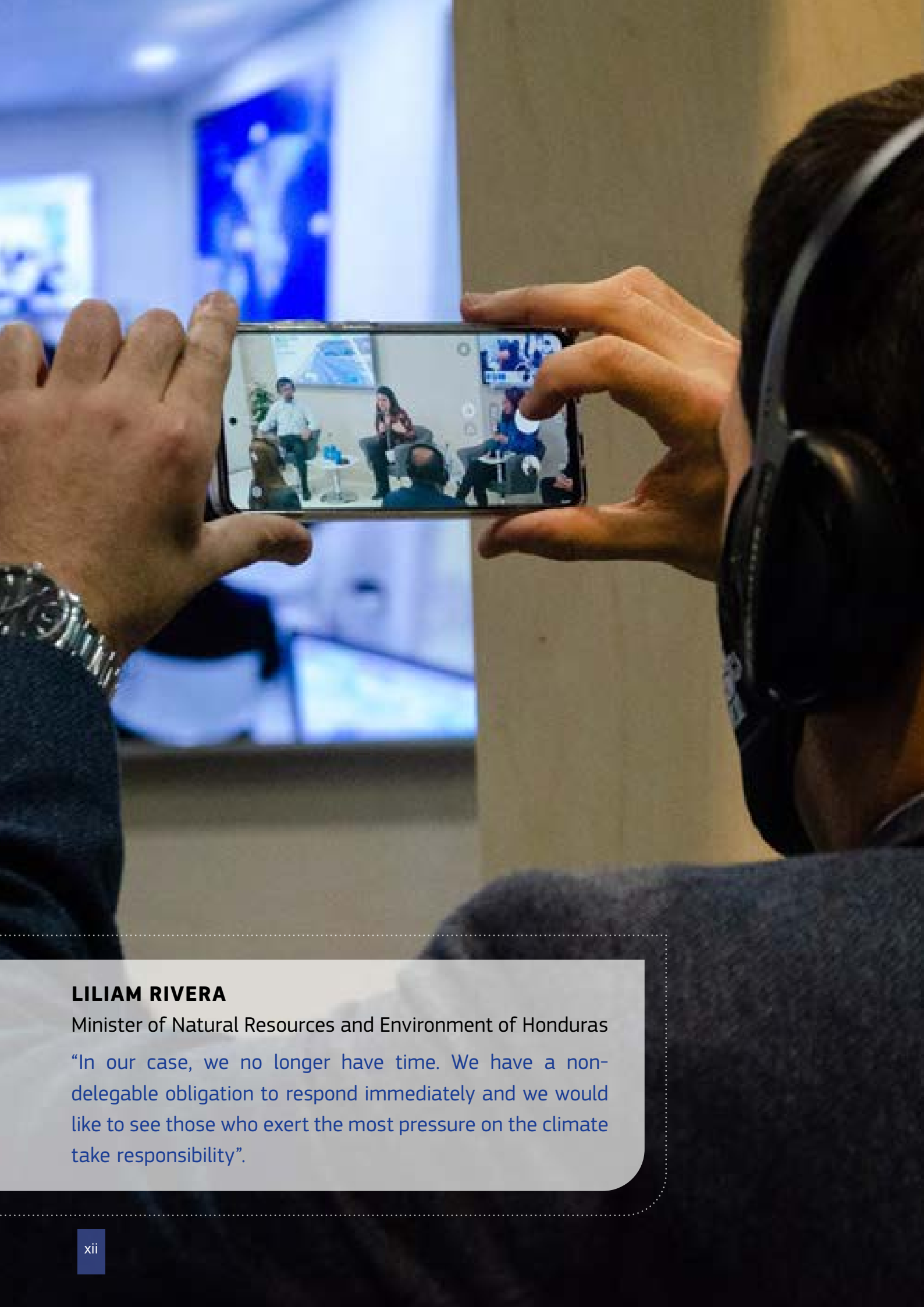
As expected, climate finance was the main topic of discussion at COP26, with the legitimate demand that the annual finance commitment of US$100 billion be met as a matter of urgency until 2025, highlighting the importance of transparency in its implementation. At ECLAC we would like to highlight the major financial commitment and the urgent institutional reform of the multilateral debt architecture needed to improve co-responsibility in the sovereign debt market, with special emphasis on Caribbean countries. We also propose a shift in regional capital markets in order to align them with the objectives of the Paris Agreement in order to properly manage climate-related financial risks and seize the opportunities offered by the green transition. The need to strike a balance between mitigation and adaptation in terms of their financing is a crucial element for achieving the goals set at the last climate summit.

One of the main achievements of COP26 is the finalisation of the rules for the implementation of the Paris Agreement. In terms of implementation, for example, countries are called upon to perform their reporting with greater transparency. On this issue, ECLAC presented the NDC-LAC platform and launched the "Parliamentary Observatory on Climate Change and Just Transition", both tools that, in partnership with other organisations, we make available to countries to address the climate emergency.

Finally, issues of collaboration and partnerships were also central, considering the various calls for the implementation of the Glasgow work programme on Action for Climate Empowerment, on Human Rights, Gender Equality and Women's Empowerment. In this regard, ECLAC, committed at all times to the principle of inclusiveness, participated in different events related to the Escazú Agreement and the rights of indigenous women in the region.

ECLAC was honoured to co-host the EUROCLIMA+ pavilion at COP26, which served as the home base of Latin America and the Caribbean during the days of the summit in Glasgow. In this sense, ECLAC confirms its commitment to our Euroclima+ partners to intensify our efforts in the future. This book is of great importance as regards keeping the content from the EUROCLIMA+ Pavilion at COP26 fresh in our memory, in order to tackle the climate crisis we are undergoing and to make our way through this epochal change with the smallest possible footprint.

Mario Cimoli



LILIAM RIVERA

Minister of Natural Resources and Environment of Honduras

"In our case, we no longer have time. We have a non-delegable obligation to respond immediately and we would like to see those who exert the most pressure on the climate take responsibility".

1. Ambition for mitigation and adaptation

A week before the start of COP26, UN Climate Change (UNFCCC) published a worrying report indicating that the Nationally Determined Contributions (NDCs) received to date had fallen far short of the levels of ambition needed to meet the Paris Agreement targets. In fulfilling their obligation as signatories to the agreement, most Latin American and Caribbean countries had updated their NDCs by COP26, and although these updates increased the level of ambition for climate change mitigation and adaptation, much remains to be done to reach the levels of ambition needed to limit the increase in global average temperature to 1.5°C this century and avoid the worst impacts of climate change.

EUROCLIMA+, BOOSTING CLIMATE AMBITION

Encouraging greater ambition in both climate mitigation and adaptation in Latin America is a priority for EUROCLIMA+. Through its Plans and Policies action line, the programme works together with its partner countries to bring about institutional and policy changes designed to facilitate the implementation of commitments agreed under the UNFCCC and the Paris Agreement, including the revision of the NDCs and long-term strategies. EUROCLIMA+ has also facilitated the setting up of numerous Communities of Practice to foster knowledge exchange on NDCs and has created an Exchange Space on long-term strategies. Learn about the actions that EUROCLIMA+ is carrying out to boost climate ambition.

1.1 Status of nationally determined contributions and long-term strategies

Within the framework of the Paris Agreement, Nationally Determined Contributions (NDCs) and Long Term Strategies (LTSs) are two planning instruments that act as roadmaps for countries to reduce greenhouse gas (GHG) emissions causing the climate crisis and to adapt to its effects.

From 2 to 12 November 2021, the EUROCLIMA+ Pavilion at COP26 in Glasgow hosted several events addressing the level of ambition of the NDCs and the need to close implementation gaps, i.e. how to move quickly from plans to concrete actions.

ECLAC's contribution was very useful, shedding light on the state of the region's NDCs in an event that provided quantitative and qualitative data. The Director of the Sustainable Development and Human Settlements Division of the organisation, Joseluis Samaniego, released key data from the latest monitoring and analysis report on the level of ambition of the NDCs. According to the report, the 17 updates presented between 2020 and 2021 improve the level of ambition by 9% compared to previous versions. With this improvement, the region's NDCs put themselves two percentage points ahead of the average level of NDCs ambition globally.

From left to right, Pablo Rojas, Carolina Urmeneta, Ligia Castro, Natalie Pareja, Sara Covaleda and Javier Mendoza

On the other hand, the type of targets included in the NDCs is evolving from reflecting percentage emission reductions to a trajectory of absolute reductions, in terms of tonnes of GHGs, which facilitates monitoring and favours greater impact of climate action. In this regard, the experiences of Chile and Costa Rica, which have started to use carbon budgets in their public policy planning, are noteworthy.

In addition to a strengthening of the adaptation component, ECLAC has detected that countries are improving their NDCs in terms of clarity, transparency and understanding of climate policy information, thus following the guidelines established by the UNFCCC. Another piece of good news at the EUROCLIMA+ Pavilion is that while, until 2020, 26 countries made their GHG emission reductions conditional on financial or technology transfers from abroad, this figure has now dropped to 21. "This tells us that there is greater autonomy in the region in making decisions that entail technical progress and are less subject to international transfers," Samaniego explained.

However, the trajectory and speed of decarbonisation predicted by the NDCs are not sufficient to meet the commitments of the Paris Agreement, requiring, in Samaniego's words, "a structural change" in policies. ECLAC estimates that under an inertial or business-as-usual scenario, the region would emit 3.7 gigatonnes of CO2 per year by 2030, while to meet the goal of limiting warming to 1.5°C, only 1.7 gigatonnes would have to be emitted. ECLAC recommends a 4 to 5-fold increase in the current rate of decarbonisation to an annual emissions reduction of 7.3% in order to achieve the goal of limiting the global average temperature increase to 1.5°C.

The necessary acceleration of decarbonisation will only be possible if structural changes are made, mainly through a redistribution of financial flows towards the green economy. In this regard, the ECLAC expert regrets that the opportunity of the post-pandemic recovery plans to redirect investments towards the green economy has not been seized.

"Green investments are undoubtedly growing very significantly, but if we do the net accounting, we see that the green part is still very much in the minority compared to the part committed to fossil fuels. There has to be work with the ministries that are making implicit environmental decisions, such as Public Works, Agriculture, Infrastructure and Finance, to align the ambition that we are reflecting in the NDCs with what is actually happening on the investment side".

Joseluis Samaniego

Sivia Brugger, representative of GIZ, one of the EUROCLIMA+ implementing agencies, stressed the need to promote the transformation of the development model. This transformation, she said, requires long-term visions and innovative interdisciplinary approaches and requires comprehensive information on sectoral climate policies in energy, transport, agriculture and buildings, among others.

Precisely monitoring and evaluating the implementation of the region's NDCs while maintaining an overview is the objective of the NDC LAC digital tool, presented during an event at the EUROCLIMA+ Pavilion. The tool is a joint initiative of LEDS LAC, EUROCLIMA+, the Inter-American Development Bank (IDB), the United Nations Development Programme (UNDP), the Economic Commission for Latin America and the Caribbean (ECLAC), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Avina Foundation.

NDC LAC is very useful not only for identifying trends and implementation gaps but also for making emissions projections and assessing the extent to which countries in the region are moving towards or away from the Paris Agreement targets.

In addition to the NDCs, the Pavilion put the focus on long-term climate strategies with rich exchanges mainly promoted by the EUROCLIMA+ implementing agencies. These events served to share experiences, bridge knowledge and capacity gaps, and foster collaboration to increase the level of ambition of the strategies.

Horst Pilger, Head of Sector in the European Commission's International Partnerships Directorate, reiterated the commitment by EUROCLIMA+ to the region in this regard, in the belief that "long-term strategies represent a great opportunity to lay the foundations for transformative development in the countries".

At the close of this report (in April 2022), six countries in the region have submitted their long-term strategies to the UNFCCC: Costa Rica, Chile, Colombia, Guatemala, Mexico and Uruguay.

Carolina Urmeneta, Head of Chile's Climate Change Office, highlighted the multi-ministerial work carried out by the Chilean presidency of COP25 for the drafting of the long-term national strategy, in parallel with the drafting of the draft law on climate change. At the time of COP26, the bill had passed its first parliamentary procedure and as of today (April 2022), the law has already been approved by Congress, making Chile the first country in the region to set by law the goal of carbon neutrality by 2050.

Javier Mendoza, the person responsible for the drawing up of Colombia's long-term strategy, took an in-depth look at the challenges of planning for the 2050 horizon within short political cycles and institutional inertias. In addition to these inherent difficulties, the COVID-19 pandemic disrupted the important consultation process, which had to be reorganised in a virtual format. The Colombian official highlighted the support of Expertise France, within the framework of EUROCLIMA+, in the search for a comprehensive and participatory approach.

"It was a great challenge to open spaces for trust-building and participatory construction with such varied groups, not only the usual ones such as the public sector but also some key players in the private sector, indigenous communities, Afro-Colombian communities, with groups of young activists who are often not included in this type of process, but who, of course, if we are talking about the future, have a lot to say".

Javier Mendoza

The different speakers agreed that the added value of having long-term strategies is not the implementation of new plans or processes, which is the responsibility of the NDCs, but that the LTS provide a vision to align planning and implementation for building neutrality and resilience to the 2050 horizon.

If the cross-cutting approach of the sectoral mitigation and adaptation policies of the NDCs is important, it is even more important that this cross-cutting and holistic approach is present in the drawing up of long-term strategies that have great potential for building sustainable societies. In this regard, Natalie Pareja, National Director of Climate Change in Uruguay, stressed the need to incorporate job creation, just transition and the gender perspective in the planning of long-term strategies.

It was particularly interesting to learn first-hand about the experience of Panama, which is already one of the only three carbon-neutral countries in the world, along with Bhutan and Suriname. Ligia Castro, Director of Climate Change, explained that her country is developing a long-term strategy with the aim of moving Panama from being carbon-neutral to carbon-negative, and is increasing efforts to reduce emissions and sequester carbon in forests, seagrasses and mangroves. In parallel, a framework law on climate change is being drafted which, among other things, provides for the creation of a special Vice-Ministry for Climate Change. In addition, systems based on standards and certifications are being created to provide incentives for sub-national governments and companies to reduce their carbon footprint.

Meeting with the Delegation of Uruguay at COP26

Honduras is another country in the process of developing its long-term strategy. Arnoldo Pineda, Climate Governance and Finance advisor, highlighted the importance that adaptation aspects are being given in this process, given that his country is one of those most exposed to the effects of climate change such as droughts and hurricanes. On the other hand, he stressed the need to incorporate youth and academia in the participatory processes of strategy development to ensure that the strategy is inclusive and has the best-informed opinions from both inside and outside the country. In this regard, he thanked EUROCLIMA+ for organising events to exchange experiences with other countries in the region and with cooperation agencies.

In terms of international support for long-term strategy development processes, multi-agency initiatives from FIIAPP, UNEP, ECLAC, EUROCLIMA+, NDC Partnership or the IDB were highlighted. These agencies and programmes are providing multidisciplinary support to different national stakeholders in order to, in the words of Cayetano Casado, Manager in NDC Partnership, "make life easier for countries to mobilise technical and financial support through multilateral and bilateral cooperation partners and international civil society organisations".

1.2 Multilevel coordination: from local to international

Vertical integration between different levels of government at national, sub-national, local and non-governmental levels, and horizontal collaboration between different countries, are essential for successful planning and implementation of the NDCs and long-term strategies. At different events it became clear with successful examples and clear results that there is a need for more multi-level governance and cooperation at all levels.

Vertical integration was precisely the central theme of an event organised by the Costa Rican Ministry of Environment and Energy with the participation of the Dominican Republic, Chile, Honduras and UNEP, EUROCLIMA+ and the International Institute for Sustainable Development (IISD). It became clear that a commitment to greater multilevel governance is a commitment to decentralisation of decision-making and a more equitable distribution of power, and that both tools also favour greater gender equality.

For multilevel governance to work, it must be mandated and planned, not random, said Daniel Morchain of IISD, who listed four success factors that any multi-level action must have: funding, institutional framework for governance, information sharing and capacity building.

Focusing on adaptation, Morchain gave compelling reasons for this multi-level integration. On the one hand, because this has been established by the international framework agreed in the Paris Agreement and the UNFCCC and, on the other, because it is only fair that it should be this way.

"Adaptation takes place in a local context, and it is therefore logical, fair and necessary that local stakeholders play a decisive role in its definition and implementation".

Daniel Morchain

It is indeed in Central America where we find some of the countries most vulnerable to climate change in the world. This is the case of Guatemala, whose Vice-Minister of Environment and Natural Resources, Fredy Antonio Chiroy, explained how they are applying a multi-level approach to adaptation policies.

Guatemala is inclusively designing 22 departmental adaptation plans, one per department, to take into account local needs. This imperative to adapt policies to the realities on the ground goes beyond local boundaries and even national borders. Thus, the country, with EUROCLIMA+ support, has launched two binational climate projects: one with Honduras to promote the Cuyamel/Omoa-Punta de Manabique Sustainable Biological Corridor in an area of very high ecological value, and another with Panama in the Maya-q'eqchi' and Garífuna regions to strengthen

indigenous sustainable food production systems and build resilience to climate impacts.

Promoting and supporting local and national actions to increase resilience in Central America is one of the focuses of EUROCLIMA+ and one of the lines of this work is developed in collaboration with the organisations of the Central American Integration System, SICA. As a result of this collaboration, projects for Capacity Building for Flood and Drought Disaster Risk Reduction have been launched, and the Severe Atmospheric Weather Virtual Centre (CVTAS) has been created, which was presented at COP26.

Jair Urriola, Executive Secretary of the Central American Commission for Environment and Development (CCAD), underlined the special vulnerability of the region to hydro-meteorological events exacerbated by climate change, such as long periods of drought and heat waves on the one hand, and heavy rains on the other, which can mean that "in two weeks it rains as much as it should rain in a whole year," he said.

Liliam Rivera, Minister of Natural Resources and Environment of Honduras, advocated for accelerating the pace of providing resilience measures and called for the responsibility of those who are most influencing climate change.

> *"In our case, we no longer have time. We have a non-delegable obligation to respond immediately and we would like to see those who exert the most pressure on the climate take responsibility".*
>
> Liliam Rivera

Fernando López, El Salvador's Minister of Environment and Natural Resources, defended the need for continued regional cooperation to strengthen early warning systems because "we are firm believers that early warning systems have the mission to save lives (...). It is important that we continue to work on strengthening systems and the capacities of our staff. The Central American region is a region that is divided by political borders, but in terms of climate, vulnerability, culture, we are one nation".

Augusto Valderrama, Panama's Minister of Agricultural Development, reiterated his country's support by "working with governments, NGOs and financial support organisations so that our Central American region, SICA, becomes more aware every day and moves in the right direction, with the support of the friends we need for this joint struggle".

Taking country-to-country collaboration beyond the regional level, an event was held to analyse the results of support by the EU and other global cooperation actors for multi-level cooperation in Africa, Asia and Latin America. The event focused on the transport sector, one of the sectors with the greatest mitigation potential in the region as it accounts for 31% of GHGs.

Carolina Simonetti, Head Advisor at the Ministry of Transport and Telecommunications of Chile, presented the conclusions of a study on good practices and recommendations for Latin America on climate ambition in the transport sector, carried out with the support of GIZ. The study highlights the urgency of including in Latin America's long-term strategies a three-step approach: avoid, shift, enhance.

In view of the rapid urbanisation of the region and the fact that as people's purchasing power increases, their motorisation increases, thus increasing emissions and worsening air quality, rapid investment in renewable energies, electromobility and micro mobility for both public and private transport is needed. According to the study, the use of electric vehicles instead of combustion engine vehicles entails a 35% reduction in GHG emissions over their entire life cycle.

On the other hand, the need to generate opportunities for learning and exchange of experiences was highlighted, as well as the need to promote cooperation platforms and networks

to facilitate the search for technical and financial support. The event showcased examples of how international cooperation is enabling agencies and programmes such as GIZ and EUROCLIMA+ to help advance climate policy planning and implementation in countries as diverse, but with commonalities, as Kenya and Chile. Precisely, the event highlighted the benefit of sharing good practices as a first step towards their replication and scalability in other territories.

1.3 Transition in the energy sector

E73% of global greenhouse gas emissions come from energy extraction and use. The decarbonisation of the region's economies necessarily involves a transition of the energy sector and greater efficiency in the way we use energy in our production processes, transport and buildings.

In this regard, Raúl Delgado, a climate change specialist from the IDB, highlighted four areas of action for the region to achieve net-zero carbon emissions: first, that renewable energies, such as solar and wind, displace fossil fuels in electricity generation; second, massive electrification of transport, heating and cooking; third, to promote public transport and non-motorised transport such as bicycles while promoting teleworking; and fourth, to curb deforestation and restore forests and ecosystems. The expert added a fifth cross-cutting area of action to the previous ones: the imperative to advance energy efficiency in all sectors.

Experts stressed that the technology to move towards decarbonisation much faster exists with an advantageous cost-benefit ratio. Delgado highlighted the dramatic price drops in batteries and solar panels, which, for example, cost one-fifth of what they did eight years ago, with estimates that the cost will fall by 25-58% by 2030.

In this regard, Antonio Urrutia Lemus, Guatemala's Climate Change Director, stressed that his country wants to achieve an 80% renewable energy matrix by 2030.

In addition to the climate and health benefits of decarbonisation, there is also job creation, with 15 million new jobs in Latin America alone. The IDB has also calculated the economic benefits, which for a country like Costa Rica, for example, would be US$41 billion, or US$140 billion for Peru.

Fernando Andrade, UNDP regional climate change specialist, highlighted the importance of new alternative energy sources such as green hydrogen and explained how Argentina and Chile are investing in the development of this energy.

EUROCLIMA+ is cooperating with countries in the region to move towards low-emission and resilient development. In Paraguay, the European Commission programme has supported the National Directorate for Climate Change in the development of a tool for measuring the efficient use of biomass by small and medium-sized agro-industrial enterprises.

In 2019, in the framework of the EUROCLIMA+ Country Dialogues, Paraguay held a Country Roundtable on climate change where 15 priority activities were established to mitigate GHG emissions and thus achieve the objectives of its NDC. The country relies heavily on the burning of biomass for electricity, with a matrix composed of 40% biomass energy, 40% fossil fuels and 20% hydropower.

It is therefore in the national interest to make biomass a renewable energy source, with the aim of reducing emissions from its use by up to 40%. In order to promote a sustainable use of biomass, the so-called 'Biomass Energy Consumption Calculation Tool' was developed, an easy-to-use, self-diagnostic and freely accessible calculator that measures energy efficiency in the most biomass-dependent agricultural and livestock sectors such as yerba mate and grain dryers, olive oil mills, pottery factories and poultry farming.

By entering a series of data into the system, the tool tells the company how much biomass energy it is producing, what its level of energy efficiency is, how

much it is spending and whether it is cost-effective. Finally, the tool calculates how much would have to be invested to achieve greater energy efficiency and whether this investment will be profitable and how long it would take to pay for itself.

The tool, which delivers cost and emissions savings and social improvements, is aligned with the NDC and the 2050 long-term plans and the Sustainable Development Goals (SDGs). The calculator has been developed in the framework of the 'Programme for the promotion of the efficient use of biomass in SMEs in Paraguay' promoted by the Vice-Ministry of Mines and Energy (VMMyE), and the National Directorate of Climate Change of the Ministry of Environment and Sustainable Development (MADES) with the support of EUROCLIMA+.

1.4 Development, green recovery and public health

The COVID-19 pandemic led to a drop in economic activity and energy use, resulting in a reduction in GHG emissions, which, however, was only circumstantial. A rebound effect soon followed, leading to continued growth in emissions in line with pre-pandemic dynamics.

We are reminded by ECLAC that the pandemic has made it clear that a structural change in the region's growth model is needed to guarantee sustainable development within the planetary ecological limits, and to help close the three persistent gaps in the region: the economic growth gap, the inequality gap and the environmental degradation gap.

Joseluis Samaniego, director of ECLAC's Sustainable Development and Human Settlements Division, said that the region's current economic growth rate, which fluctuates between 1.2% and 2.6%, would have to be halved to be compatible with the Paris Agreement goals. However, slower growth would prevent being able to lift more people out of poverty.

The post-pandemic recovery should have focused on a green recovery, he insisted, diverting funds from the fossil fuel-based economy to investments in renewable energy, strengthening exports of advanced goods and not just raw materials, to the detriment of imports, creating value-added jobs and focusing on the care economy.

On the other hand, the Director of ECLAC's Division for Gender Affairs, Ana Güezmes warned that the pandemic has deepened the structural gender inequalities already existing in the region, with a large drop in the employment rate of women in favour of unpaid care work, and called for a transition towards a care economy.

"It is necessary to move towards a care society that coordinates care for the planet, care for people and self-care. The care economy is a dynamic sector, key to a transformative recovery, with equality and sustainability".

Ana Güezmes

But experts insist that there is still time to change course and commit to structural changes that will facilitate the achievement of the SDGs and the goals of the Paris Agreement.

The importance of integrating climate and public health policies was discussed at an event organised by the Global Climate and Health Alliance (GCHA). Marina Romanello, Director of Lancet Countdown Research, warned of "the silent killers", referring to the 20-year increase in mortality observed in the region due to heat waves, which have particularly lethal effects on the elderly and children under one year of age.

In addition to the direct effects on health, heatwaves caused the loss of 10.5 billion working hours in Latin America in 2020, because at high temperatures it is not possible to carry out agricultural or construction work, sectors that employ the most vulnerable populations. Other effects of climate change such as changes in rainfall patterns lead to an increase in vector-borne diseases such as those from mosquitoes.
But it was not only the effects of climate change on health that were discussed at the EUROCLIMA+

Pavilion, but also issues such as livestock farming and excessive meat consumption, which not only cause high levels of GHG emissions, but also lead to disease. In Brazil, there are an estimated 42,000 deaths per year and in Argentina 20,000 linked to excessive meat consumption.

There is therefore scientific evidence that investing in reducing GHG emissions will have a positive effect on the health of people and the planet. In this regard, the experts recommended including the issue of health in the NDCs.

Participant in the EUROCLIMA+ Pavilion

Guillermo Dascal, Climate Change expert at EUROCLIMA+

KEY MESSAGES

» With the latest updates submitted to UN Climate Change, the region's NDCs are improving both quantitatively, as their targets are more ambitious, and qualitatively, in terms of quality and transparency, and because the conditionality component is decreasing.

» While most countries in the region have updated their NDCs by increasing the level of ambition for mitigation and adaptation, on the whole these plans are not sufficient to curb climate change and its impacts.

» Many countries already have national policy instruments such as climate change strategies and laws in place that are aligned with international targets. An advanced cross-cutting and multi-ministerial approach and a strong participatory component are key to making these policies effective.

» For effective planning and implementation of the NDCs and LTS, greater multi-level governance and cooperation is needed at all levels of government and among all types of stakeholders.

» Reducing GHG emissions in the region requires decarbonisation and increased energy efficiency. Key action areas for decarbonisation are: transition from fossil fuels to renewables; mass electrification of transport, heating and cooking; boosting public transport, non-motorised transport and teleworking; halting deforestation and restoring forests and natural ecosystems.

» Climate change is causing serious population health problems linked to heat waves and vector-borne diseases.

» Reducing GHG emissions will have a positive effect on the health of people and the planet; and health needs to be included in the NDCs.

» Structural changes in economic models are needed to make development and improvement of the quality of life compatible with planetary limits.

SOME COUNTRY CASES PRESENTED AT COP26

COUNTRIES CITED

- Argentina
- Chile
- Colombia
- Costa Rica
- El Salvador
- Guatemala
- Honduras
- Panama
- Paraguay
- Uruguay

TOOLS CITED

- Carbon budgets
- Climate Change Act
- Multi-level governance
- Decentralisation of decision-making
- Warning systems

CENTRAL AMERICA

Cooperate in dealing with disasters

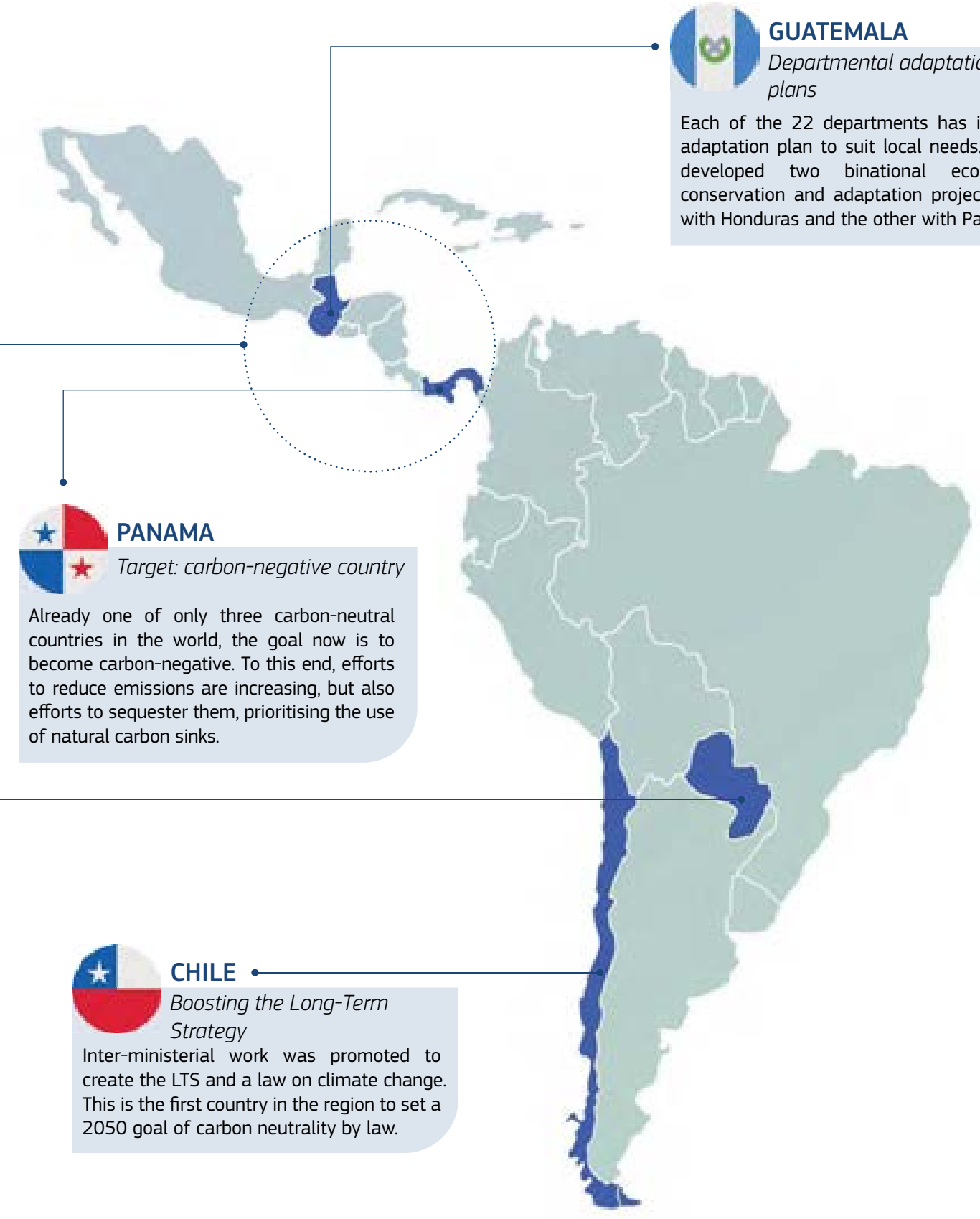
In this region particularly exposed to climate impacts, EUROCLIMA+ and SICA have launched a project for Capacity Building for Disaster Risk Reduction for Floods and Droughts and have created the Severe Atmospheric Weather Virtual Centre (CVTAS).

PARAGUAY

Sustainable use of biomass

The country is 40% dependent on burning biomass to generate electricity. To reduce GHG emissions, a tool has been developed to help major agricultural and livestock industries calculate and reduce GHG emissions, thereby reducing costs and emissions.

SOME COUNTRY CASES PRESENTED AT COP26



GUATEMALA

Departmental adaptation plans

Each of the 22 departments has its own adaptation plan to suit local needs. It has developed two binational ecosystem conservation and adaptation projects, one with Honduras and the other with Panama.

PANAMA

Target: carbon-negative country

Already one of only three carbon-neutral countries in the world, the goal now is to become carbon-negative. To this end, efforts to reduce emissions are increasing, but also efforts to sequester them, prioritising the use of natural carbon sinks.

CHILE

Boosting the Long-Term Strategy

Inter-ministerial work was promoted to create the LTS and a law on climate change. This is the first country in the region to set a 2050 goal of carbon neutrality by law.

JEFFREY SACHS

Economist

"We should not invest in new exploration and fossil fuel pipelines (...). If we want to get to zero carbon emissions in 28 years' time, let's not build fossil infrastructure that will last 50 or 60 years".

2. Climate finance and the role of the private sector

Without a redirection of public and private finance towards the green economy, Latin American countries will not be able to achieve the Paris Agreement's mitigation and adaptation goals or reach their development targets. COP26 heard about the region's progress in this area, from the development of decarbonisation roadmaps by economic sector, to the consideration of carbon budgets when planning the externalities of investments.

EUROCLIMA+ FOR CLIMATE FINANCE

Access to climate finance is a major challenge and a priority for the region. EUROCLIMA+ is facilitating the engagement of stakeholders in the financial system to strengthen climate action and undergo a sustainable, resilient and inclusive recovery strategy, and has also launched a Community of Practice on Private Sector and Climate Policy. Learn more about the climate finance initiatives that EUROCLIMA+ is currently implementing in the region.

2.1 Challenges and opportunities for climate finance

Climate finance is needed not only to reduce GHG emissions, but also to build resilience and sustainable development. The need to transform the energy matrix and meet the growing demand for clean energy in the coming decades in the region requires an increase in green investment. Although progress is being made in the right direction and more diverse sources of finance and more resources are now available, there are still challenges for green finance in Latin America, which were pointed out by several experts during COP26.

The renowned economist, Jeffrey Sachs, who opened one of the sessions on climate finance, highlighted the need for finance to i) drive the energy transition as part of the mitigation agenda, ii) respond to climate change adaptation, iii) and cover the impacts of loss and damage from disasters caused by droughts, floods and other extreme events.

Sachs insisted that, although there are now greater financial flows to renewables, there is still strong fossil fuel financing.

"We should not invest in new exploration and fossil fuel pipelines (...). If we want to get to zero carbon emissions in 28 years' time, let's not build fossil infrastructure that will last 50 or 60 years".

Jeffrey Sachs

Other experts agreed that financial resources are increasingly available, but the mechanisms to direct them to specific projects are lacking, and there is a lack of appropriate technologies and governance and institutional frameworks to give stability to these investments.

Other strategies to boost the green finance sector include the development of macroeconomic models in which such financing can be embedded and capacity building in other sectors beyond renewable energy through public-private partnerships.

"In Chile, for example, we are going to double solar and wind capacity. We are investing thousands and millions without subsidies, simply by creating a framework of stability. Investors get a return and at the same time they are reducing emissions," explained Juan Carlos Jobet Eluchans, Chile's Minister of Energy and Mining, who insisted that the mentality of investors is changing because they know about the returns that climate finance is producing.

Signals from investment banks

This change in the outlook for green finance is corroborated by the evolution of banks' investment portfolios. Elina Kamenitzer, Head of the Climate Action Division of the European Investment Bank (EIB), explained that green lending accounts for around 40% of the EIB's total lending of around €27 billion. The EIB's ambition is that, over the next five years, half of the volume of lending should be geared towards climate finance.

Looking to the future, Elisabetta Siracusa, Senior Advisor to the European Commission's Directorate-General for Financial Stability, Financial Services and Capital Markets, detailed four principles that will guide policies in the coming years: sustainable finance contributing to the transition to a digital economy; the inclusion of small and medium-sized enterprises in the green transition; resilience for the financial sector to factor the risks of climate change and biodiversity loss into its modelling, and a global perspective that brings in other international stakeholders.

Remco Fisher, from UNEP's Finance Initiative, highlighted the work that has been done since 2017 to ensure that senior bankers have a first-hand understanding of the financial risks and opportunities of climate change and to champion and mainstream green finance in their operations. For Fisher, the financial sector is rapidly increasing its interest in greater information, transparency and detail in the resilient management of climate change-related risks.

However, he warned that there is a need not only for perspectives on investment performance, but also for a regulatory element of accountability. "What it would require is for all CEOs and all financial firms to say 'I believe in a 1.5ºC future', not just for risk management, but as an existential matter and for the overall benefits it brings to society," he emphasised.

Financial risks and opportunities

As well as European institutions, Latin American multilateral banks and national and regional financial institutions should signal as regulators the needs of this sector to increase green investments. Gustavo Máñez, UNEP's regional climate change coordinator, highlighted that green investments in Latin America and the Caribbean will constitute a US$1.3 trillion market by 2030, an exceptional economic opportunity that can also create almost 30 million jobs along the way. "In other words, it is a platform to lift us out of the current economic crisis," he insisted.

One of the pending tasks in the region is to be able to mobilise these resources towards the nature sector, which is still lagging behind and is essential in the response to climate change. Nature-Based Solutions (NBS) can reduce up to one-third of GHG emissions by sequestering emissions through ecosystems such as forests, wetlands and oceans (learn more about NBS in Chapter 4 of this thematic study).

One of the critical steps to make the most of green investments is to mobilise private banks to take climate risks into account in their investments and lending, something that is still in its infancy in Latin America. Thus, a recent UNEP survey of 80 large banks in the region showed that only one-third of these banks incorporate climate risks into their strategies and operations, as is the case with some central banks and financial regulators.

According to Máñez, this short-sighted view may be due to the fact that climate impacts are not yet so

tangible and that the worst impacts on our economies are not expected to occur in the near future. This runs the risk that important players such as central banks will decide to invest with a perspective that climate change will impact too late to mitigate and adapt to its effects. However, countries such as Panama, Brazil, Mexico and Colombia are already leading a change in this direction.

> *"We are raising this awareness of climate change in financial investments, but in the nature sector we are still far behind. And let's not forget that nature can solve a third of the problem through (carbon) sequestration by natural systems".*
>
> Gustavo Máñez

For example, in Panama, the Ministry of Environment and the Ministry of Economy and Finance established a training strategy aimed at the main public entities managing investment projects for the application of a technical investment guide that facilitates the identification of climate risk and how it would affect such projects. In parallel, progress has been made in the construction of the national climate risk map. This instrument will be available to private stakeholders to facilitate the estimation of risks in their investment and infrastructure projects.

In Brazil and Mexico, financial institutions are restructuring their processes and organisational set-ups to respond to the climate crisis. The Mexico-based Grupo Financiero Banorte, for example, has created governance structures within the institution so that climate change, along with other issues such as inequality and biodiversity loss, can be addressed by its board of directors and sustainability committees. It has also set up a number of systems for measuring and verifying climate risks and has trained its staff to develop such scenarios.

In the case of Brazil, the country's second largest bank, Bradesco, is working on incorporating climate risks into its portfolios. Marcelo Pasquini, Head of Capital Management, Market Finance, Access Management and Corporate Sustainability, explained that there is an urgent need to understand what kind of information is needed and how it will relate to each type of scenario in order to communicate it to clients. "We belong to a rather large country and translating these scenarios in terms of concrete clients, concrete portfolios, is not always easy. It is often useful to work with tax experts who deal with transitional risks," he added.

Meanwhile, Colombia has sought to encourage sustainable investments through the creation of a green taxonomy. This is a classification system of economic activities and assets that contribute to the country's environmental commitments. This classification is intended to facilitate the identification of such projects and thus develop green capital markets. Ultimately, what this achieves is to leverage more effective mobilisations of private and public resources in those activities that are in line with the SDGs and the Paris Agreement.

Mariana Escobar Uribe, Coordinator of the Sustainable Finance Working Group of the Financial Superintendence of Colombia, explained that after conducting the Biennial Survey of Risks, Opportunities for Environmental and Climate Issues, it was diagnosed that a major barrier lay in understanding which projects were really green. With this in mind, work began to be coordinated between various government institutions to generate the green taxonomy based on ecological and financial criteria.

2.2 Private sector alignment

The private sector is key to increasing the climate ambition of Latin American countries. Its drive to innovate and implement technologies that enhance climate change mitigation is invaluable. This is why the EUROCLIMA+ programme promotes cross-sectoral, multi-level and multi-stakeholder coordination for companies and governments to jointly guide their actions and plans.

Although there is an significant number of companies that promote actions in favour of mitigation and adaptation to climate change, in many cases these actions are not properly aligned with the medium- and long-term goals of the countries, or there is a lack of incentives and mechanisms for the transfer of technologies and capacities between countries to strengthen the Latin American private sector. During COP26, progress towards closing these gaps was shown through decarbonisation roadmaps and platforms to facilitate trade agreements.

Decarbonisation roadmap

Generating a transition to new low-carbon economies involves convincing the private sector of the benefits of such a transition. Several initiatives in Brazil, Costa Rica, Chile and Argentina have been dedicated to this task in recent years.

In Brazil, the study "*A New Economy for a New Era: elements for building a more efficient and resilient economy in Brazil*" showed that choosing a new economic path represents greater economic and social benefits than continuing with the current model.

By comparing three growth scenarios: business as usual (BAU), new economy (adopting different low-carbon measures) and new economy+ (where agricultural production is intensified beyond BAU), the result showed that under the third scenario the economy could grow by up to US$534 billion, generating an increase of two million new jobs and restoring 12 million hectares of degraded land.

"We have a lot of pasture and arable land. Frankly, we don't need to continue cutting down trees for our economy, our agriculture, to remain competitive," explained Carolina Genin, Director of the Climate programme at the World Resources Institute (WRI), which prepared the study for Brazil.

To overcome some scepticism and resistance from the private sector, countries such as Costa Rica, Argentina and Chile are adopting sectoral decarbonisation roadmaps that translate the country's overall objectives into specific industries.

In Costa Rica, within the framework of the Carbon Neutral Country Programme, work is being done on sectoral routes that provide a baseline on the current operating conditions of companies, their sources of emissions and the current technological context, and their evolution in the medium and long term. These tools act as a dashboard to provide information and planning for decision-making, knowing the possible alternatives to reduce emissions and calculating the potential economic savings.

For example, the Costa Rican government conducted a study for the refrigeration and air conditioning sector, which allowed companies to be presented with seven different technological options out of the 16 available on the market, which are less costly and less polluting than those currently used by the same companies.

"The idea is that we can tell them exactly what this decarbonisation process should look like, but taking into consideration the business strategies in the business context," noted Laura Mora Mora, Coordinator of the Costa Rican government's Carbon Neutrality 2.0 Country Programme.

> *Decarbonisation roadmaps need to become "more a business strategy than an obligation to change because of established rules. It is easier for an entrepreneur, or a business model, to have information that demonstrates that their business can continue, evolve and grow than it is to do so in a forced and directed manner".*
>
> Laura Mora Mora

In Chile, the Sustainability and Climate Change Agency has signed 191 voluntary agreements with more than 8,600 companies committed to cleaner production, decarbonisation and compliance with the SDGs. These instruments aim to set goals and

action plans in line with national objectives, as well as fostering technology transfer and ensuring institutional continuity. These agreements also feature measurement, reporting and verification mechanisms, which creates value for companies because by measuring their progress they can also gain recognition for their climate actions.

In the case of Argentina, the Argentine Business Council for Sustainable Development (CEADS) has successfully created sectoral roadmaps for sustainable development to the 2050 horizon. One of the first sectors it worked with was the oil and gas sector. A roadmap for achieving the SDGs was drawn up, thereby establishing a strategic entry point for a much more challenging goal of decarbonisation for companies in this sector. Another notable decarbonisation experience involves the steel and cement sectors, which are high GHG emitters.

The experts from Chile, Colombia and Argentina, who presented the above cases, pointed out three recommendations to the challenges facing the implementation of decarbonisation roadmaps:

1. **Outlook for business opportunities.** In order to obtain greater commitment from the private sector, it is strategic to highlight these instruments as an attractive business opportunity and not as a constraint to their development towards 2050.

2. **Long-term institutional frameworks.** The experiences in Argentina and Costa Rica highlighted the importance of having institutional frameworks that give continuity to these exercises beyond the current administration. Decarbonisation roadmaps, being perceived as long-term strategic exercises, are better received by the private sector, which fears that they are short-term efforts brokered by political interests. This can also be achieved by putting in place financial support from the government that is not tied to the short term.

3. **Improvement in the quality of information and data management.** Both obtaining information to provide to the private sector and improving the processing of indicators for monitoring and verification of roadmaps is a challenge for these instruments to be adopted. Current regional experiences show that having clear measurements of the savings from technological change can drive business climate action.

Platform for trade agreements

Another way to promote private sector engagement and alignment with the ambitions of the Paris Agreement is the promotion of commercial technology transfer agreements. Generating such partnerships is the raison d'être of the Low Carbon Business Action (LCBA) programme promoted by the European Union and being implemented with partners in Argentina, Brazil, Chile and Colombia since 2020.

This programme consists of a business platform that promotes the generation of commercial agreements, technology and knowledge transfer between European technology SMEs and Latin American companies seeking decarbonisation or circular economy solutions. By being part of this platform, which is free of charge, Latin American companies have access to technological information and business intelligence on potential counterparts in the European Union, a task of identification that would otherwise have a deterrent cost for companies.

The LCBA has a comprehensive package of specialised technical assistance that helps to generate collaboration agreements between companies, as well as to resolve legal, financial and environmental concerns in accordance with European Union regulations. In addition, it also offers contacts with financial institutions offering credit lines in line with the project to be implemented.

In Latin America, the sectors that are mainly involved are: agriculture and forestry in the promotion

of biofuels, solid waste management, industrial processes, energy efficiency and renewable energies.

One of the cases that stood out during COP26 was the collaboration that is developing between JMB Ingeniería Ambiental, an environmental services company with 23 years of experience in Argentina, and a technology partner in Belgium, the company Haemmers. One of the challenges JMB is working on is how to bring technology transfer to remote rural areas where extractive industries are present. The project they are promoting, with the support of LCBA, focuses on waste management in the production of natural gas. For this sector, there is an urgent need to increase efficiency and at the same time comply with environmental regulations in the recovery of waste generated by oilfields.

Other notable cases include Brazil's Carbon Free Farm, a system that helps farms, especially in intensive livestock farming, to reduce methane emissions, and an initiative by the Carvajal Group in Colombia to use the bagasse left over from sugar cane production as fuel and thus reduce the use of fossil fuels. Both projects are working with LCBA to find technical partners to help them improve their processes and purchase equipment.

2.3 Carbon pricing instruments

Alongside these bridges in financing and technology transfers, decarbonisation is a task that can also be accelerated through different policy mechanisms. One way to accelerate the transition is carbon pricing, to make high-emission activities less economically attractive than low-emission activities. These carbon prices can be translated into fiscal policy in the form of taxes, raising revenue for states; or in the regulation of spending policies, for example by setting criteria for public investments.

At the event "Carbon pricing instruments, applications in Latin America and the Caribbean", different experts discussed the current landscape of these policy mechanisms in the region. Joseluis Samaniego, Director of Sustainable Development and Human Settlements at ECLAC, warned that carbon taxes in the region are at very low levels, which does little to raise revenue and has little effect on changing private sector behaviour, compared to the potential for higher taxes, as seen in other regions.

Currently, only Mexico, Argentina, Colombia and Chile apply carbon taxes. The first three are taxed on the basis of carbon emissions from fossil fuels; and the last one on the emissions actually made in economic activity. The sectors excluded from these instruments also depend on the particular cases of national economies, e.g. in Colombia coal is exempted from this tax, and in Mexico, gas.

In Colombia, the tax was implemented in 2016 and is currently priced at around US$5 per tonne. "It is a low price compared to other countries outside the region, but it responds to the Colombian situation and price formation," noted Laura Marcela Ruiz, advisor to the Technical Vice-Ministry of the Colombian Ministry of Finance and Public Credit. This tax seeks to change the behaviour of these sectors while maintaining the country's demands for economic growth and providing resources to boost action in other sectors such as forestry.

In Chile, the tax has been in place since 2017 and has raised around US$200 million annually, with a value of US$5 per tonne of CO2. One of the specific features of this instrument is that it allows the inclusion of emissions of other gases such as nitrogen oxide and sulphur. However, "the tax mainly affects thermoelectric plants, and with the current value it does not have much impact on technological replacement," explained Juan Pedro Searle, Head of the Climate Change Unit at the Chilean Ministry of Energy.

Social cost of carbon

In addition to these taxes, other countries have been making progress in creating social cost of carbon policies that not only estimate the price for current emissions, but also look at the long-term impacts of these emissions. The social cost of carbon refers to a valuation of emissions that takes into account

social costs and benefits and not just market prices. When calculated, the social cost can be incorporated into national public investment systems that help change the relative returns of investment projects, incentivising low-carbon projects. Currently, in Latin America, this is only applied in Peru and Chile.

Over the last 10 years, Chile has made progress in adopting this social cost in its National Investment System. In 2011, this price was set at US$5 per tonne, and after a major update based on different methodologies, it was set at US$32.5 as an average value in 2017. Through this mechanism, simulations of different energy, infrastructure and urban mobility projects can be carried out to see how the social cost influences the estimates of these projects.

As part of this update, they also created a web-based tool for calculating the energy efficiency of public buildings that has promoted low-emission alternatives for buildings such as police stations. In the coming years, these calculations will be expanded to include carbon black, which results from the incomplete combustion of diesel, biofuels and biomass.

In Peru, discount rates have been created to evaluate investment projects. In this case, the cost of the investment is spread over time, with a more relaxed start-up period for projects to yield the social benefits and gradually increase in value.

Another country that has been moving in this direction is Costa Rica, which hopes to have the social cost of carbon already calculated by 2022 in order to mainstream it through the National Public Investment System as a result of the work of the Ministry of Planning Francisco Tula, Director of the Public Investment Area of the Costa Rican Ministry of National Planning and Economic Policy, said that one of the most notorious challenges is to incorporate a carbon price that can be effectively implemented, and another is the training of the actors involved in the public investment cycle, from project formulators to government professionals.

Costa Rica's work is supported by EUROCLIMA+ through ECLAC as the implementing agency, in order to promote the social cost of carbon in the network of National Public Investment Systems of Latin America and the Caribbean (RedSNIP), in which, in addition to Costa Rica, Chile, Peru, Dominican Republic, Honduras, Nicaragua, Panama and Guatemala also participate. The SNIP Network was established in 2011 and enables 19 countries to exchange information for project evaluation and management and information to generate innovations on carbon instruments.

Jimy Ferrer and Joseluis Samaniego participated virtually in an event on financing

Another challenge, according to Marcos Castro, of the World Bank, is the political will to move forward with this agenda in order to introduce a high pressure signal in national economies using different instruments. The World Bank - which has a carbon price ranging from US$40 to US$80 per tonne in 2020 - has also supported efforts by countries in the region to develop domestic carbon certification schemes and national carbon neutrality programmes.

In fact, the network for the exchange of experiences and tools has been growing in recent years. For example, the Carbon Platform of the Americas is an initiative that emerged in 2017 between Chile, Colombia, Costa Rica and the jurisdictions of Quebec in Canada and California in the United States to exchange experiences between regions that already have a carbon price. At COP26, Platform members made a declaration to renew commitment to these instruments for green recovery from the pandemic, inviting countries such as Peru, Panama, Argentina, Honduras, Jamaica, Trinidad and Tobago to join.

KEY MESSAGES

» While the flow of climate finance into the region is increasing, the sources of finance need to become larger and more diverse.

» Current flows of finance to fossil fuels must be redirected towards clean energy.

» Regional banks as well as central banks still have a task ahead to better include climate risks in their economic modelling. Some banks are already beginning to train their employees and clients to include this perspective in the evaluation of their portfolios and services.

» The private sector is making progress in improving its energy efficiency processes through cooperation with European partners for technology transfer. One prominent programme is Low Carbon Business Action (LCBA), which has been promoted by the European Union since 2020.

» In Latin America, there is leadership from countries such as Chile, Colombia, Panama, Costa Rica, Mexico, Argentina and Peru in developing mechanisms to stimulate the carbon market and the flow of climate finance. These tools range from carbon taxes, the inclusion of the social cost of carbon in public investments, climate risk mapping in government investment research to technical support in the creation of decarbonisation roadmaps.

» Sectoral decarbonisation roadmaps have the potential to become long-term instruments for governments and businesses to align on national greenhouse gas emission reduction targets. Costa Rica, Chile and Argentina are leading this work in the region.

» Only two countries in the region apply the social cost of carbon (Chile and Peru), an instrument that can guide the prioritisation of low-carbon projects to be financed by public investments.

SOME COUNTRY CASES PRESENTED AT COP26

COUNTRIES CITED

- Chile
- Colombia
- Peru
- Costa Rica
- Brazil
- Argentina
- Panama

TOOLS CITED

- Investment Roadmap
- National Risk Map
- Carbon pricing
- Carbon taxation
- Social cost of carbon
- Green taxonomies
- Sectoral roadmaps
- Voluntary agreements
- Trade agreements
- Technology transfer

COSTA RICA

Sectoral roadmaps for decarbonisation

Outline sectoral actions based on technological change and government support. The government works hand in hand with companies to present them with innovative options that contribute to their long-term business strategy while meeting national mitigation and adaptation targets.

COLOMBIA

Carbon tax

Implemented in 2016 with a current price of around US$5. Its collection has contributed to strengthening other economic sectors related to the country's climate goals, such as the forestry sector.

PERU

Social cost of carbon

The government adopted a social cost of carbon as an additional criterion in the evaluation of public investment projects. With this, a signal is given to the market to promote low-carbon industrial developments.

SOME COUNTRY CASES PRESENTED AT COP26

PANAMA

National climate risk map

Helps to identify the risks faced by public investment projects. The tool provides guidance to decision-makers in different agencies on the potential impacts of climate change.

COLOMBIA

Green Taxonomy

Classification system for projects that contribute to the SDGs and the Country Agreement. This type of guidance helps to guide private sector investments in activities that actually have an impact on sustainability.

CHILE

Carbon tax

Implemented in 2017 with a current price of US$5 and has raised US$200 million annually. Its effectiveness in encouraging technological change in the industry is being evaluated.

CHILE

Voluntary cleaner production agreements

More than 191 agreements involving 8,600 companies committed to cleaner production, decarbonisation and compliance with the SDGs. These instruments are intended to set targets and action plans in line with national objectives.

MANUEL TRUJILLO

Head of International Relations, Barranquilla, Colombia

"It is very important to start mixing environmental, social and economic issues. Everything has to go hand in hand and that is a great lesson of this project. This is a model that empowers the community and invites citizens living in the community to be part of this dream of building a bio-diverse city".

3. Cities: epicentre of climate innovation

The Latin American region is one of the most urbanised regions in the world, with 81% of the population living in urban areas. While cities are major generators of productivity, innovation and opportunity in general, they are also major emitters of greenhouse gases. Cities have a great responsibility and opportunity to reduce their emissions and build resilience to climate change while improving the quality of life and the air they breathe.

EUROCLIMA+ FOR SUSTAINABLE MOBILITY

Urban mobility is one of the focus sectors for EUROCLIMA+ support to its 18 partner countries in Latin America. Of the 57 projects currently under implementation, 18 are in this area. So far, the amount earmarked for urban mobility projects amounts to €9.3 million. For the location of these projects see this map. In addition, EUROCLIMA+ collaborates with specific initiatives such as the MobiliseYourCity, SLOCAT and LEDS-LAC for knowledge management and technical exchange, and has set up a Community of Practice which allows different actors in the sector to exchange progress, teaching and lessons learnt on sustainable urban mobility.

3.1 From planning to action: how to prioritise and finance climate action

Today, cities are the largest sources of greenhouse gases and this problem will increase with the current acceleration of urban growth. By 2050, 89% of Latin America's population is expected to live in urban areas. According to UN Habitat, cities consume 78% of the world's energy and produce more than 60% of greenhouse gas emissions.

For the European Union, in line with the Green Pact guidelines, supporting cities' climate action is a priority. During an event of the Global Covenant of Mayors for Climate and Energy, Stéphanie Horel, a European Union official, reiterated the EU's commitment to the international climate agenda, highlighting the importance of supporting the leadership of Latin American cities

However, in order to support cities in this process, there are two major obstacles to action: the great heterogeneity between different cities and the difficulties in accessing climate finance.

Jorge Muñoz Wells, Mayor of the Metropolitan Municipality of Lima and representative for Latin America to the Board of the Global Covenant of Mayors for Climate and Energy, stressed that "it is crucial that financial and multilateral entities provide funding opportunities for climate initiatives and in turn, allow for the closing of the gaps between planning and implementation of climate action plans, in order to ensure a better quality of life, access to affordable housing and essential basic services for our population".

Different organisations and international cooperation initiatives are trying to help cities remove these obstacles and close the implementation gap.

Jordan Harris, Coordinator for the Americas of the Global Covenant of Mayors for Climate and Energy,

GCoM Americas, and Estefani Rondón, i, ECLAC researcher, presented the pilot project "Qualitative Analysis to Accelerate the Implementation of Climate Action Plans in Latin America and the Caribbean," which aims to accelerate the implementation of the climate action plans of the Covenant's signatory municipalities.

The project has started by analysing the climate plans of the cities of San José, Quito and Mexico City. The ultimate goal is to generate tools and methodologies to help cities prioritise mitigation and adaptation measures, and to identify and apply for sources of funding for implementation.

Thus, to analyse the action plans, a series of indicators were configured, seeking a holistic assessment that would not only focus on mitigation and adaptation actions, but would explore cross-cutting issues such as governance and citizen participation, socio-economic and environmental management indicators, and gender issues.

"Climate action plans are not the end goal, but a stepping stone for the implementation of mitigation and adaptation actions. The overall objective of this project is to support decision-making on priority actions, as well as to provide guidance on available funding options".

Estefani Rondón

Further external financial assistance and the development of market-based instruments such as those being implemented in San José are needed to bring about this transformation of cities. These are compensation mechanisms, to try to make industries and businesses see the positive benefits of climate and environmental actions.

The other major city that has participated in the GCoM pilot is Mexico City. Leticia Gutiérrez Lorandi, the City Council's Environment Secretary, stressed the importance of having a carbon budget in order to achieve the goal of climate neutrality by 2050.

Between 2018 and 2024, the city wants to plant 40 million trees, plants and shrubs, restore 85 kilometres of living rivers and reduce solid waste going to landfill by 50 per cent.

In the field of renewable energy, Mexico City will build the largest solar power plant in a city on the central supply market. On 25 hectares of roof, panels will be installed for the generation of 20 Megawatts.

In addition, the Mexican capital applies a comprehensive social perspective in climate policies with the aim of reducing inequality and gender gaps and increasing inclusion and respect for human rights. For example, 100,000 rainwater harvesting systems will be installed in vulnerable households without access to water, with a strong gender perspective. This initiative reduces inequality gaps by freeing up unpaid time that women used to carry water to their homes.

In addition to financial support, local decision-makers are demanding more help to build the capacity of municipal teams.

3.2 In urban planning, as in health, planning is better than cure

Latin American cities are experiencing "uncontrolled growth," warned the coordinator of UN Habitat Andean countries, Roi Chiti, who explained that the rate of urban land growth is disproportionate, as it is doubling or tripling the rate of population growth.

"The huge carbon footprint created by cities is largely the result of poor urban planning and design, connected to the way we manage and govern our cities. For some decades now we have seen a very accelerated growth of cities in terms of land consumption that is not justified by population growth".

Roi Chiti

This uncontrolled growth is encroaching on green areas around cities that used to act as carbon sinks, a critical natural tool for mitigating climate change.

The other major problem is the growing deficit of land-use mix or diversity. There has been an over-specialisation of land in city centres where productive opportunities and services are concentrated, as opposed to suburban residential neighbourhoods that continue to expand in disconnection with working areas.

Unplanned growth of cities leads to excessive demand for mobility. This need for mobility is met through fossil fuel transport, which contributes to climate change. The result is that transport is behind 46% of total emissions in cities.

Chiti called for urban planning that provides different land-use models to those that currently prevail, so that urban growth can be adapted to the needs of the population.

An efficient and equitable distribution of urban uses, with a mix of residential, public and private service uses, is needed to increase energy efficiency and make resource consumption more responsible.

According to the experts, this is achieved by focusing on more compact and proximity-based urban areas, i.e. services, production and leisure facilities should be closer to the place of residence in order to reduce transport-related emissions. It is necessary to optimise investment in facilities, promote local economic activities and services, and improve public transport.

3.3 Contributing to mitigation through multi-level governance

Innovating to overcome barriers to climate action is what many cities and regions in Latin America are doing. To be effective, they need to advance coordination at local and national levels and with international institutions in the design of comprehensive public climate policies.

Diego Aulestia, Head of the Human Settlements unit of ECLAC's Sustainable Development and Human Settlements Division, stressed that "cities have great difficulties in accessing financing" for operational reasons, but also because of "the need to design and implement a public policy that is comprehensive and coordinated". In this respect, Aulestia affirmed that the region needs to make great strides and that, although the situation is mixed, there are significant margins for progress, but "coordination is needed at the local and national level, and of course with institutions at the international level".

In Brazil, for example, the largest and most populous country in Latin America, with some 210 million inhabitants, "there is a need for greater integration on climate issues between municipalities in the region," he said.

For his part, Axel Grael, Mayor of Niteroi, Brazil, argued that unity can lead to greater support from financial institutions.

Augusto Acosa, Project Manager of the City Climate Finance Gap Fund of the European Investment Bank (EIB), stressed the importance of communication and listening to the needs of cities so that international development banks can act as bridges for national dialogue between central and local governments in their development support work.

> *"Local governments are not only recipients of international aid, cooperation or funding, they are actually actors of change."*
>
> Augusto Acosa

On the other hand, the need to strengthen urban-rural linkages through effective spatial planning and land use planning was stressed. The aim is to reduce territorial inequality and democratise access to services and opportunities for rural populations, thereby reducing the phenomenon of mass rural-urban migration.

Multi-level and inclusive governance of the countryside

Leonardo Orlando, Leonardo Orlando, Prefect of the Autonomous Decentralised Government of the Province of Manabí, the third most populated province in Ecuador with 1.6 million inhabitants, underlined the importance of this integration between the countryside and the city.

In just three decades, the rural population of the province has fallen from 60% to 41%. The Prefect stressed that, although the trend of rapid urbanisation is global and unstoppable, it can be mitigated "if we establish appropriate harmonious links between urban and rural areas and if economic growth is inclusive, reducing inequalities."

The Prefect spoke of the need to pay a social debt to the countryside, modernising it so that it has a greater value in terms of productivity, income generation and digital connectivity, and assured that it is necessary for cities to host more primary sector activities in order to improve food security. The Prefect highlighted the support and collaboration with multilateral organisations.

"We are working with FAO, the UN Food and Agriculture Organisation, UN Habitat, ILO, UNHCR. Now we intend to establish a closer partnership with UN Women and have an alliance with the entire United Nations system in Ecuador to turn Manabí into a territory that meets the goals and targets of the Sustainable Development Goals of the Global Agenda 2030".

Leonardo Orlando

Domingo Matías, Vice-Minister of Territorial Planning and Regional Development of the Dominican Republic, underlined the need for articulation between the local and the national level and to move from planning to implementation.

"In the Dominican Republic, we have had instrumental advances rather than strategic advances, since we have very important laws and regulations. Now the other part is missing, which is that these regulations and laws can generate welfare for the people, which is the ultimate goal".

Domingo Matías

On decentralisation and partnership for action. Matías regretted that decentralisation processes in Latin America and the distribution of local and regional competences on climate issues are very unequal.

Thus, "the institutional strengthening of local governments is key to placing them at levels of development that will lead them to have the capacities to coordinate with the national government," he said.

Ingrid Zambrano, Mayor of the canton of Sucre, Ecuador, stressed the need to innovate in terms of governance and with this objective in mind, a commonwealth has been created to achieve the climate goals and the Sustainable Development Goals: the North Pacific Commonwealth, formed by the cantons of Sucre, San Vicente, Jamey and Pedernales.

"We are thinking not only as a canton, but also as a region with 200,000 inhabitants. We have decided to join together as a commonwealth, as a strategy also to strengthen some plans, programmes and projects that will precisely mitigate the impacts of climate change," he said.

Many participants at the EUROCLIMA+ Pavilion events insisted on the need to strengthen active citizen participation in climate policy planning and implementation.

Mariana Alegre, Mariana Alegre executive director of Lima Cómo Vamos, an observatory that promotes citizen involvement, stressed the need to generate evidence with the support of the research sector and

civil society organisations on what citizens expect and demand, and for this evidence to be incorporated into decision-making and the design of public policies.

In this regard, Domingo Matías spoke of the need for democratic planning to generate social counterweights.

"Citizens are the ones who pay the public budget and therefore their participation is decisive in public decision-making. Another important challenge is that transparency and accountability systems need to be improved. 'Spending well' for us means investing based on the perspective of the people. Climate change is a democracy issue. Climate change is an issue of social inclusion. Climate change is a welfare issue," he said.

3.4 Investing in adaptation, safeguarding development

On climate adaptation, Jorge Muñoz Wells, Mayor of Lima, spoke of the need to strengthen adaptation actions to safeguard development progress.

"There is no doubt that the planet has warmed up and we are unfortunately experiencing the effects of climate change, which become a threat to the initiatives in favour of poverty eradication and recovery from this post-COVID situation in which we are all involved and above all a threat to the search for sustainable development in the different countries".

Jorge Muñoz Wells

In addition to the need to reduce emissions, cities have to address their particular vulnerability to the effects of climate change. For example, the fact that the world's 600 largest cities will suffer the catastrophic effects of a sea level rise of half a metre over the next 20 years was put on the table.

Meanwhile, climate change is not affecting the entire population equally, the poorest and most vulnerable communities being most exposed to its effects. These populations are the most dependent on ecosystem services. Similarly, more than a billion people today live in informal settlements, which are more exposed to climate impacts.

UN Habitat representative Roi Chiti explained that a triple strategy of mitigation, adaptation and climate justice is needed to address the challenge of climate change and that the New Urban Agenda adopted by the countries of the world in 2016 "comes to our aid" in this task, "because it contains principles and guidelines to achieve SDG 11 to promote inclusive, safe, resilient and sustainable cities and human settlements," he said.

An example of urban adaptation was provided by Mexico City. With almost 1,500 km2 of territory and more than 20 million inhabitants in its metropolitan area, Mexico City is working on a long-term adaptation plan to accompany the mitigation strategy, including ecosystem adaptation, with a focus on nature-based solutions. The aim, explained Leticia Gutiérrez Lorandi, the City Government's Environment Secretary, is to help communities adapt, preserve their livelihoods and reduce disaster risks associated with climate change.

Representatives from the cities of Barranquilla, Colombia; Belo Horizonte, Brazil; and Hermosillo, Mexico presented their plans, achievements and challenges in implementing innovative climate policies with a focus on just transition and inclusive participation.

Manuel Trujillo, Head of International Relations for the city of Barranquilla, located on the Caribbean coast, is one of the most heavily-populated cities in Colombia with 1,300,000 inhabitants and is the fourth-largest economy in the South American country. In Colombia, 80% of the population lives in urban areas.

Barranquilla aims to become Colombia's first 'biodiverse city' by 2030, governed by a model of

urban development in harmony with nature. To achieve this, a long-term strategic development vision has been created for the 2100 horizon, following the principle of a biodiverse city, or "biodivercity", which is based on the connection of urban ecosystems, co-responsible actors and natural environments, through the principle of citizen participation and with the objective of achieving sustainable development.

Barranquilla is thus moving towards an orderly urban growth, governed by the principles of sustainability, such as the promotion of urban agriculture with community gardens and orchards. One of the concrete actions to implement this vision of a biodiverse city is a collaborative project with the city of Rome under the auspices of the International Urban and Regional Cooperation (IURC). The city has taken inspiration from the urban gardens of Rome, a pioneer in urban agriculture, to set up a pilot project of urban gardens in the Villas de San Pablo neighbourhood, where 78% of the vulnerable population lives without guaranteed food security.

The model seeks to empower the community by training them and giving them the means to produce their own food while creating spaces for exchange, social cohesion and community work.

"It is very important to start mixing the environmental with the social and economic. Everything has to work together and that is a great lesson of this project. This is a model that empowers the community and invites citizens living in the community to be part of this dream of building a biodiverse city".

Manuel Trujillo

The Brazilian city of Belo Horizonte with 2.5 million inhabitants in a metropolitan region of 6 million is the third-most populous city in Brazil and the seventh-most populous in Latin America.

In early 2020, Belo Horizonte suffered the worst rains in its history, causing untold loss of life and property, destroying much of the city's infrastructure. "The impacts of climate change have become a daily occurrence," said Hugo Salomão França, Director of International Relations of Belo Horizonte City Hall.

Given the lack of impact of existing mechanisms for climate policy planning, Belo Horizonte, with the support of IURC, decided to initiate a collaborative project with the Portuguese city of Almada, in Portugal, to draw inspiration from its local Climate Change Platform (PLAC) and reformulate the Climate Change and Eco-efficiencies Committee of Belo Horizonte. Thus, knowledge and best practices have been exchanged over time on management and governance models for environmental policy actions. The aim of the collaboration is to improve the city's resilience to climate disasters and to meet the goals of the Paris Agreement and the SDGs.

The results of this collaboration have been very positive, with a significant increase in civil society participation, the provision of resources to promote positive impact activities, the creation of an environmental certification, the submission of an energy efficiency project for international funding and the city's adherence to the UN Race to Zero initiative.

With almost 1 million inhabitants and located in northern Mexico in the Sonoran Desert, Hermosillo is a city that is forced to adapt quickly to climate change. It is located in an arid area but is exposed to rainfall that can be torrential. On the other hand, the city needs to alleviate its high temperatures through nature-based solutions.

Thanks to international cooperation, the city has developed Latin America's first 'Green Infrastructure Guidelines Manual' and a 'technical standard' to enforce its application. The manual contains examples of urban applications of nature-based solutions, such as green or vegetation-covered roofs or walls, rain gardens or filter asphalt.

Guadalupe Peñúñuri Soto, Director of RPS Sociedad Creativa and advisor to the Hermosillo City Council area, claimed the need for a "systemic approach" in our relationship with urban nature in order to plan

and implement mitigation and adaptation actions. She also stressed the need to enhance collaboration because "today more than ever we need international cooperation to be able to leapfrog our situation and land in specific actions in each of our cities".

3.5 Transport and mobility: cities at the forefront of action

Transport is one of the sectors that generates the most GHG emissions worldwide, and Latin America and the Caribbean is no exception. According to data from ECLAC, 36% of the region's energy-related emissions come from transport.

In Latin America, the rapid increase in motorisation is of particular concern, as it is the region with the highest growth in car ownership in the world, as much as doubling the global average.

Thus, given the urgency of the problem, urban mobility is one of the major areas of work of the EUROCLIMA+ programme, in the words of Carles Puigmarti Borrel dof the European Union, because it is one of the sectors with the highest greenhouse gas emissions and at the same time one of the most important problems in the most urbanised region in the world, Latin America.

"All of us who have lived in Latin America have experienced the enormous traffic jams and the enormous time wasted precisely because of urban mobility problems, and solving them can bring us two great benefits: reducing emissions and providing sustainable solutions to mobility difficulties," said Puigmarti Borrell.

As explained by Carolina Chantrill, Head of the Sustainable Urban Mobility Area of the Sustentar Association, among the most common mobility measures found in the NDCs are those related to the incorporation of new technologies or the use of alternative energies. However, "these measures alone do not have the capacity to reach the maximum emission reduction potential required in the sector to be able to meet the 1.5°C of the Paris Agreement," she said.

"Strategies related to changing the way we move and transport freight and avoiding, through planning, design and digitalisation strategies, unnecessary journeys must also be considered," she added.

It was precisely the digitalisation of mobility that was discussed by Juan Palacio, , representative in Latin America of Moovit, a free mobile application that allows users to plan their movements by favouring public transport and micro-mobility to reduce emissions. Palacio stressed the need to conceive mobility as a service to facilitate intermodality and the adaptability of the different modes of transport to the specific needs of each user, giving visibility to low-carbon alternatives such as walking or using active micro-mobility means such as bicycles, or electric means such as scooters.

Palacio gave as an example the city of Buenos Aires in Argentina, one of the countries in the region with the largest urban population. According to a survey conducted by his firm, 1 in 4 micro-mobility users said they were motivated in their choice by their awareness of reducing emissions. This, for Palacio, shows that it is important to increase visibility, providing information to users about the environmental impact of their mode of transport, because information raises awareness, and awareness is the first step towards a change in habits.

Several mobility experts pointed out that the Covid-19 pandemic has led to a decline in the use of public transport, which has been replaced by increased use of bicycles in some cases and private cars in many cases. However, he is confident that the pre-pandemic rates of public transport use can gradually recover and improve.

The objective of Move *To Zero-MOVE*, a UNEP initiative to highlight the advances in electric mobility and identify the elements necessary for its definitive deployment in Latin America and the Caribbean, is precisely to give visibility to sustainable mobility solutions. According to

Jone Orbea, regional leader of MOVE, "there is already an ecosystem of electric mobility in the region, since it is part of the thinking, structures, planning, industries and businesses, in practically all countries and all sectors of Latin America."

With more than 2,000 electric buses already circulating in the region (there are some 4,500 in Europe) and with one of the cleanest energy matrices in the world, Latin America and the Caribbean are moving decisively towards the electrification of transport. The region has many other favourable conditions for a rapid deployment of this technology, such as the availability of the minerals needed for battery production and the existence of car factories that are diversifying into electric vehicles.

The case of the city of Bogotá in Colombia is particularly inspiring. "At the moment Bogotá, with 1,485 electric buses within its Transmilenio system, and Santiago, Chile, are the cities outside China that have the largest fleets of electric public transport vehicles in the world. I don't think many people know this and it is fundamental for us to be able to tell this story," said Nicolás Estupiñán, the Mobility Secretary of Bogotá, whose government has also pledged not to buy petrol cars from 2022 onwards.

A particular experience within the Latin American context is Uruguay, whose energy matrix is dominated by hydropower, which means that 98% of its energy matrix comes from renewable sources. However, the transport sector requires a "second energy transformation" in the words of Paola Visca, Climate Change Advisor at the Ministry of Housing and Territorial Planning. In order to carry out this transformation, and given that urban mobility is the responsibility of the provinces and not the central government, the latter is conducting an awareness-raising effort to convince sub-national authorities of the need to electrify transport.

In Costa Rica, the municipalities of Montes de Oca and Curridabat have developed a network of cycle paths that have become a role model for the rest of the country and the region. Ana Lucía González, Deputy Mayor of Montes de Oca, encouraged social organisations and municipal officials to set up similar projects. It is worth noting that the cycle path project was initiated by a team composed entirely of women, and was supported by EUROCLIMA+.

Emperatriz Ordeñana Ayerdis, Emperatriz Ordeñana Ayerdis, Head of the Environmental Services Department of the city of San José, Costa Rica, explained the main challenges facing her city, such as solid waste management and pollution caused by motor vehicles, all in a context of social inequalities and the proliferation of irregular urban settlements.

To reduce emissions and improve air quality, San José is building cycle paths on several main boulevards so that citizens can travel without motor vehicles from one end of the city to the other. "We are committed to the issue of public transport, to decarbonisation with the implementation of the tramway and the integration of San José into a nationwide project of electric trains," explained the Costa Rican official.

Road transport is a major source of greenhouse gas emissions in cities, as climate policy makers in megacities are well aware. Leticia Gutiérrez Lorandi, Mexico City's Environment Secretary announced that the city "has achieved the goal of reducing more than 10 million tonnes of CO2." In the long term, she stressed the importance of having a carbon budget, in order to reach the goal of carbon neutrality by 2050.

In addition, by 2024, their aim is to put 500 electric trolleybuses into operation, build 30 kilometres of cable bus (a new mode of transport for Mexico City) and install a cable car for the most remote and marginalised areas of the city.

Pedro Palacios, Mayor of Cuenca, Ecuador, highlighted the principle of proximity to mitigate climate change, and specifically praised the

concept of 'the 15-minute city' where citizens can walk or cycle 10 or 15 minutes and have 80% of their needs met. Precisely to facilitate mobility, Cuenca aims to create 125 kilometres of cycle paths by 2023.

It is precisely the principle of proximity and diversification of spaces that is defended by the organisation CREO Antofagasta, the Chilean city which, due to its geography with a narrow and elongated layout, and its high social segregation by neighbourhoods, has traditionally been a "generator of private mobility" in the words of Nicolás Sepúlveda, Executive Director of NGO. Thus, in a city of 360,000 inhabitants, more than 800,000 trips are recorded every day, of which 37% are by private vehicle, 34% by public transport, 29% on foot and only 1% by bicycle.

To reduce the use of unsustainable means of transport, CREO Antofagasta, with the support of the EUROCLIMA+ programme through its implementing agency GIZ, has developed the so-called Master Plan and an integrated sustainable mobility strategy to increase the kilometres of cycle paths, promote the use of public transport, improve its connection with cycle paths and facilitate the connection of the neighbourhoods in the hill areas, where people with fewer resources live, with the urban centre, where services are concentrated. In addition, the pedestrianisation of spaces and the closure of streets to road traffic is being promoted to improve safety for cyclists and pedestrians.

Images of a car-free day in the Chilean city of Antofagasta/ Credit: CREO Antofagasta

KEY MESSAGES

» The Latin American region is one of the most urbanised in the world with 81% of the population living in urban areas. By 2050, this percentage is expected to be 89%.

» Cities are the main source of emissions, and with urban populations growing rapidly, the urgency to mitigate urban emissions is growing.

» The high specialisation of urban land, with production centres on the one hand and residential suburbs on the other, means that a lot of energy is required for mobility, people spend a lot of time on the move and air pollution increases.

» The need to travel mainly by private and combustion vehicles must be reduced, favouring greater population density and proximity to productive and service areas.

» There is a need for more orderly urban development with a more rational and balanced use of land.

» Cities have great difficulty in accessing climate finance, and are calling for more international aid and support for staff training.

» Climate governance issues in planning and implementing climate action require more decentralisation, transparency and innovativeness

» The region is making headway in the development of electric mobility and has the conditions to accelerate this transition and bring it to scale

Alexandra Cortés, Communications Officer at EUROCLIMA +

SOME COUNTRY CASES PRESENTED AT COP26

COUNTRIES CITED

- Peru
- Colombia
- Ecuador
- Mexico
- Brazil
- Dominican Republic
- Costa Rica
- Uruguay
- Argentina
- Chile

TOOLS CITED

- Market-based instruments
- Carbon budgeting
- Renewable energy
- Comprehensive social perspective
- Decentralisation
- Innovation in governance
- Citizen participation
- Transparency
- Accountability
- Nature-based solutions
- Urban agriculture
- Urban guidelines manual
- Digitalisation
- Electric mobility

BARRANQUILLA (CO)

"Biodivercity" Strategy

In Barranquilla, a development for 2100 was proposed under the principle of planning in harmony with urban environments. They promote practices such as urban gardens, inspired by cities like Rome.

BELO HORIZONTE (BR)

Climate twinning

The Brazilian city has twinned with the Portuguese city of Almada to exchange best practices and improve its climate governance

SOME COUNTRY CASES PRESENTED AT COP26

MEXICO CITY (ME)

Urban renewable energy

It will build the largest solar power plant in a city above the central produce market. On 25 hectares of roof, panels will be installed for the generation of 20 Megawatts.

ECUADOR

Together for the SDGs

The cantons of Sucre, San Vicente, Jamey and Pedernales, which together represent some 200,000 inhabitants, have created an association with the aim of working together to meet the SDGs and climate goals.

ANTOFAGASTA (CL)

Clean transport

The NGO CREO Antofagasta with the support of EUROCLIMA+ is implementing actions to reduce the use of private vehicles, increase the use of public transport, cycling and walking, while improving the infrastructure and raising more awareness.

SOL ORTIZ GARCÍA

General Director of Policy, Prospecting and Climate Change of the Mexican Ministry of Agriculture and Rural Development, Mexico

"We cannot think that we are going to solve the huge problem of climate change without considering that we also have to solve the issue of biodiversity loss. The two are inextricably linked. Climate change affects biodiversity and, therefore, if we conserve biodiversity, we can contribute (to climate action) as part of these nature-based solutions".

4. Biodiversity and food: nature-based solutions

One of the drivers of climate action in Latin America covers actions focused on protecting, restoring and sustainably managing ecosystems in order to contribute to solving problems such as biodiversity loss, climate change or food and water insecurity. At the EUROCLIMA+ Pavilion, success stories, opportunities and challenges of Nature-Based Solutions in Latin America were presented.

EUROCLIMA+ FOR NATURE-BASED SOLUTIONS

The thematic sector of Forests, Biodiversity and Ecosystems (BBE from its initials in Spanish) together with Resilient Food Production are very important fields of work in the EUROCLIMA+ programme. In these areas, innovative natural resource conservation projects are being promoted to increase the capacity of ecosystems to sequester carbon and contribute to the resilience of people and food systems in the face of climate change. Institutional capacities are being strengthened and successful experiences are being leveraged across the region. Since 2019, nine projects from 12 countries have been supported for a value of around €13 million, and more than half a million people have been impacted, including leaders, local authorities, producers and decision-makers, among other stakeholders.

4.1 The Potential of Nature-Based Solutions in Latin America

At the heart of climate action in Latin America are Nature-Based Solutions (NBS). This concept - increasingly common in international negotiations and in all climate-related forums - is defined by the International Union for Conservation of Nature as those actions that, based on ecosystems and their benefits, respond to various societal challenges such as food security, disaster risk or climate change. In other words, the term refers to actions undertaken to protect, restore and sustainably manage ecosystems that contribute to climate mitigation and adaptation, and deliver other important benefits.

At the EUROCLIMA+ Pavilion at COP26, it was highlighted how countries in the region are moving forward on incorporating these solutions into the planning and implementation of Nationally Determined Contributions (NDCs), developing public policy instruments, regional partnerships for conservation and local projects together with different regional, national and international stakeholders.

The recent study "Focusing on Nature-Based Solutions in the updated NDCs of Latin America and the Caribbean", promoted by EUROCLIMA+, showed that 13 countries in the region explicitly or implicitly include nature as part of their climate action, demonstrating an increased adoption of ecosystem-based approaches to mitigation, adaptation and disaster reduction in the region.

Mauricio Luna Rodríguez, GIZ regional advisor for the EUROCLIMA+ programme and co-author of the study, asserted that the planned climate actions have not been found thus far to be detrimental to biodiversity. However, he pointed out that there is a lack of detailed information to understand whether the actions proposed in the NDCs are limited to "doing no harm", or whether they also contribute to ecosystem integrity.

Another positive trend in countries' commitments, the expert pointed out, is the inclusion of agro-ecosystems in the packages as a dual strategy for climate action and food security.

Enabling factors for the success of NBS in the region have also been identified to make them more viable and effective for climate change adaptation and mitigation. These factors are: new public policies, financing, capacity building, information production, and management and research tools.

During the session at the EUROCLIMA+ Pavilion, experts highlighted different positive aspects of adopting nature-based solutions. Michel Schlaifer, technical advisor at Expertise France, grouped the benefits of NBS into four main types, and for each of them examples were given at different events:

1- These were their potential to create important synergies and linkages with the goals of other UN conventions, such as combating desertification, biodiversity conservation (CBD), wetland protection (Ramsar Convention) or the Sendai framework for risk and disaster reduction, as well as the 2030 Agenda and the SDGs. For example, in Cuba, with the support of EUROCLIMA+, the Environment Directorate of the Ministry of Science, Technology and Environment (CITMA) is promoting a project on the south coast of the island to improve the resilience of coastal communities through reforestation with native species, which contributes to climate change mitigation and adaptation to rising sea levels. This type of project interconnects commitments made under different international agreements.

2-Its close interrelationship with biodiversity conservation. Nature-based actions represent benefits for promoting the protection of endangered species, the sustainable and local management of vulnerable fauna and flora, and the conservation of key areas for terrestrial, marine, freshwater and microbial diversity.

In Mexico, in the framework of a project implemented with the support of EUROCLIMA+, efforts have been made to integrate biodiversity elements into policies and programmes for the management of productive sectors. From the environmental conservation group Pronatura Mexico, they established an advocacy model composed of four axes: institutional strengthening and governance of ecosystem goods and services; nature-based solutions with a livelihoods approach; capacity building for the mobilisation and empowerment of vulnerable groups; and the articulation of global agendas from the local level for the fulfilment of national goals.

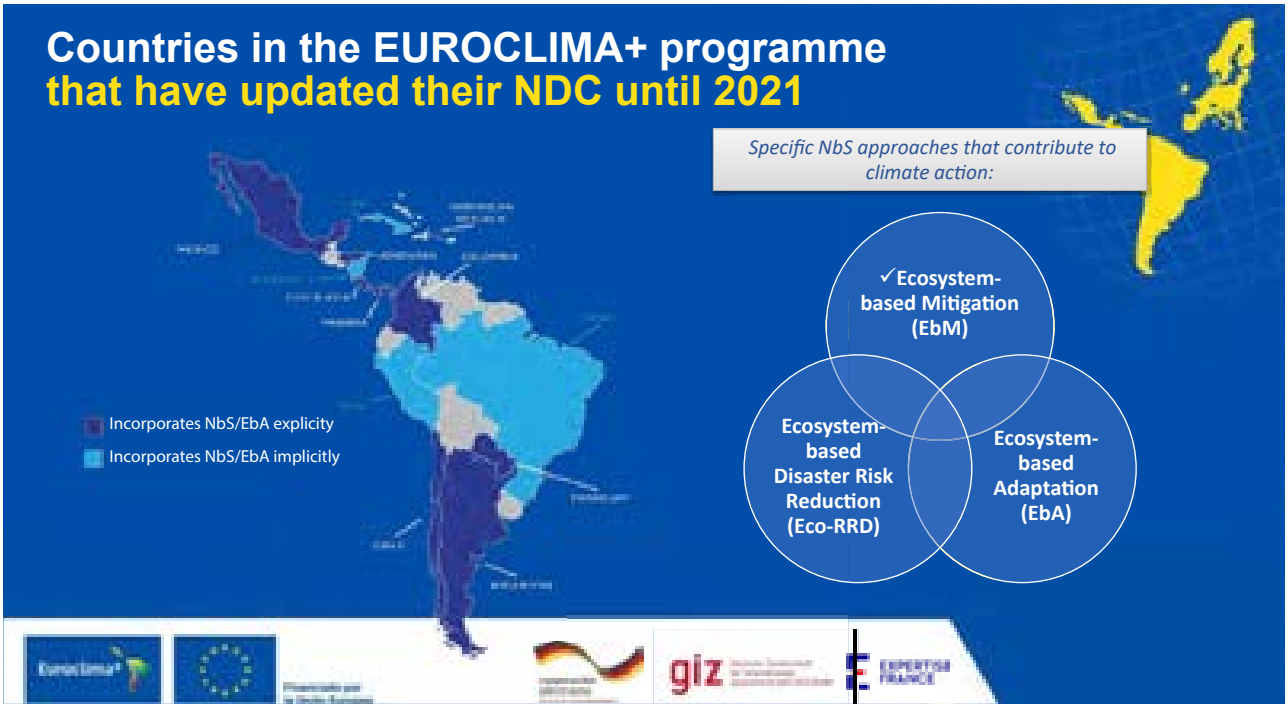
The states of Jalisco and Oaxaca have developed territorial planning to promote the conservation and restoration of ecosystems,

working together with agave producers for tequila. These two cases are presented in detail in the following subsection.

3- The wide diversity of stakeholders they can bring together. The design of NBS involves bringing together different community, governmental and private stakeholders from diverse sectors such as agriculture, forestry, water and tourism. In this regard, Ricardo Ulate, advisor to the Costa Rican delegation, representing the Costa Rican Minister of Environment and Energy, emphasised that for several years his country has been combining the water, energy, biodiversity and forestry agendas. In a recent effort to update the NDC and build the National Decarbonisation Plan (two essential policy instruments to guide work on the NBS), thirteen key sectors were identified for the country, three of which are particularly important for the 'nature' sector: land-use planning; forestry and biodiversity; and water and oceans. Together with these stakeholder groups, initiatives to develop NBS were integrated, and a system for monitoring indicators and progress was set up to track compliance.

Another example of multi-level coordination was presented by ICCO Cooperation's 'Our Land, Our Forests' programme, which is being implemented in El Salvador, Guatemala, Colombia and Honduras with the support of EUROCLIMA+. During COP26, the experience of El Salvador was specifically shared, where the project combines agroforestry systems with carbon credit generation on degraded forest land plots of small and medium-sized landowners. In addition, the project is implemented through a participatory dialogue between the national government, regional governments and the owners of land or plots to be reforested. According to Natalia González, ICCO Colombia's Forests & Climate coordinator, there are two key elements to consider: the first is to have a long-term vision from the planning stage, including monitoring and follow-up; and the second is that these initiatives need to bring real benefits to the communities in order to gain credibility and their commitment, while at the same time generating income.

4- The territorial and systemic approach in its design. Building actions that generate social benefits from nature requires thinking in a systemic way about the technological, economic, social and environmental aspects of the territories. This, in turn, entails complex and regional stakes that can bear fruit on a large scale. For example, it enables strategies



beyond conventional planning boundaries. This is the case of the Madre de Dios basin, between Bolivia and Peru, in the heart of the Amazon, one of the most biodiverse places on the planet, where community programmes for the management of non-timber resources, such as the Brazil nut, are preventing the deforestation of the jungle. The Amazon Forests and Climate Change project, supported by EUROCLIMA+, is successfully engaging more than 90,000 people - most of them indigenous and peasant farmers - in this sustainable use that prevents the rapid negative transformation of the Amazon rainforests. Luis Arteaga, Technical Director at the Bolivian Association for Research and Conservation of Andean Amazonian Ecosystems (ACEAA), emphasised that the project aims to demonstrate "the possibility of generating mitigation and adaptation synergies by promoting non-timber resource management enterprises with a community approach."

In Central America there are also plans in this direction, such as the Five Great Forests of Mesoamerica initiative, which seeks to protect these transboundary ecosystems that cover about 120,000 km2 and store 47% of the region's forest carbon stocks, as their size has been reduced by more than 23% due to deforestation caused by illegal cattle ranching. It brings together the eight countries of the Central American Commission for Environment and Development (CCAD), the Mesoamerican Alliance of Peoples and Forests (AMPB), the Wildlife Conservation Society (WCS) and Re:wild, and is supported by the European Union through a DeSIRA project. The initiative is based on the principles that they are a movement that works under one vision; addresses the major threat of livestock exploitation through incentives to ensure there are more trees and fewer cattle; and promotes indigenous community leadership and the search for local solutions.

"Transboundary ecosystems are biodiversity hotspots and are home to irreplaceable species such as the jaguar and the scarlet macaw. They are essential to mitigate climate change as they absorb up to 30% of greenhouse gas emissions and are equally important for climate change adaptation".

Felice Zaccheo
Head of Unit of the Directorate-General for International Cooperation and Development of the European Union

4.2 Integration of biodiversity into climate action

A strong message at COP26 was the inseparable link between climate action and efforts to combat biodiversity loss. Both socio-environmental challenges are part of the same problem and solution. Actions that protect biodiversity contribute to climate action. Similarly, working towards a planet in which the average global temperature rise does not exceed 1.5ºC above pre-industrial levels also helps to prevent the collapse of very large populations of fauna and flora.

At the EUROCLIMA+ Pavilion, experts from Mexico detailed how they are interlocking these two global objectives in their public policies and projects. Sol Ortiz García, General Director of Policy, Prospecting and Climate Change of the Mexican Ministry of Agriculture and Rural Development, stressed that their strategy is based on a systemic approach where the agendas of climate change, the Convention on Biological Diversity, Agenda 2030 and the fight against desertification are integrated, because the actions have a multipurpose and a multiplying effect of efforts.

Thus, Mexico is implementing national and regional actions with a dual purpose of diversity conservation and climate action. At the national level, for example, they have developed the Sectoral Committee on Genetic Resources for Food and Agriculture, so that it has been possible, through networks in the agricultural, livestock, aquatic, microbial and

invertebrate sectors, to learn about and improve practices around those genetic resources that contribute to the adaptation to climate change. This is the case of the germplasm banks or seed banks that provide material for local farmers' networks and compile seeds for about 1,300 plant species which are important for agriculture and food.

"We cannot think that we are going to solve the huge problem of climate change without considering that we also have to solve the issue of biodiversity loss. The two are inextricably linked. Climate change affects biodiversity and therefore, if we conserve biodiversity, we can contribute (to climate action) as part of these nature-based solutions".

Sol Ortiz García

Meanwhile, the governments of the states of Jalisco and Oaxaca explained in the EUROCLIMA+ Pavilion the territorial planning efforts they are making to connect biodiversity with climate action:

- In Jalisco, a state with 80% of the vegetation types registered for Mexico and major production chains such as avocado, beef and agave for tequila production, the 'Jalisco con Bosques' ('Jalisco with Forests') policy has worked together to integrate aspects of the overall strategies to combat deforestation and protect biodiversity. The instrument - which involves various aspects of governance from productive restoration to monitoring the felling of natural forest - has strengthened the relationship with the private sector through the development of certifications with which the Tequila Regulatory Council can verify the traceability of the agave from which tequila is made.

- In Oaxaca, a state of great biological and cultural diversity with around 12,500 species and 15 indigenous and Afro-Mexican groups, 83% of municipalities are at high or very high risk of extreme weather events. Therefore, with the support of EUROCLIMA+, efforts have been made to integrate ecological and social management instruments to bring together multi-sectoral forces to help reduce poverty while contributing to the restoration of degraded areas. To this end, the level of environmental degradation in the state was diagnosed, which estimated a restoration potential of about 1.4 million hectares through restoration models with productive activities such as the cultivation of milpa, coffee, agave and livestock.

Mexican experiences have highlighted the following challenges for the integration of biodiversity protection, livelihood improvement and climate action:

- **Institutional and budgetary coordination** between different state agencies. The legal frameworks, which limit the functions of different institutions within the state, mean that there is intrinsic competition, which makes it difficult to see the synergies between their respective plans and actions in the territories.

- **Private sector involvement.** In both projects (in Jalisco and Oaxaca), the institutions were open to understanding how to leverage fruitful partnerships with the business sector so that there is traceability of their products and a commitment to restorative and biodiversity-friendly practices.

- **Context of local producers.** In promoting policies that will entail changes in technologies, inputs and the realities of small producers, it is necessary to look at the economic and social needs that such a transition will generate. If these elements are not foreseen, there is a risk of requiring producers to produce more efficiently and sustainably without understanding what support they need for this change.

As in the case of Mexico, in other sessions of the pavilion, the work being done in other countries in favour of biodiversity was presented. For example, in Brazil, the National Association of Municipalities and Environment (ANAMMA) implements Ecosystem-based Adaptation (EbA) measures through participatory public policies that take biodiversity into account. It also finances its actions with support from the private sector, sub-national governments, universities and civil society organisations.

Mariana Gianiaki, Director of the AAGL project (Articulating Global Agendas from the Local) in Brazil, implemented with the support of EUROCLIMA+, explained that they already have the Atlantic Forest Law that establishes the need for municipalities and local governments to have their own agenda to help in biodiversity planning. The direct beneficiaries of these actions are indigenous peoples and small landowners in priority areas for restoration.

4.3 Mobilising finance for nature

Providing sustained long-term funding for nature-based solutions is one of the main challenges in designing such solutions. From public policies, countries such as Costa Rica have sought to build voluntary mechanisms for private sector participation, but there are also other incentives from companies and international cooperation that seek to design the best mechanisms to make this type of climate action viable.

For example, the Tropical Agricultural Research and Higher Education Centre (CATIE) has been working in Central America to analyse how financial mechanisms should be structured according to the local context. In Honduras, they identified 44 barriers, which after prioritising them, it was possible to understand the weight of the banks' perception of risk for this type of project. For this reason, it was decided to work with a guarantee fund that shares the risk with the banks. This generates greater confidence for those who invest in these rural initiatives.

.

Gracia Lanza, Coordinator of the Environment Economics and Sustainable Agribusiness Unit of CATIE, outlined three lessons learned from the Honduran experience. On the one hand, there is a strong need to stimulate market demand so that NBS-derived products do have a market in which they can function. A second point is that it is necessary to be clear with investors about the expectations surrounding these projects, because in the agricultural sector, for example, results are not achieved immediately, but take several years. Finally, Lanza drew attention to the persistent lack of further scientific evidence demonstrating the economic and social benefits of NBS, and the need for investors to be convinced of the need for change "for there to be such progress even with imperfect information," she noted.

In Mato Grosso, Brazil, an innovative mechanism called CONSERV guarantees income to rural producers for conserving standing trees on their private land. These are voluntary contracts and can be re-evaluated by the owners as they see fit. In addition to generating a carbon sequestration benefit, the project seeks to show the advantages of maintaining these stretches of natural vegetation standing for agricultural production and for the regulation of water cycles.

In addition to attracting funding for mitigation actions, there is also a need to channel resources for ecosystem-based adaptation. CATIE, together with other organisations such as WRI, has conducted different studies on the subject in Central America. The region is one of the most vulnerable to extreme events such as hurricanes, especially in the Gulf of Honduras. The increased frequency of these events, which trigger more rains, landslides and floods, involves extraordinary costs for countries. In addition, there has been a loss of vegetation cover in the upper basin areas of the region's rivers.

Walter Vergara, Director of WRI's 20x20 initiative, said that, given the climate risk scenario for the region, they are looking at how to respond from the NBS. In their analysis, NBSs are far more cost-effective than engineered solutions. For example, instead of creating artificial physical barriers, wetlands can be

restored to respond to sea level rise or agroforestry systems can be reinforced to help reduce runoff and thus reduce the risk of landslides. These actions help to minimise the risks and costs for banks, insurers and governments in responding to such events. As a result, the expert insisted on the need to analyse the benefits of adaptation with nature-based measures in order to pinpoint the financial incentives required for their implementation.

Regarding the role of regional banks in promoting NBS, initiatives to direct financial flows towards these initiatives were presented at the EUROCLIMA+ Pavilion. The Central American Bank for Economic Integration highlighted that, since 2016, US$6.9 billion has been invested in financing operations that contribute to attacking the effects of climate change in the region. The bank has three mechanisms for this: directly financing these activities, participating as a party in the accreditation processes of other funds such as the Green Climate Fund, and promoting the issuance of carbon and social bonds.

Another case is the Banco de Desarrollo Rural de Guatemala, which takes three factors into account in its operations: sustainable development, mitigation and climate adaptation. These three factors operate within the framework of the bank's environmental policy, which also promotes internal environmental policies. Bernardo López, Chairman of the Board of Directors of Banrural de Guatemala, explained that a recent financing experience has been the consolidation of a REDD+ project in the Guatemalan Caribbean, which supports forest protection actions, technical assistance to local communities, legalisation of indigenous lands, women's health programmes, biodiversity studies and carbon monitoring.

4.4 Transformation of agri-food systems

In Latin America, agriculture accounts for 27% of total greenhouse gas emissions, while globally it accounts for 11%. Brazil is the main issuer, followed by Argentina, Mexico and Colombia. This makes it urgent to transform the region's food systems in order to achieve carbon neutrality and to delve deeper into the experiences of soil recovery as an emissions sink. In Europe there are already initiatives in this direction, such as the From Farm to Fork strategy, which is part of the Green Pact and through which the European Union supports good practices in resilient food production, as well as job creation, preservation of natural resources, mitigation and adaptation to climate change.

Claudia Martínez, Director of the Food and Land-Use Coalition (FOLU) Colombia, presented the report *10 critical transitions to transform food and land use*, focusing on the hidden costs of global food and land use systems. According to their estimates, these systems cost US$12 billion, while they only produce US$3 billion, i.e. they cost more than they produce.

The costs or externalities of these systems derive from their consequences for health, the environment and the economy. Much of this comes from the use of pesticides and fertilisers, which account for a large part of emissions. "Unfortunately, in order to produce more, what we are doing is poisoning our bodies and poisoning ecosystems," Martinez argued. To these externalities must be added the emissions produced by food waste. To counteract this situation, FOLU promotes productive and regenerative agriculture, the construction of a network of regenerators of the planet and the use of bio-inputs.

According to Eduard Muller, Vice Chancellor of the University for International Cooperation and director of Costa Rica Regenerativa, regenerative agriculture and holistic livestock farming can reverse the damage to biodiversity. To demonstrate this, he said that in Guanacaste, a province in northwest Costa Rica, a project was started in the pandemic where communities are producing 10 tonnes of healthy food per month on one hectare. The results after only three months were very satisfactory, as 78 species of insects and arthropods were recovered; the vegetation cover was maintained, water was recovered and they are getting closer to the goal of irrigation not being necessary.

"SJust by converting livestock farming to regenerative livestock farming, we would be fixing more carbon than is released by the whole economy and then some. And if we add regenerative agriculture, we're talking about another 12 gigatonnes (of storage)".

Eduard Muller

Talking about Cuba, Leidy Casimiro, from the Vermont Institute for the Caribbean, pointed out the potential of agroecology in family farming because it allows the application of innovative technological solutions, based on endogenous production and a more efficient use of available local resources, without requiring large amounts of external inputs for production and marketing. According to Casimiro, "farms that are in agroecological transition feed more than eight people per hectare per year, both in energy and protein production."

For her part, María Teresa García, Coordinator of Mujeres Rurales (Rural Women), explained that the impacts of the climate crisis on the lives of rural, indigenous and peasant women in Central America have been hard-hitting. 300 members of the cooperatives lost their crops, their native seeds and their income, which translates into food supply problems. To strengthen their resilience, since 2011 they have been promoting agroecology and indigenous agriculture, through water harvesting and the production of fertilisers and compost, to heal the land and enhance biodiversity.

A key element in promoting these climate action initiatives is financing through effective, multi-level planning. One example of this cooperation was provided by the Netherlands cooperation agency SNV and its partners in Latin America by sharing success stories in Honduras, Guatemala, Colombia and Ecuador. It should be noted that a EUROCLIMA+ supported project on climate-smart family farming in Honduras was presented. The Climate-Smart Family Farming for Resilient Food Production Project (AFCI-PRA) has been promoting food security for vulnerable populations and is an example of a good practice that can be scaled up at the national level.

Food security

Numerous experiences combining adaptation and mitigation from the agricultural sector were presented in the pavilion. Carolina Reyes, Coordinator of the Projects Department of Fundecooperación for the Sustainable Development of Costa Rica, gave details of the Adapta2 project, which promotes a low-carbon livestock farming strategy, thanks to which adaptation measures are implemented on 650 farms, through actions such as forage banks and silage, adapted breeds, rational grazing, agrosilvopastoral systems, improved pastures, rational use of slurry, efficient use of water and protection of water sources.

Thanks to the project, adaptation measures have been implemented on more than 2,100 hectares of land, more than 50 climate change adaptation technologies have been applied, an increase in profitability of 10-11% has been achieved, and river and stream banks have been protected. Training has also been provided for 5,000 people. In addition, Fundecooperación created the credit lines 'pro-climate agriculture' and 'pro-climate livestock', thanks to which more than 70 producers have access to credit.

Another project shared in the Pavilion was on climate change adaptation measures for sustainable livestock farming in Panama, presented by Ima Ávila, Director of the Grupo de Educación y Manejo Ambiental Sostenible (Gemas). The initiative has succeeded in establishing silvopastoral systems on 600 hectares, with the participation of 120 producers, to reduce climate vulnerability in the middle and lower basin of the Santa María river. They designed and implemented farm management plans and trained 80 technicians and 120 producers with the support of specialists from the Centre for Research on Sustainable Agricultural Production Systems (CIPAV).

The last project, 'Practices with Nature-based Solutions', was introduced by Janeth Sierra, Technical Secretary of the Panamanian Ministry of

Agricultural Development. The initiative covers 200 hectares of shaded coffee agroforestry and soil conservation systems in the upper part of the Santa Maria river basin. As a result of the project, producers and technicians have been trained in inaccessible communities, agricultural landscapes have been restored, native species have been rescued, a gender-sensitive orchid production and marketing project has been implemented, and workshops on climate change have been held.

At the event 'Latin America seeks financing for climate resilient transformation of its agricultural sector', the experiences of four countries were presented. Bolivia aims to improve the resilience capacities of rural families in five departments of the country; Chile aims to increase the resilience of human and ecological communities and food security; Costa Rica aims to strengthen the adaptive capacity of producers' livelihoods and the value chain to contribute to food security; and Panama aims to contribute to food security and transform livestock activity to make it more competitive and resilient.

The AFOLU sector's transition to carbon neutrality

a researcher at INTA, explained that they have integrated several models such as Business as Usual (BAU), Fable Calculator and the EGO Dynamics model. In addition, since mitigation targets must be compatible with the goals of conservation of pure water sources and biodiversity, and food production and export, the resulting modelling has been coupled with the use of the Nature Map algorithms at the national scale.

Another phase of the project was a dialogue on the perceptions of stakeholders in the agriculture and forestry sector to analyse the main challenges and conditions for achieving carbon neutrality. Verónica Gutman, , a consultant for the Avina Foundation, the institution in charge of the process, listed the challenges they encountered: i) the short-term macroeconomic urgencies facing Argentina, ii) the need for greater coordination between climate and energy, transport, agro-industrial, economic, financial, social and territorial policies, iii) defining a roadmap with concrete goals that is acceptable to all stakeholders in the sector.

Finally, Jose Volante, Coordinator of INTA's Natural Resources and Environmental Management Programme, concluded that, from a biophysical point of view, it is possible to achieve carbon neutrality in Argentina, but it is necessary to: i) recover and increase the area of native forests by 11%, ii) triple the area of cultivated forests; increase agricultural production without expansion, iii) increase the area of protected areas by at least 30%.

Participant in an event at the EUROCLIMA+ Pavilion

KEY MESSAGES

» In Latin America, emissions from agriculture and land use account for 27% of total greenhouse gas emissions, compared to 11% globally.

» The transformation of food systems is urgent, through the implementation of regenerative agriculture and livestock models, as well as agro-ecological models, in order to achieve carbon neutrality and deepen the experiences of soil recovery as an emissions sink.

» Most countries that have updated their NDCs in the region explicitly or implicitly include nature-based solutions for meeting their climate goals.

» In the region, the design of the NBS integrates compliance with the 2030 Agenda, the Paris Agreement and the Convention on Biological Diversity, as well as other international frameworks and commitments.

» The potential of NBS lies in their power to create important synergies and economic partnerships, their close interrelationship with biodiversity conservation, the wide diversity of stakeholders they can bring together, and the territorial and systemic approach in their design and implementation.

» The financing of NBS requires a commitment from investors, regional banks and decision-makers that can reduce the risk perceptions that such projects still carry.

» Channelling resources towards nature-based solutions for both mitigation and adaptation can lead to the creation of green jobs, conservation of biodiversity and minimisation of risk from extreme weather events.

SOME COUNTRY CASES PRESENTED AT COP26

COUNTRIES CITED

- Peru
- Colombia
- Ecuador
- Mexico
- Brazil
- Dominican Republic
- Costa Rica
- Uruguay
- Argentina
- Chile

TOOLS CITED

- Market-based instruments
- Carbon budgeting
- Renewable energy
- Comprehensive social perspective
- Decentralization
- Innovation in governance
- Citizen participation
- Transparency
- Accountability
- Nature-based solutions
- Urban agricolture
- Urban guidelines manual
- Digitalization
- Electric mobility

MEXICO

Sub-national public policies

The 'Jalisco con Bosques' programme has contributed to improving the traceability of the agave sector and the production of tequila, thanks to productive alternatives for the restoration of degraded ecosystems.

MEXICO

Subnational public policies

The intersectoral roundtable in Oaxaca succeeded in joining efforts to identify the restoration potential of about 1.4 million hectares following social, economic and environmental principles to generate sustainable, low-carbon rural development.

CENTRAL AMERICA

Regional conservation network

The Five Great Forests of Mesoamerica movement seeks to protect these transboundary ecosystems, which hold 47% of the region's forest carbon stocks. In a regional cooperative effort, it seeks to improve forest governance and highlight local knowledge for forest protection.

SOME COUNTRY CASES PRESENTED AT COP26

CUBA

Resilience and adaptation to climate change

In six coastal municipalities in the provinces of Artemisa and Mayabeque, regions affected by the loss of the coastline and food sovereignty, groups of volunteers and productive alternatives were established to address these two issues.

ARGENTINA

Modelling at national scale

Based on modelling, work is underway to establish trajectories towards carbon neutrality for the agriculture, forestry and other land uses sector for the whole country. This instrument is expected to guide decision-making for decades to come.

FÁTIMA ANDRADE

Of the International and Ibero-American Foundation for Administration and Public Policies (FIIAPP).

"To give value to the knowledge and ancestral knowledge that indigenous peoples have about life, to make them visible and to value them economically and socially is vital, and that is why addressing this challenge requires leaving no one behind. Also, more than ever it is an issue of social, environmental and economic justice".

5. Just transition and participation

To ensure that the transition to more resilient and low-emission societies and production systems is just, the participation of all sectors of society is crucial. That is why Latin American countries need to adopt an inclusive approach that takes everyone into account and encourages participation by strengthening education, information and participatory decision-making. COP26 identified the main challenges and opportunities for achieving a just transition in Latin America and shared strategies to ensure that climate change adaptation and mitigation leave no one behind.

EUROCLIMA+ FOR CLIMATE EMPOWERMENT ACTION

This EUROCLIMA+ priority action line is focused on strengthening education, public access to information, citizen participation, international cooperation and social awareness on climate change as indispensable elements for the implementation of capacity building processes and political and social strengthening on climate competences. Furthermore, Article 12 of the Paris Agreement recognises that enhancing participation and education is key to promoting transformations in lifestyles and behaviours that foster low-emission societies and economies. Learn more about the work by EUROCLIMA+ on ACE (Action for Climate Empowerment).

EUROCLIMA+ FOR THE GENDER PERSPECTIVE AND THE PARTICIPATION OF VULNERABLE GROUPS

Gender mainstreaming and the participation of vulnerable groups, indigenous peoples and local communities is an important cross-cutting action line of EUROCLIMA+. From this perspective, the Programme works with Latin American countries to support their integration into policies, action plans and other measures related to the NDC. Learn about the actions promoted by this European Union programme together with the countries of the region.

5.1 Empowerment and climate justice

Faced with the urgency to act on climate change mitigation and adaptation, Latin American countries are aware of the need to include everyone in the action. To this end, national strategies for Action for Climate Empowerment (ACE) are being developed as part of the NDCs. To share experiences in the development of these strategies, the EUROCLIMA+ Pavilion brought together experts from the region to share lessons learnt, challenges and goals.

In 2010, Colombia was one of the first countries to propose a national ACE strategy and has already implemented it and is evaluating its impact. Jairo Neftalí Cárdenas, from the Ministry of Environment and Sustainable Development, explained that the country's goals are to update the environmental education policy to include climate change as an

urgent message; to incorporate education into the Integrated Sectoral Climate Change Management Plans (PIGCCS); and to build the National Climate Change Information System by 2030.

In 2020, Uruguay initiated the participatory process for the drawing up of its National Action Strategy for Climate Empowerment (ENACE), which at the time of writing is in the final process of public consultation. The drawing up of this strategy is framed under the umbrella of the National Climate Change Response System and is developed with the support of EUROCLIMA+.

The strategy was carried out with the participation of a wide range of stakeholders and social sectors to ensure inclusiveness and the participation of vulnerable groups. According to Belén Reyes, from the Uruguayan Ministry of Environment, this participatory process was in itself a process of empowerment of the different stakeholders.

On the other hand, Chile is advancing in the preparation of its ACE strategy, and expects to have participatory methodologies to implement with communities this year. In view of the implementation of the strategy, Jessica Ulloa, from the Chilean Ministry of Environment, pointed out four challenges: i) to mainstream ACE within state institutions to guide sectoral public policies, ii) to turn the strategy into a guide for the private sector, iii) to follow up and monitor compliance with the actions and measure their progress, and iv) to ensure that its application is maintained over time, in spite of changes of administration.

For its part, Argentina, through the Ministry of Environment and Sustainable Development, and also with the support of EUROCLIMA+, promotes the ACE strategy through public policies. Among its advances are the creation of the National Cabinet on Climate Change and the approval of two strategic laws: the Yolanda Law (in homage to Argentina's first Secretary of Natural Resources and Human Environment), which aims to guarantee comprehensive environmental training for public personnel, and the Law on Comprehensive Environmental Education, which seeks to integrate the new paradigms of sustainability into formal and non-formal education.

One country that is starting on the road to outlining the ACE strategy is Costa Rica, as it became aware of this need when it proposed to perform a territorial diagnosis and inferred that, although actions are already being implemented in this regard, they do not respond to a common objective. They therefore began to look for spaces for conversation and awareness-raising on climate change mitigation and adaptation and discovered the value of integrating art and culture with science.

5.2 Women, indigenous communities, rural communities and new generations in public policies

Climate change and environmental degradation affect everyone. However, it has differentiated impacts on each individual, according to gender, ethnicity, age and socio-economic conditions. Climate action must not only avoid exacerbating inequalities and poverty, but also combat them by designing adaptation and mitigation strategies that recognise the needs, knowledge and rights of indigenous and rural peoples, vulnerable people and women.

In indigenous and rural communities, women play a major role in the defence of territories, the conservation of ancestral knowledge and its transmission between generations. They are guardians and protectors of nature. However, the traditionally assigned productive and reproductive roles of nurturing and care mean that "it is they who are most vulnerable to environmental change". "It is a situation that is aggravated when they belong to vulnerable groups, such as indigenous communities," said Fátima Andrade, , of the International and Ibero-American Foundation for Public Administration and Policy (FIIAPP).

This was expressed in the same vein by Ángela Cuenca, Director of Colectivo Casa, from Bolivia, for whom climate change, which has widened the gaps in access to common resources such as water and

land, has been exacerbated by extractivism, which, in addition to commodifying nature and contaminating territories, has impacts on communities and, above all, on the lives of women.

"With the arrival of mining and oil operators, there are cases of harassment of women, rape, ruptures in the family fabric, masculinisation of spaces and attempts to silence women's voices," said Cuenca. Faced with this situation, the collective carries out actions to denounce the environmental, physical and emotional violence caused by extractivism; they organise marches and gather documentation on rights violations; and they propose alternative systems for planting and harvesting water based on ancestral knowledge that generate more socio-productive options for support and mutual aid among women.

The gender approach to climate justice

"There is no climate justice without gender justice," said Laura Leonelli Morey, International Resources Coordinator of the Women's Fund of the South during one of the sessions of the EUROCLIMA+ Pavilion, where the need to mainstream the gender approach in Latin American NDCs through various tools was emphasised.

This is the case of Peru which, with the support of EUROCLIMA+, included gender, interculturality and intergenerational cooperation approaches in its National Government Plan as pillars of its public policies, in order to contribute to building a fairer, more equitable and inclusive society. Likewise, in Peru's National Climate Change Commission, a space for women's representation was included.

Milagros Sandoval, from the Peruvian Ministry of the Environment (MINAM), identified the following as the main challenges for the incorporation of this approach: i) making women's work and their predominant role in the intergenerational transmission of traditional knowledge visible, ii) collecting and systematising information on their particular situations, and iii) ensuring their active participation when they are responsible for the care of their children. This last point underlines the urgency of building community care strategies.

In addition to these, the leader of the Indigenous Peoples' Platform for Climate Change (PPICC), Tabea Casique Coronado, added other barriers to women's participation, such as discrimination in power spaces and the roles they have to fulfil in the home, which sometimes contradict their role as leaders.

In this regard, women and their communities have contributed to environmental challenges in many areas. For example, to strengthen collaboration between indigenous communities and the government, a regional dialogue was held in Chile through the Platform of Local Communities and Indigenous Peoples (Plataforma de Comunidades Locales y Pueblos Indígenas, CLPI). One of the conclusions they reached was: "It is necessary to build a new political, social and environmental pact among all the inhabitants of Mother Earth to reverse the consequences of the climate crisis, and for this, ancestral knowledge and indigenous technologies are essential," said Hortensia Hidalgo Cáceres, Hortensia Hidalgo Cáceres from the Fund for the Development of Indigenous Peoples of Latin America and the Caribbean (FILAC).

For their part, Aymara and Quechua women in Bolivia and Peru, together with their communities, have integrated ancestral knowledge and practices in climate change adaptation. The 'Pacha Yatiña Pacha Yachay Project' is an intercultural climate service that has a climate timeline that includes rainy, dry and hailstorm seasons, in order to forecast and prepare agricultural campaigns.

At the national level, Peru launched the Platform of Indigenous Peoples to address Climate Change, a proposal by the country's indigenous organisations in which they work together with the State, through the Ministry of the Environment, to manage, articulate and follow up on the proposals of indigenous peoples for climate change adaptation and mitigation, i.e. their ancestral knowledge, practices and wisdom are valued.

Inclusion of indigenous and rural communities in climate change policies

As well as women, rural communities are indispensable actors in the protection of ecosystems, which is why it is essential to analyse the main problems they face so that they can improve their levels of resilience to the impacts of climate change and increase their participation in the definition of projects and compensation mechanisms.

> *"To give value to the knowledge and ancestral knowledge that indigenous peoples have about life, to make them visible and to value them economically and socially is key, and that is why tackling this challenge requires leaving no one behind. And it is more than ever an issue of social, environmental and economic justice".*
>
> Fátima Andrade

The cross-cutting issue facing Latin American indigenous communities is the struggle over land tenure and land use. During COP26, several leaders presented the particular impacts in each of their territories. Indigenous peoples in Paraguay are facing agro-toxin contamination from soy plantations, as well as cattle ranching and deforestation, as is also the case in Mato Grosso do Sul, one of the areas most affected by agribusiness in Brazil, with the monoculture of sugar cane, maize and soy. In Peru, communities in the highlands are challenged by pollution from mining companies, while communities in the jungle face deforestation and oil spills. In Colombia, the indigenous Zenú Nuevo Caribia community fights against river pollution.

In the face of these challenges to adapt to climate change, indigenous peoples in Latin America are making contributions through a variety of strategies:

In Peru, the peasant communities of Abancay, in the southern department of Apurimac, have implemented the Mechanism for Remuneration for Ecosystem Hydrological Services (MERESEH), which is a voluntary agreement to ensure water availability, optimise demand and strengthen the governance of water resources. It benefits the urban population that uses drinking water and the rural communities located in the headwaters of the basin, who manage the water supply, contribute to the conservation of the ecosystems and, for this, receive compensation.

In Central America, there is the Knowledge Management and Good Practices for Climate Change Adaptation project, which has the Community Climate Observation Network. This carries out climate

From left to right, Karla Mena Soto, Angélica Ponce, Augusto Valderrana, Andrew Scyner

monitoring work, intervenes in early warning systems and accompanies small producers who safeguard ecosystems. According to Abdel García, del Centro von Humboldt Nicaragua: "La sociedad es el actor en la primera línea de impacto de los eventos, por lo tanto, debería ser el primer eslabón en la producción de alertas climáticas en su territorio".

The role of children and young people

Children and young people must be taken into account in tackling environmental issues, said , Milagro Brondi Z., from Terre des hommes, citing the UNICEF report *The climate crisis is a children's rights crisis*, according to which 55 million children and adolescents are exposed to water scarcity, 45 million are exposed to heat waves and 105 million are exposed to atmospheric pollution. For this reason, the goal of Terre des hommes, within the framework of the Convention on the Rights of the Child, is to achieve an optional protocol on children's environmental rights.

In the session 'Youth participation in the climate agenda: Voices from Europe, Latin America and the Caribbean', three experiences were highlighted. The first was that of Francisco Vera, who at the age of 12 is a well-known Colombian activist. In March 2019, he created Guardianes por la vida (Guardians for Life), an environmental organisation that gives children a voice. They have held tree-plantings, litter days and have participated in discussions with the government on fracking.

Francisco Vara Manzanares

The second was from Daniela Miranda and Marco Yañez Marín, young people from the Chilean negotiating delegation to COP26, who highlighted the need to expand the training in climate negotiations that they have received in the region and thus include the youth perspective in decision-making, from an intergenerational, intersectoral and intersectional dialogue.

The third was Merel Schaap from the Netherlands, who is part of the collaborative network of 60 youth organisations that built the youth agenda and participate in negotiation tables with the government of her country. They also participate in the Economic and Social Council and the Partnership for Sustainable Development.

Recognition of the role of nature

To understand the close relationship in socio-ecological systems, it is key to recognise nature as a subject of rights and an agent in our societies. This is the case, for example, of the tropical Andes, which are in a critical situation as one of the regions with the highest degree of exposure and sensitivity to global environmental changes.

Eduardo Calvo B., from the Intergovernmental Panel on Climate Change (IPCC), revealed that the IPCC's Special Report on the Ocean and Cryosphere confirmed the retreat of glaciers as a consequence of climate variations due to carbon dioxide emissions. In a worst-case scenario, glaciers are expected to disappear by 2060.

"If the planet had emissions like the four countries of the Andean Community, we would probably not be talking about climate change today".

Eduardo Calvo B.

In this regard, for the protection of mountain ecosystems in the Andean countries, it is vital to recognise the rights of nature. According to Paul Desamblanc C., Paul Desamblanc C., an Andean parliamentarian for the Republic of Ecuador, the Andean páramos are of major importance because of their capacity to store and regulate water, as well as to act as carbon sinks. For these reasons, the Andean Parliament is working on draft legislative frameworks on "the rights of nature" and the "Andean Pact for the defence of nature".

Desamblanc also highlighted the following measures for the protection of the Andean páramos: i) the inclusion of the páramos in the systems of protected areas, ii) the generation of greater knowledge about their functioning and effects, iii) their recognition as key systems for the reduction of greenhouse gases, iv) the limitation of certain economic activities, and v) the active participation of the communities and native peoples that inhabit them.

"The Andean páramos retain up to 10 times more carbon than a tropical forest, which helps to drastically reduce the amount of CO2 in the air, making the Andean páramos the world's main carbon sinks".

Paul Desamblanc

Infraestructura en la Amazonia

According to Ciro Salazar Valdivia, from the NGO Derecho, Ambiente y Recursos Naturales (DAR, Law, Environment and Natural Resources), 2020 was a devastating year for the Amazon rainforests and confirmed that there were losses of approximately 2.3 million hectares. Although not visible, deforestation caused by infrastructure projects is one of the main threats, as they are presented as access routes for connectivity, but when they are not properly planned, they enable illegal mining and logging, drug trafficking, land grabbing and uncontrolled migration.

Gabriela Soto Zavaleta, from DAR's Climate Change and Forests programme, joined the voices of defence for the Amazon. She said it is alarming that deforestation continues five years after the Paris Agreement. There is a contradiction between the commitments made at international events and what is promoted at the national level. She called for the NDCs to include analyses of the impacts of road infrastructure that emerge from civil society and indigenous peoples' organisations.

Speaking along the same lines Rodrigo Botero García, Director of the Foundation for Conservation and Sustainable Development (FCDS) in Colombia, proposed applying the Green Road Infrastructure Guidelines, which could contribute to mitigating these impacts, as their designs take into account the mobilisation of wildlife populations and the maintenance of vegetation cover, as well as restrictions on land use.

Climate justice in Latin America

The consequences of environmental degradation are not only for the territory; the communities that inhabit it are also affected. Óscar Daza Gutiérrez, of the National Organisation of Indigenous Peoples of the Colombian Amazon (OPIAC), denounced that the persecution of indigenous leaders defending their territories has increased. For this reason, he demanded that indigenous peoples be integrated into decision-making on forest management and that the right to prior consultation be respected: "Protecting indigenous peoples, their territories and their traditional knowledge systems means protecting the biodiversity of the Amazon and contributing to the fight against climate change," he said.

In line with the above, and in order to achieve more democratic societies that guarantee the right of every person and future generations to live in a healthy environment, it is necessary to follow the lines set out by the Escazú Agreement, the first in the world to contain specific provisions on human rights defenders in environmental matters. It also seeks to ensure the effective implementation in Latin America and the Caribbean of the rights of access

to environmental information, public participation in environmental decision-making and access to justice in environmental matters, as well as capacity building and cooperation. The agreement was adopted in Escazú, Costa Rica, on 4 March 2018. It is open to all 33 countries in the region, of which 24 have signed and 12 have ratified it.

The Escazú Agreement has a significant role to play in promoting climate justice in Latin America. According to Carlos de Miguel Alonso, from ECLAC, the main messages of the Agreement in terms of climate change are: i) the search for transparency and improvement of governance and environmental decision-making processes, ii) the link between the protection of human rights and environmental and climate protection, and iii) the emphasis is on people and groups in situations of vulnerability, and this has to do with just transition, in which cooperation and capacity building are essential.

In the same vein, Erick Pajares G., CEO of Biosfera - Futures Research, said that climate litigation will proliferate in the coming years as the effects of global warming become even more evident and widespread. The central goal of climate justice is effectiveness as a response to government inaction. Therefore, in his view, international environmental law is a tool for raising awareness in the face of climate devastation, "insofar as it incorporates disruptive paradigms as part of its conceptual foundations, such as planetary awareness and citizenship, the recognition of nature, the rights of future generations, ecological rights and the environmental rights of children," he said.

5.3 Information, knowledge and education

For the design of empowerment actions for climate action and socio-environmental decision-making, the Research and Education Networks are decisive for the articulation of climate information as they allow research communities in our regions to have access to environmental data and use it to carry out their activities.

For example, RedCLARA has more than 2,000 institutions connected through its 10 national research and education networks. It aims to strengthen the development of science, education, culture and innovation in Latin America, through the use of advanced networks and cooperation with Africa and Europe. Another research and education network is ASREN, from the Arab region, with an impact on Africa and Asia, which aims to connect Arab institutions with each other and with the world through high-speed data communication networks to promote scientific research, innovation and education. Another example is GÉANT, a pan-European academic and research network, which connects European research networks with the world and provides an ecosystem of information, infrastructures and services for communication, collaboration, data exchange and access to services, facilities and data repositories.

Data collection and processing are essential for monitoring and tackling climate change. However, there are numerous challenges facing those who handle and use such data. The experts meeting at the pavilion detailed the following challenges: i) building bridges between the scientific community and civil society to provide education on the use of data, ii) targeting political decision-makers to articulate efforts in terms of public policies, iii) ensuring equitable access in the various regions of the world, iv) ensuring high resolution data, and v) enabling access to real-time weather forecasts in order to foster early-warning systems.

Climate Action Labs in higher education institutions

In order to drive the changes required in an increasingly adverse socio-ecological context, Latin American universities are designing strategies that allow them to work with communities and increase their resilience. This is how they have built social innovation laboratories for climate action, a platform for South-South collaboration to think about solutions through education.

At the University of Caldas, Colombia, there is ClimateLabs Erasmus+, which, according to its

coordinator, Camilo Vallejo, seeks to make a curricular transformation that claims interdisciplinarity, to support the construction and financing of innovative projects and to classify public policy based on evidence. On this last point, progress has already been made on a pilot case to help build public policy on food security, based on urban gardens.

In the Food System Resilience Lab at the EAN University in Colombia, the idea is to enhance the education of young people through the co-creation of solutions for urban food risk mitigation. Its director, Paola Sánchez, said that the project aims to show the connection between food and climate change and that society should not only be made aware of environmental problems, but should also act to solve them.

In addition to these initiatives in Colombia, there are others in Brazil, such as Unicap Climate Lab at the Catholic University of Pernambuco. According to its coordinator, João Elton de Jesus, the laboratory wants to promote educational actions on environmental and climate issues, in addition to promoting sustainable social innovation projects that can lead to income for the population, which is why they work closely with the university community and vulnerable neighbourhoods.

Among the main challenges they identified are to break the rigid formats of the university, through the use of innovation and co-creation methodology; to integrate all the stakeholders in the local ecosystem, in order to generate alliances and develop projects together so that research has a real impact on the community.

Climate information viewers for climate change adaptation

Climate data visualisation tools have a role to play in facilitating access to information to enable adaptation measures worldwide.

Horst Pilger, Head of Sector, INTPA, European Union

In Central America, with the support of EUROCLIMA+, the Climate Change Scenario Viewer was created with the purpose of providing this region with a set of climate change scenarios with an appropriate resolution to work with, given the particular geographical characteristics of this territory. The portal contains categories such as models, including CORDEX, analogue or regression models; variables, such as temperature and precipitation; and sensitivity scenarios, depending on radioactive forcing and increases in greenhouse gases.

Other Latin American countries already have such tools. Chile has developed the Climate Risk Atlas, consisting of three elements: a climate hazard explorer, through 45 aggregated indices of temperature, precipitation, heat and cold waves; sectoral climate risk maps, using Impact Chains, which is the analysis of a system facing a threat, considering its exposure and vulnerability; and species distribution maps, which visualise and download distribution models for native and endemic species of flora and fauna. These are useful for the drawing up of regional and communal climate change action plans, as well as for the environmental assessment of projects.

Ecuador is developing a geo-viewer of climate scenarios and risks, following IPCC guidelines and also supported by EUROCLIMA+, which aims to support climate change management and encourage research. It will have four themes: climate projections, climate change adaptation measures, climate change indicator and climate risk analysis.

In Spain there is Adaptecca, which is part of the National Plan for Adaptation to Climate Change (PNACC). It has been conceived as a living tool, which changes according to the needs of the community and whose strength is its linking to public policies. Also, depending on the dataset, up to 26 variables can be queried and mainly two climate change scenarios (4.5 and 8.5), as intermediate and high emission scenarios, are included. The information can be viewed by year, month or season, and a specific region can be selected.

Another initiative is the IPCC Interactive Atlas, developed by scientists from the Spanish National Research Council (CSIC) and the Spanish company Predictia, which expands on the findings of the IPCC's Sixth Assessment Report. The IPCC findings can be viewed in a spatialised way and serve as a basis for developing interactive data or other regional or national applications.

Jorge Tamayo, from the Spanish State Meteorological Agency (Aemet), reflected on the role of the viewfinders and indicated the importance of the information they produce being useful and accessible, so it is valuable for users to be involved in the whole process, so that the needs of the different research sectors and society are considered.

Parliamentary action

One of the events that most demonstrated Latin America's leadership in climate negotiations was the meeting of parliamentary leaders from more than ten Latin American and Caribbean countries, together with parliamentarians from the United Kingdom and Spain, who gathered at the EUROCLIMA+ Pavilion to announce the creation of the Parliamentary Observatory on Climate Change and Just Transition (OPCC), which has the support of ECLAC and seeks to strengthen inter-parliamentary cooperation to promote the exchange of experiences and proposals, the monitoring of legislative discussions and the dissemination of government actions on a just transition.

Joseluis Samaniego, Director of ECLAC's Sustainable Development and Human Settlements Division, welcomed the creation of the observatory because it strengthens inter-parliamentary cooperation to undertake common actions, provides a space for exchange among peers and at the same time gives visibility to the policies and good practices of the participating countries and gives a voice to the region in the face of the problem of the degradation of nature. On the other hand, Juan Antonio López de Uralde Garmendia, Spanish MP, announced the willingness of the Spanish Parliament to cooperate in

the initiatives to be adopted at COP26, and stressed the need to give substance to these agreements so that they can be transformed into binding laws for governments.

Likewise, Alex Sobel, UK parliamentarian, mentioned the importance of the Observatory as it facilitates networking to create global solidarity. It will also be very useful in the fight against products from illegal deforestation, as it will allow parliamentarians to obtain information on the origin of the goods and thus ensure that they are complying with the law. He also welcomed the central position being given to human rights and intersectionality in this initiative, since they are essential for working towards a just transition.

"A just transition at the expense of developing countries is not justice at all".

Alex Sobel,
UK Member of Parliament

According to Gladys González, Senator and President of the Environment and Sustainable Development Commission of the Argentine Senate, officials have been called to tackle the challenge of the climate and ecological crisis in two ways: internally, to pass laws that consolidate state policies in pursuit of sustainability, and externally, to work with other nations of the world in cooperation, as is happening with the OPCC.

Likewise, Brenda Austin, Vice-Chair of the Natural Resources and Conservation of the Human Environment Commission of the Argentine Chamber, highlighted the importance of the OPCC, since through collaboration and co-creation it will be possible to advance legislation based on scientific evidence that will allow countries not to start their climate actions from scratch but to take advantage of the virtuous experiences of others.

In addition, parliamentarians from Brazil and Germany were convened during COP26 to discuss how to move forward the debate on a just transition in different parliaments. In this regard, Monica Sodré, Executive Director of Rede de Ação Política pela Sustentabilidade (RAPS), presented the study The Climate Agenda in the National Congress: a research on the perception of Brazilian parliamentarians, including interviews with 159 members of congress. In the view of 87% of respondents, Brazil should invest more resources to reduce deforestation, but only 69% agree with a more robust budget for the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), which is a key player in articulating environmental policy and protection strategies for the Amazon, and which has suffered considerable contingencies in recent years.

Also for Brazil, Alessandro Molon, a member of the National Congress, referred to the role of the Parliament in the transition agenda towards a fair and sustainable economic model, and warned of the need for a Brazilian Green Deal, inspired by elements of the European Union's Green Deal, but taking into account the country's own characteristics, in which the main problem is deforestation and land use. This proposal has five pillars, which are: infrastructure, cities, just and sustainable transition, land use and forests, and policy and regulatory changes.

Finally, Lisa Badum, from the German Bundestag, explained that the climate crisis is currently having a drastic impact on her country, something that had not been seen in the past. This is why the issue of climate change is present in parliamentary debates and citizen mobilisations, which has forced the government to take action on the issue. However, she decried the fact that the decisions taken in Parliament do not reflect the magnitude of the crisis and that it is a challenge to turn citizens' demands into real political action.

KEY MESSAGES

» Action for Climate Empowerment is an integral part of climate action planning and implementation. The education and awareness-raising of everyone is a prerequisite for action.

» The active participation of children and young people in decision-making and the implementation of climate action is necessary, not only for intergenerational justice, but also so that such policies have more impact and reach more people, drawing on diverse knowledge, experiences and points of view.

» In order to design climate change adaptation and mitigation strategies, it is key to identify the needs, knowledge, practices and rights of indigenous and rural peoples and to integrate them into decision-making.

» It is crucial to recognise the intersection between climate justice and gender justice, in relation to the impacts of extractivism on women and their vulnerability to environmental change due to their roles in production and reproduction.

» The Escazú Agreement presents an opportunity to strengthen the role of environmental leaders, improve mechanisms for access to information and participation, and promote climate justice in the region.

» It is essential to involve civil society in climate change adaptation and mitigation actions through education, innovation and communication.

» There has been progress in engaging parliaments as crucial actors in the translation of international climate agreements into concrete public policies at the national level. The creation of the Parliamentary Observatory on Climate Change and Just Transition (OPCC) during COP26 seeks to strengthen such inter-parliamentary cooperation.

» In the region, progress is being made in the creation of climate information viewers, technological platforms with a powerful capacity to analyse risks and future climate scenarios, which can guide decision-making. Initiatives underway in Spain, Chile and Central America stand out.

SOME COUNTRY CASES PRESENTED AT COP26

COUNTRIES CITED

- Argentina
- Bolivia
- Chile
- Colombia
- Costa Rica
- Ecuador
- Mexico
- Nicaragua
- Paraguay
- Peru
- Spain
- United Kingdom
- Uruguay

TOOLS CITED

- Long-Term Climate Strategy
- Climate Action Labs
- Climate Information Viewers

CENTRAL AMERICA

Climate Change Scenario Viewer

Regional portal with unified climate information. It provides inputs for better adaptation to climate variability and improved productivity, competitiveness and quality of life. It seeks to serve as a bridge between users and climatological specialists

https://centroclima.org/

ESPAÑA

Adaptecca

Platform for consultation and exchange of information on impacts, vulnerability and adaptation to climate change. It aims to strengthen the capacities of society and administrations in their adaptation actions.

https://adaptecca.es/

ESPAÑA

IPCC Interactive Atlas

This allows the comparison of climate information from all regions of the world to obtain projections of how they will be affected by climate change.

https://interactive-atlas.ipcc.ch/

SOME COUNTRY CASES PRESENTED AT COP26

CHILE

Climate Risk Atlas (ARClim)

Its objective is to produce a set of risk maps related to climate change. It contributes to the design of public policies and the implementation of adaptation measures.

https://arclim.mma.gob.cl/

MARC VANHEUKELEN

EU climate diplomacy senior advisor

"It's not just about providing support, it's about learning from each other. We are in the same boat, we have the same challenges, both for adaptation and mitigation, and EUROCLIMA+ is an excellent platform for dialogue, to support and learn from each other".

6. Impact and legacy of the EU-LAC partnership on the road to Glasgow

For two weeks in November 2021, the EUROCLIMA+ Pavilion was once again the "House of Latin America" at the COP; a house built on the solid foundations of collaboration between countries, institutions and civil society organisations.

This commitment to regional collaboration was the same one that, in December 2019, inspired the first edition of the EUROCLIMA+ Pavilion at COP25 in Chile in Madrid. This EU-sponsored vision was again evident at COP26 in Glasgow, reinforced after two extraordinarily difficult years.

The time between December 2019 and November 2021 was one of the most complex and difficult periods in our contemporary history. The pandemic, followed by a severe socio-economic crisis, against the backdrop of the climate crisis, placed unprecedented difficulty on the course of national policies and cooperation for climate action.

It was unprecedented that the Chilean presidency of the COP lasted two years instead of one; that international delegates spent almost two years without being able to meet in person to advance multilateral agendas; that the economic and personnel resources of administrations at all levels had to be focused on the emergency of protecting people from both COVID-19 and its severe socio-economic impacts.

Although the lifting of travel restrictions, the arrival of vaccines and a lower incidence of the coronavirus allowed COP26 to be held in Glasgow, there were numerous participation and operational challenges imposed by the pandemic.

Thanks to new technologies, the EUROCLIMA+ Pavilion was able to accommodate a large number and a broad spectrum of voices both in person and virtually. All sessions of the pavilion could be followed live in the source language and with simultaneous translation, and all videos and materials, such as presentations, are available on the EUROCLIMA+ website.

As proof of the European Union's firm commitment to the EUROCLIMA+ vision, the Pavilion's agenda began on the morning of 2 November with an event in the main EU pavilion that analysed the regional legacy of the collaboration between EUROCLIMA+ and the COP25 presidency in promoting climate action in Latin America and the Caribbean.

On the same day, in the afternoon in Europe and in the morning in the Americas, the EUROCLIMA+ Pavilion's own agenda opened with an event which took an in-depth look at the legacy of the Chilean nation's presidency of COP25.

The collaboration between the Chilean presidency of COP25 and the European Union has been developing since the beginning of the incoming presidency, during 2019 with the preparatory work for the conference that finally had to be held in Madrid, and until the end of 2021 with the conclusion of the Chilean presidency by passing the baton to the United Kingdom.

The EU-Chile partnership has actively supported Latin American and Caribbean countries in raising the ambition levels of their NDCs and long-term strategies and aligning them with the objectives of the Paris Agreement

This partnership between the European Union and the COP25 Presidency was supported by ECLAC and UNEP in the implementation of 30 regional initiatives between 2019 and 2021. These initiatives touched on all areas of climate action such as scientific evidence, transparency, gender approach, participation and empowerment, electromobility, just transition and green job creation, innovation and entrepreneurship, circular economy, green hydrogen, resilient agriculture and building new partnerships.

The initiatives also involved a wide range of actors: the scientific and academic world, the private sector and entrepreneurs, citizens and NGOs, decision-makers, women, indigenous peoples, youth and local governments, among others.

In her speech at the Pavilion, the President of COP25 and Minister of Environment of Chile, Carolina Schmidt, thanked the European Union and the EUROCLIMA+ programme for all the support and collaboration that had a strong regional focus.

""We established with the European Union a partnership based on our common vision of driving climate action with a sense of urgency, based on science, and as an opportunity for green recovery, and not only in Chile but also in Latin America and the Caribbean, because COP25 was the Latin American COP".

Carolina Schmidt

For her part, Jolita Butkeviciene, Director for Latin America and the Caribbean of the European Commission, stressed that the joint initiatives made it possible to "push for the creation of concrete commitments to move from political negotiation to real climate action".

Marc Vanheukelen, EU climate diplomacy senior advisor, reiterated the European Union's support for climate action in Latin America through the EUROCLIMA+ programme in the framework of the Green Pact and the NextGeneration EU recovery funds, and said that US$300 million of these funds have already been earmarked for the adaptation.

"It's not just about providing support, it's about learning from each other. We are in the same boat, we have the same challenges, both for adaptation and mitigation, and EUROCLIMA+ is an excellent platform for dialogue, to support and learn from each other".

Marc Vanheukelen

Joseluis Samaniego, Head of ECLAC's Sustainable Development and Human Settlements Division, commended the Chilean Presidency for having "driven regional work by example, being the first country in the region to submit its updated NDC to the Convention and for having recently presented its long-term climate strategy."

The Chilean Presidency's contribution to advancing regional climate action was not limited to the governmental level. Gonzalo Muñoz, the high-level champion for climate action appointed by the Chilean presidency, highlighted the efforts made to "align non-state actors with science, making 1.5°C the new climate target for society as a whole and, once achieved, making net zero emissions by 2050 the new benchmark for businesses, cities, regions and investors".

Andrea Meza, , Minister of Environment and Energy of Costa Rica and President of the Forum of Environment Ministers of Latin America and the Caribbean, described the good collaboration between the EU, the Chilean Presidency of COP25 and the Latin American region thanks to an "alignment of values, of vision, of how we understand that this process of decarbonisation and generation of resilience has to be a process that generates well-being and progress; an opportunity to transform and modernise our economies, in an inclusive manner and respecting human rights."

For his part, Hugo Morán Hernández, Spain's Secretary of State for the Environment, highlighted the experience accumulated by the Iberoamerican Network of Climate Change Offices (RIOCC), as "a space for interconnection and learning among all, where tools are generated that serve to respond to unexpected situations at critical moments, such as COP25" under the Chilean presidency held in Madrid.

"In this process of cooperation, we were able to bring it (the COP) forward, putting our common know-how at the service of the international community as a whole," he said. As a result of this Ibero-American collaboration, he continued, "a new way of understanding the dialogue processes that should accompany climate conferences in the future is emerging, integrating society as a whole in the dialogue, beyond the spaces for negotiation between governments".

Andrés Landerretche, Coordinator of the COP25 Presidency, thanked the Government of Spain "for its solidarity at a very difficult time for Chile" and for the collaboration that made it possible to relocate the COP from Santiago to Madrid in just five weeks.

In Landerretche's words, for the Latin American region, there has been "a before and after in this Presidency, in the sense that, although climate change was a well-known issue, it was not well-known at the level that we managed to permeate in society." This was possible thanks to "a very inclusive approach with all key stakeholder groups, in particular indigenous peoples and local governments," he added.

The positive impact that COP25 has had for Chile and the region has been broad and deep as shown in the book *COP25 Legacy*, published on the eve of COP26. Some of the national aspects of the legacy were highlighted at the opening event of the EUROCLIMA+ Pavilion which brought together three ministers and the head of the Chilean delegation to the UNFCCC.

Andrés Couve, , Minister of Science, Technology, Knowledge and Innovation, described how a formal linkage space was set up between scientists and decision-makers. The result, he said, has been that "around 600 Chilean researchers have produced more than 20 technical documents that systematise national evidence and 188 public policy recommendations to advance the design and support the development of mitigation and adaptation initiatives and means of implementation for climate action in the country".

From left to right, Mariana Castaño Cano, Marina Casas, Juan Carlos Jobet, Carolina Schmidt, Andrés Couve, Julio Cordano and Andew Scyner. Credit: Ministry of the Environment of Chile.

For his part, Julio Cordano, Head of the Chilean delegation to the UNFCCC, highlighted the strengthening of youth participation in the climate negotiations process thanks to the 'Young Negotiators' programme. This is a training initiative in which 1,500 young Latin Americans participated and which, in the case of Chile, allowed the incorporation of two young people into the official delegation.

They are Daniela Miranda, a 26-year-old sociologist, and Marco Yáñez Marín, a 27-year-old law graduate. Daniela and Marco participated in an event on youth and climate change organised by EUROCLIMA+, which was also attended by Francisco Vera Manzanares, a 12-year-old Colombian activist, and Merel Schaap, a youth participation expert from the Netherlands. All are pictured here with Horst Pilger and Guillermo Dascal from EUROCLIMA+.

From left to right, Marco Yáñez Marín, Daniela Miranda, Francisco Vara Manzanares, Horst Pilger, Merel Schaap and Guillermo Dascal

Conclusions

On 13 November 2021, COP26 in Glasgow closed more than 24 hours late, reflecting the complexity of reaching consensus on climate change, whose causes, impacts and solutions touch on almost every aspect of society and the economy of all nations. If COP25 was already exceptional and a logistical challenge, due to the change of venue just over a month before the event, COP26, and the almost two years that separated the two conferences, redefined what we understood by 'exceptional'.

The COVID-19 pandemic had a major impact on reality and altered the multilateral process under the UNFCCC. For almost two years, delegates, observers, activists and media, who attended climate conferences and other working meetings, had to adapt to the virtual world while dealing with the new order of priorities imposed by the pandemic.

The work of EUROCLIMA+, like that of the partner countries and implementing agencies, was impacted, but thanks to new technologies, existing collaborative processes and the determination of all, the work of advancing regional climate action continued. These almost two years of unusual work between COP25 and COP26 were reported in the numerous events of the EUROCLIMA+ Pavilion. This thematic study provides a summary of the fruitful sessions in Glasgow.

The hundreds of policymakers, experts and activists - who passed through the pavilion in person and virtually - took the pulse of the state of climate action in the region. They highlighted key achievements, but, in particular, pointed out the obstacles that need to be overcome to make faster progress towards meeting the Paris Agreement goals.

The conclusions of this study in the light of the previous six chapters are as follows: (1) we still need more climate ambition from all state and non-state actors, while structural changes are urgently needed to reconcile development with planetary boundaries; (2) although climate finance is flowing as never before, it remains insufficient and more investment, better access channels, and more solidarity are needed to realise the energy transition and adaptation; (3) those on the ground who are on the frontline of the causes and solutions to climate change, starting with governments and local populations, need to be inspired, safeguarded and empowered; (4) climate action needs to go hand in hand with biodiversity conservation and nature is an intrinsic and powerful part of the climate solution and food security; (5) we must all be part of inclusive and just climate action; and (6) collaboration and multilateralism are the best tools to make progress towards our climate and development goals.

ANNEXES

Annex I. List of events

Code	Organisers	Event
E1		The European Union and Latin America and the Caribbean Working together for a sustainable, low-carbon post-pandemic recovery.
E2	Chilean Ministry of Environment	Support from the European Union, through its EUROCLIMA+ programme, to Chile in its role as Presidency of COP25, in order to promote climate action in Latin America and the Caribbean
E3	Ministry of Environment and Sustainable Development of Paraguay and Ministry of Science, Technology and Environment of Cuba	Successful experiences of Cuba and Paraguay with the EUROCLIMA+ Programme
E4		Nature-based solutions for urban areas in Latin America
E5	Low Carbon and Circular Economy Business Action (LCBA) in Latam	Experiences in Latin America in the framework of the LCBA programme to accelerate the transition to neutrality
E6	City to City Cooperation	The role of international urban cooperation in the creation of climate policies aimed at reducing emissions, adapting to climate change and/or protecting natural habitats (case studies of Barranquilla (CO), Belo Horizonte)
E7		Working Group on Just Transition and Decent Work
E8	Chilean Ministry of Energy	The role of green finance in meeting the goals of the Paris Agreement and the Sustainable Development Goals
E9	UNEP Office for Latin America and the Caribbean	The finance we need for the future we want: a conversation with financial actors leading the transformation to a sustainable and climate-neutral economy in the LAC region
E10	Agence française de développement (AFD) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	Closing the financing gap for local climate action: solutions for the development of bankable projects and suitable financial vehicles
E11	International and Ibero-American Foundation for Public Administration and Public Policy (FIIAP)	Empowering for Climate Action: visions and lessons learnt
E12	Economic Commission for Latin America and the Caribbean (ECLAC)	Carbon pricing instruments, LAC applications
E13	FIIAP	Climate information viewers for climate change adaptation
E14	GIZ and EUROCLIMA+	Accelerating private sector climate ambition in Latin America: Opportunities and challenges of sectoral decarbonisation roadmaps

E15	ECLAC and Economic and Social Commission for Asia and the Pacific (ESCAP)	The Three Gaps Model: The Big Push for Sustainability
E16	Spanish Agency for International Development Cooperation (AECID)	Energy efficiency in LAC for climate change adaptation and mitigation under the Paris Agreement
E17	Planning Secretariat of the Province of Manabí	The role of regional territorial planning towards the definition of instruments for climate change mitigation: experience of Manabí, Ecuador
E18	Tropical Agricultural Research and Higher Education Centre (CATIE)	Financial incentives to boost nature-based solutions in LAC
E19	European Union	Youth participation in the climate agenda: Voices from Europe, Latin America and the Caribbean
E20	Delegation of the European Union to Chile	The global route to green hydrogen competitiveness
E21	FIIAPP, GIZ, UN Environment and ECLAC	Long-term Climate Strategies: Experiences and perspectives in Latin America
E22	EUROCLIMA+ and FIIAPP	Progress in the implementation of the inclusiveness principle of the Paris Agreement in Latin America
E23	International Secretariat for Water	Challenges and contributions of indigenous peoples in Latin America in the face of climate change
E24	Latin American Cooperation of Advanced Networks	Research and Education Networks for Climate Action: Impacts of academic Digital Infrastructure on climate policies
E25	Alexander von Humboldt Centre, AECID and AFD	Social inclusion of indigenous and rural communities for successful climate change policies and climate change adaptation
E26	Derecho, Ambiente y Recursos Naturales (DAR), Federación Nativa del Río Madre de Dios y Afluentes (FENAMAD), Fundación Plurales and Biosfera - Investigación de Futuros	Ecosystem protection from a climate justice, gender and vulnerable groups approach
E27	EUROCLIMA+ (GIZ) and NDC Partnership Support Unit	How to make the green recovery work? Experiences from Latin America and the Caribbean and the role of international partnerships
E28	Climate Group, Red Argentina de Municipios frente al Cambio Climático, and ANAMMA Brazil	Local government networks tackle biodiversity loss and climate change
E29	Global Climate and Health Alliance	Healthy NDCs in Latin America and the Caribbean
E30	Wildlife Conservation Society	5 Great Forests of Mesoamerica: A Regional Initiative on Climate, Biodiversity and People
E31	GCoM Americas and ICLEI South America	Accelerating and financing the implementation of Municipal Climate Action Plans in Latin America

E32	Ibero-American Observatory on Sustainable Development and Climate Change	Transforming food systems to accelerate carbon neutrality
E33	Costa Rican Ministry of Environment and Energy	Success stories on vertical integration between local and national during adaptation planning processes in LATAM and the Caribbean
E34	Brazil Climate Centre (Centro Brasil no Clima)	Governors for the climate: Brazilian states lead in NDC implementation
E35	Humboldt Chancellor Fellow	Legislative powers and climate change: how to advance the just transition debate in parliaments?
E36	ECLAC, the Federal Senate of Brazil and the National Senate of Argentina	Protagonist Latin American and Caribbean Parliaments: Announcement of the Parliamentary Observatory on Climate Change and Just Transition
E37	National Institute of Agricultural Technology (INTA)	is it possible to achieve carbon neutrality in the AFOLU sector in Argentina? Inputs on modelling and stakeholder perceptions
E38	Amazon Environmental Research Institute (Instituto de Pesquisa Ambiental da Amazonia)	CONSERV: mobilising finance to foster conservation and agricultural production on Amazonian farms
E39	Central American Commission for Environment and Development	Building Resilience in Central America
E40	GIZ	Scaling up Nature-Based Solutions in public policy in Latin America and the Caribbean
E41	Netherlands Development Cooperation Service, ICCO COOPERATION and the Ministry of Environment and Natural Resources of Guatemala	Climate finance at the local level and its articulation with public policies in Latin America: Lessons learned from project success stories in the PRA and BBE sectors
E42	Ashoka	Co-creating community-based Climate Action Labs in higher education institutions in Latin America
E43	UNEP	MoveToZero: Latin America and the Caribbean, the best untold story in electric mobility
E44	Expertise France, CATIE and GIZ	Latin America seeks funding for climate-resilient transformation of its agricultural sector
E45	SLOCAT Partnership	Climate action in the transport and urban mobility sector
E46	ECLAC	Climate ambition: new national commitments in Latin America and the Caribbean
E47	GIZ	Mainstreaming biodiversity as a tool for tackling climate change
E48	SLOCAT, EUROCLIMA+, GIZ (NDC-TIA, TraCS, Moving Chile), Mobilise Your City	Supporting multi-level cooperation for the implementation of transport strategies in NDCs

Annex II.

IN FIGURES: EUROCLIMA+ Pavilion statistics at COP26

44 events

37 hybrid events, **7** online-only events

402 presentations

335 interveners

40 high-level speakers

249 organizations

42 countries

+700 people in attendance

+15K people watched the videos online

EUROCLIMA+ COP26 Pavillion team

Country index:

Argentina	7, 9, 18, 19, 20, 22, 23, 34, 47, 50, 52, 56, 64
Bolivia	44, 49, 57
Brazil	9, 17, 18, 20, 29, 30, 32, 38, 46, 47, 58, 62, 64, 65
Chile	vi, vii, 2, 3, 5, 6, 7, 12, 16, 18, 19, 20, 21, 22, 23, 24, 34, 35, 49, 56, 57, 59, 63, 66, 68, 70, 71, 72
Colombia	3, 4, 17, 19, 20, 21, 22, 23, 24, 26, 32, 34, 35, 43, 44, 47, 48, 48, 55, 58, 59, 60, 62, 72
Costa Rica	2, 3, 5, 7, 18, 19, 21, 22, 23, 24, 35, 43, 46, 48, 49, 56, 60, 70
Ecuador	30, 31, 35, 39, 48, 60, 63
Spain	63, 64, 66, 71
El Salvador	6, 43
Guatemala	3, 5, 7, 12, 22,43, 47, 48
Honduras	xii, 4, 5, 6, 12, 22, 43, 46, 47, 48
Mexico	3, 17, 20, 21, 23, 28, 32, 33, 35, 38, 40, 42, 43, 45, 46, 47, 52
Nicaragua	22, 59
Panama	4, 6, 12, 17, 22 23, 24, 49
Paraguay	7, 8, 12, 58
Peru	7, 21, 22, 23, 24, 44, 57, 58
United Kingdom	64, 69
Dominican Republic	5, 22, 30
Uruguay	3, 4, 35, 56

Index by instrument :

Carbon budgeting	2, 15, 28, 35
Climate Change Act	3, 4, 11, 12
Multi-level governance	5, 11, 29, 30
Decentralisation of decision-making	5, 31, 37
Warning systems	6, 59, 62
Investment Roadmap	17, 24, 56
National Risk Map	17, 23, 24, 63, 66
Market-based instruments	17, 21, 23, 28
Carbon taxation	20, 21, 23, 24
Social cost of carbon	21, 22, 23. 24
Green taxonomies	17, 18, 24
Sectoral roadmaps	15, 18, 19, 23, 24, 50
Voluntary agreements	19, 24, 46, 47, 58
Trade agreements	18, 19, 20
Technology transfer	2, 18, 19, 20, 23
Energías renovables	x, 6, 7, 8, 11, 15, 16, 20, 28, 35, 38
Comprehensive social perspective	28
Innovation in governance	37, 52
Citizen participation	55, 56, 57, 58, 59, 61, 65, 70, 72
Nature-based solutions	x, 16, 32, 33, 41, 42, 43, 45, 46, 49, 51
Urban agriculture	32
Urban guidelines manual	33
Digitalisation	34
Electric mobility	7, 11, 34, 37
Long-Term Climate Strategy	1, 3, 4, 5, 6, 8, 12, 18, 19, 23, 32, 70
Climate Action Labs	62, 63
Climate Information Viewers	63, 65

MN-AL-22-006-EN-N

Oficina de Publicaciones
de la Unión Europea

ISBN: 978-92-76-53662-8