LAC-EUROPE

Latin America and the Caribbean–European Union Relations: strengthening a strategic alliance

DEVELOPMENT BANK
OF LATIN AMERICA
AND THE CARIBBEAN

LAC-EUROPE

Latin America and the Caribbean-European Union Relations: strengthening a strategic alliance

CAF
DEVELOPMENT BANK
OF LATIN AMERICA
AND THE CARIBBEAN

LAC-EUROPE Series © CAF 2023

Authors
Latin America and the Caribbean-European Union Relations: Strengthening a Strategic Partnership
Germán Ríos and Erika Rodríguez with contributions from Efrén Rodríguez and Alejandro Sabarich.

Challenges of Social Policy in Latin America and the Caribbean: Analysis and Policies
Lucila Berniell, Dolores de la Mata,
Ernesto Schargrodsky, and Adriana Arreaza -
CAF Knowledge Management, with the collaboration of Santiago Levy - Brookings Institution.

Innovative Paths of Investment, Cooperation, and Digital Alliance
Gustavo Beliz, Ángel Melguizo, and Víctor Muñoz.

Joint Climate Action between Europe and Latin America and the Caribbean: A Common Development Agenda
Mauricio Cárdenas and Pierpaolo Cazzola.

Editorial Coordination
CAF Strategic Communication Directorate.

Design GOOD;)
Communication for Sustainable Development.

Sustainable printing on ecological Earth Pack paper, 100% sugarcane fiber, 0% tree fiber, 0% bleaching chemicals.

This and other digital publications are available in CAF's virtual library at **scioteca.caf.com**

Content

Weaving transatlantic ties in the age of global challenges

SERGIO DÍAZ-GRANADOS
Chief Executive Officer
CAF -Development Bank
of Latin America-

In the complex fabric of international relations, Latin America and the Caribbean and the European Union have maintained a historical link nurtured by cultural, economic and political ties over the centuries. Today, this relationship has been reconfigured in light of three pressing global challenges: digital transformation, climate change, and the fight against poverty and inequality. These challenges do not recognize borders and require transatlantic collaboration to find effective solutions.

Digital transformation has burst into all areas of society, changing the way we live, work and communicate. Latin America and the Caribbean, with its cultural and geographic diversity, has embraced technology as a key tool for driving social and economic inclusion. However, many regions and segments of the populations still have connectivity challenges and digital divides. On its part, the European Union has demonstrated leadership in technological innovation and regulating new technologies.

By joining forces, both regions can exchange knowledge and resources to enhance digital transformation. Collaboration in building digital capacities and in creating and strengthening startup ecosystems could expand economic opportunities in Latin America and the Caribbean with high-quality commercial and productive exchanges that generate social well-being. The European experience in creating regulatory policies for new technologies, data protection and cybersecurity could provide a valuable framework for building appropriate public policies to support digital transformation in Latin America and the Caribbean. The two regions can reap the rewards of digital transformation by working as a team, leaving no one behind. The role of the Latin American and European private sector is key to leveraging investments and taking advantage of digital transformation opportunities.

On the other hand, both Latin America and the Caribbean and the European Union are committed to fighting global warming, which is a global challenge that requires urgent cooperation by all the planet's countries. Latin America and the Caribbean, with its wealth of biodiversity and natural resources, is particularly vulnerable to the impacts of global warming, and is one of the regions with the greatest renewable energy potential. Europe has been a leader in reducing emissions worldwide and promoting renewable energy, and is an innovator in public policies to mitigate the dire consequences of climate change. Collaboration on this front could lead to jointly implementing environmental policies, investing in sustainable infrastructure and protecting crucial ecosystems, such as the Amazon and other tropical forests. Transferring green technology and investing in clean energy could drive a transition to more sustainable economies in Latin America and the Caribbean. By sharing its lessons learned in reducing emissions and adapting to climate change, the European Union can provide valuable input for charting a path towards a greener, more sustainable future.

Eradicating poverty and reducing inequality is an integral part of the Sustainable Development Goals. It requires coordinated action in all regions. Latin America and the Caribbean face challenges in the equitable distribution of wealth, high levels of poverty and access to basic services. With its experience in social well-being policies, the European Union can contribute ideas for building stronger social security systems and social policies to tackle poverty and inequality. Moreover, the quality of its commercial and productive exchanges is an axis on which to promote productive transformations and support improving the labor market and social protection.

Collaboration in the fight against poverty and inequality can involve exchanging best practices in economic inclusion policies, conditional transfer programs, job creation policies and strategies to address the exclusion of specific groups. The European Union can share its experience in institutionalizing social protection, reducing child poverty and protecting vulnerable groups, while Latin America and the Caribbean has innovative approaches that have proven successful in mobilizing local communities and innovative social programs.

The CAF can play a key role, contributing its experience and capacity to lead regional alliances and govern initiatives for the material transformation of productive and labor systems. It also plays a key role in the issues prioritized in the bi-regional relationship. The green and digital transitions and overcoming structural gaps are objectives shared by the CAF and areas in which its experience and interest can contribute to an efficient, effective and sustainable transformation.

Latin America and the Caribbean and the European Union have a historic opportunity to weave a transatlantic cooperation network and address common challenges in this era of globalization. As they make progress in digital transformation, fight climate change and work together to eradicate poverty and inequality, both regions can learn and grow together, creating a more inclusive, sustainable and prosperous future for all their people.

Value Proposition of CAF to Europe: **From Santiago to Santiago**

Santiago de Chile
CAF Assembly / CAF-CEPAL
march 6-9, 2023

Attendees
Ministers of Economy and Finance and Central Bank Presidents from 21 member countries; CAF Board of Directors.

MILESTONES

- Challenges and proposals for incorporating a gender perspective into the design and implementation of public policies, as well as in regional cooperation.
- Debate on fiscal challenges due to regional decentralization. Enhancement of subnational government capacities (tax collection, expenditure execution, etc.).
- Design of a more efficient organization in the relationships between different levels of government, aimed at promoting local development, innovation, and the consequent generation of opportunities.
- Impact, challenges, and opportunities of the venture capital industry in sustainable development. • Presentation of the CAF Economics and Development Report (RED) 'Inherited Inequalities: The Role of Skills, Employment, and Wealth in the Opportunities of New Generations.'
- Youth leadership: Conversation with young people from Latin America and the Caribbean.
- Launch of the CAF Strategy for the Inclusion of People with Disabilities and Ethnic-Racial Diversity.

Bruselas

EU-LAC Business Summit / European Commission-BID-CAF
july 17th - 18th, 2023

Attendees
Political leaders, CEOs of companies, directors of development financial institutions, and industry associations; CAF Board of Directors.

MILESTONES

- The European Union announced an investment of 45 billion euros in the region through the Global Gateway.
- The European investment agenda has identified 136 projects in which both the EU and multilateral organizations in the region will be involved.
- Of the 136 projects, CAF has identified 70 national and regional initiatives to concretize European investment in projects focused on poverty and inequality reduction, promoting a green and just transition, and digital transformation.
- Investment opportunities in renewable energy and green hydrogen, critical raw materials, decarbonization, transportation infrastructure projects, 5G and last-mile connectivity, digitalization for public services, sustainable finance, green bonds, among others.

Santiago de Compostela

First Meeting of EU and Latin America and the Caribbean Ministers of Economy and Finance / European Commission-BID-CAF
Santiago de Compostela, september 15, 2023

Attendees
33 Latin American and Caribbean finance ministers, 27 EU finance ministers; CAF Board of Directors.

MILESTONES

- Cooperation and investment agenda based on green transition, digital transformation, and human development.

Sector-specific discussion notes prepared by CAF

- **Human Development**
  Global challenges cannot be overcome without a society in which there are opportunities for progress through equitable and quality access to education, adequate social and healthcare protection systems, decent and formal working conditions, and gender equality.

- **Digital Transformation**
  Analysis of connectivity issues, the role of digital education and training for the future of work, intelligent digital regulation, the role of technology in addressing climate change, not forgetting gender equity and social inclusion.

- **Green Transition**
  Latin America and the Caribbean are among the regions most affected by the climate emergency, hence the urgent need for a green, responsible, and just transition. It has crucial energy resources and raw materials for the transition to the decarbonization of global economies. European investments in these technologies can significantly reduce greenhouse gas emissions (GHG), achieving reduced dependence on imported products derived from fossil fuels.

EU-CAF Investment
Projects Map

EL SALVADOR
- Digital connectivity
- * Line 1 of the Metro

JAMAICA
- Renewable Energy
- * Green bonds

MEXICO
- Energy transition
- * Green bonds
- * Watershed Management

DOMINICAN REPUBLIC
- Improvement of sanitation systems
- * Green bonds
- * Sustainable urban transportation

COLOMBIA
- 85% of digital connectivity by 2026
- Sustainable economy and cities
- E-mobility

COSTA RICA
- * Health
- * E-mobility
- * Green bonds

PANAMA
- Energy in transition
- The Canal's Decarbonization
- Digital transformation
- Vaccines and biopharmaceuticals

BARBADOS
- Improvement of the drinking water management system
- Investment in Blue Green Bank
- * Renewable energy

TRINIDAD AND TOBAGO
- Digital transition
- * Renewable energy
- Water and sanitation

ECUADOR
- Water to fight chronic child malnutrition
- Water and sanitation of Portoviejo
- * Sustainable mobility
- * Green bonds

VENEZUELA
- Reduction of methane and CO2 emissions

PERU
- Water security in urban areas
- Conservation and protection of natural heritage
- Electrical interconnection systems
- BRT Systems
- * Light Urban Rail
- Circular economy
- * Green economy investments
- Electrical Interconnection of the Andes

BRAZIL
- Renewable energy
- The modernization of water and sanitation systems
- * Iniciativa Bosques Tropicales
- Apoyo a pymes en tecnologías verdes

BOLIVIA
- * Renewable energy

URUGUAY
- Water and sanitation
- Promoting electric urban mobility
- * H2 Production

CHILE
- * H2 Production
- Carbon Neutral Fuel Production

PARAGUAY
- Water and sanitation
- The fight against deforestation
- Renewal of the power transmission network

ARGENTINA
- Electric transmission
- Rural development program
- * Energy in transition - Hydrogen
- * Critical raw materials

70 potential joint EU-CAF initiatives

- Digital
- Climate and energy
- Sustainable transportation
- Health
- Education and research

* The CAF's interest in participating

EU-CAF

Agenda of initiatives included in the Global Gateway Investment Agenda in which the CAF is participating or is interested in participating.

CENTRAL AMERICA

- Regional energy market

THE CARIBBEAN

- * Maritime connectivity
- Converting sargassum into biofuel

LAC

- * LAC Global Green Bond Initiative
- Electromobility and transportation - LAC
- Regional Amazon Basin and the Amazona
- Green transition - LAC
- Inclusive and egalitarian societies - Social cohesion

8 potential joint EU-CAF regional initiatives

- Digital
- Climate and energy
- Sustainable transportation
- Health
- Education and research

* The CAF's interest in participating

Abstract

The continuous changes in international geopolitics are forcing its various actors to review and redefine their strategic alliances. Recent events, such as the COVID-19 pandemic, China's renewed presence in Latin America and the Caribbean in light of the United States' loss of influence in the region, Brexit and Russia's invasion of Ukraine, are part of a constantly evolving international scenario. This article analyzes how the European Union (EU) and Latin America and the Caribbean (LAC), with long-standing historical ties and shared values, as well as various partnership, free trade, political and cooperation agreements, have the necessary incentives to revitalize dialogue on the most varied levels and jointly face the challenges of the digital, ecological and socioeconomic transition within the framework of the Sustainable Development Goals (SDGs) and 2030 Agenda. In a world that increasingly requires quality and trusting relationships, and designing inclusive public policies that make major agreements possible, Spain's Presidency of the Council of the European Union comes about as a great window of opportunity for relaunching EU-LAC relations.

Introduction

On July 17, 2023, the European Union (EU) and the Community of Latin American and Caribbean States (CELAC) decided to continue building a strategic relationship between the two regions. The meeting between EU heads of state in Brussels helped reactivate a process of dialogue and high-level political cooperation. The presence of representatives and dignitaries from the two regions' 60 countries, signing a joint declaration, and launching EU a New Agenda are proof of the interest of and historic opportunity for the two regions.

The world has changed considerably since the first Latin America and the Caribbean (LAC)-EU Summit, held in Rio de Janeiro in June 1999. The issues that tend to be at the top of the agenda currently include overcoming the toll of the COVID-19 pandemic, China's renewed presence in Latin America in light of the United States' loss of influence in the region, Brexit, and Russia's invasion of Ukraine and its impact on the world economy. The topics have been different in successive summits, for a total of nine to date, and with a name change since the summit held in Santiago de Chile in 2013 due to the creation of CELAC as an intermediary entity with the EU, but all of the topics have had a strong impact on the future of EU-LAC relations.

Several events in recent years, such as the Brexit crisis and distinct anti-European discourse of certain European and Latin American leaders, are evidence of the turbulence that affects and will affect relations between the two regional blocs. However, it also demonstrates the need to identify the opportunities emerging from recurring crises. This article analyzes the incentives that both the EU and LAC have to strengthen relations that make a genuine strategic alliance

POLICY PROPOSALS ARE PRESENTED, SOME OF THEM BELONGING TO PROJECT BANKS OF MULTILATERAL ORGANIZATIONS, SUCH AS CAF-DEVELOPMENT BANK OF LATIN AMERICA AND THE CARIBBEAN-RESEARCH CENTERS, OR PUBLIC-PRIVATE PARTNERSHIPS.

possible and allow them to go beyond declarations and, furthermore, assume the variable geometry provided by all the instruments for Euro-Latin American relations: bilateral, subregional and bi-regional.

The expected ratification of the EU-Mercosur Association Agreement, after over two decades of negotiations, or the modernization agreements with Chile and Mexico, as well as the meetings of the Euro-Latin American Parliamentary Assembly (EUROLAT), demonstrate the complexity of this variable geometry and the relevance of multilevel dialogue.

For the recent EU-LAC Summit held in Brussels in July 2023, the European Commission and High Representative launched a New Agenda for EU-LAC Relations. This agenda proposes a modernized and stronger strategic partnership through reinforced political dialogue, stimulating trade and investment and fostering more sustainable, just and interconnected societies through the investments of the *Global Gateway* strategy.

The European *Global Gateway* strategy aims to promote smart, clean and secure bonds in strategic sectors worldwide. More specifically, the investment agenda in LAC revolves around the following pillars: a green and just transition, an inclusive digital transformation, human development, the resilience of health and vaccines.

Smart investments in quality infrastructure are promoted, in compliance with the highest social and environmental standards and in line with EU interests and values: human rights, the rule of law, and international regulations and standards. To achieve its objectives, the EU has made up to EUR 300 billion in investments worldwide available through a *Team Europe* approach, which brings together the EU, its Member States and its financial and development institutions. In LAC will be mobilized EUR 13 billion until 2027. Spain, specifically, will mobilize EUR 9.4 billion. They have identified 136 projects for the coming years across the region.

The CAF has identified 70 *Global Gateway* initiatives with potential for collaboration with European entities in its member countries. It already participates in some way in some of them, either with studies or financing. This initiative is a powerful tool for identifying joint projects and initiatives and joining efforts among various entities, complementing and increasing the countries' development impact.

In 2022, the European Investment Bank (EIB) signed fifteen *Global Gateway* contracts for a total of EUR 1.7 billion. In addition, alongside direct investment financing, the strategy promotes other investment financing models (EIB, 2023): the first is the Global Gateway guarantee to finance investments in sectors, such as clean energy, green infrastructure and health care. The guarantee will have a maximum impact on the *Global Gateway's* investments in partner countries where sovereign debt and other public sector risks pose a problem when it comes to obtaining financing. In addition, under the open architecture of the European Fund for Sustainable Development (EFSD+), the EU will provide guarantee coverage of up to EUR 13 billion until 2027. It will be carried out through a variety of implementing partners, such as international financial institutions (including the EIB) and European development finance institutions, seeking to attract private investments that support partner countries' achievement of the Sustainable Development Goals (SDGs).

Based on this progress and these opportunities, this article describes the evolution and main characteristics of EU-LAC relations in two fundamental dimensions:

(a) political-institutional and development cooperation; and

(b) economic-financial, while outlining the challenges of the digital, ecological and socioeconomic transition on both sides of the Atlantic. The objective is to draw up a road map for strengthening the European integration process and its relationship with LAC.

There are also public policy proposals, some of which belong to project banks of multilateral organizations, such as CAF-Development Bank of Latin America and the Caribbean- (research centers or public-private partnerships, and proposals for the continuity and growth of initiatives such as, for example, the EU-LAC Focus project, in the field of Higher Education, which can be very useful for relaunching EU-LAC relations. These and other issues will take on special relevance in the coming months due to Spain's Presidency of the Council of the European Union in the second half of 2023, Europe's intermediary par excellence with Latin America.

01 Diagnosis of relations between the European Union and Latin America and the Caribbean

This chapter analyzes the state of trade, economic, financial, and cooperation relations between Europe and Latin America and the Caribbean, and proposes a series of policies that would help promote and accelerate the Agenda 2030 in both regions.

The political-institutional and development cooperation dimension

Prior to Spain and Portugal's entry into the European institutions, political and institutional relations between Europe and Latin America and the Caribbean were primarily focused on their interests in the former colonies of the European Community's countries, mainly in the Caribbean, with limited diversification towards the rest of the region's areas and countries. There are multiple studies and views on the reasons that could explain the scarce rapprochement between Europe and Latin America and the Caribbean. But, in general, there is a relatively widespread consensus on factors, such as:

(a) the absence of a common European Union foreign policy towards the region due to the disparity of interests and visions of the countries that comprise it;

(b) the instability and political, economic and social heterogeneity of Latin American and Caribbean countries;

(c) the lack of progress, concreteness and results of regional integration processes; and

(d) the United States' position as the primary partner in the region (Muñiz de Urquiza, M. 1989; and Najera Ibañez, A. 1986).

Signing the Treaties of Accession allowed Spain and Portugal to join the EU and its institutional fabric at the start of 1986. The history, values, language, culture, political, economic, and human ties both countries have with LAC were key to increasing the EU's rapprochement with the region in a broader and more diverse way, and to establishing relationships on solid foundations. However, in spite of the important rapprochements and the demonstration of willingness from a political point of view manifested through the EU-LAC Summits, meetings between foreign ministers of both regions, regular contact on a parliamentary level, and the multiple action plans and mechanisms to promote development EU countries have activated, both bilaterally and from the European institutions,[1] LAC has lost relevance in the political priorities of EU institutions and instruments in terms of external action.

A new international cooperation and partnership instrument, the *"Neighborhood, Development and International Cooperation Instrument - Global Europe"* (*NDICI - Global Europe*) was created within the EU Multiannual Indicative Program 2021-2027, merging the multiple financing instruments used in the Multiannual Indicative Program 2014-2020 to provide greater coherence, simplification and flexibility to support in terms of EU-driven external action. This program is strategically aligned with global challenges, centered on the *"Policy First"* and *"Shared Values"* philosophy, and a firm commitment to implementing the Sustainable Development Goals (SDGs). Within this program, about EUR 3.4 billion has been allocated for LAC, below the

THE HUMAN TIES THAT BOTH COUNTRIES MAINTAIN WITH LATIN AMERICA AND THE CARIBBEAN WERE CRUCIAL IN INCREASING THE EU'S APPROACH TO THE REGION IN A BROADER AND MORE DIVERSE WAY.

1. EU Initiatives in LAC:
    - Latin American Investment Facility (LAIF) and Caribbean Investment Facility (CIF), which have co-financed over 50 projects since they were launched in 2010, with a contribution of about EUR 450 million, mobilizing an investment of approximately EUR 12 billion (generating an estimated investment of EUR 26 for every Euro contributed by the EU through LAIF and CIF).
    - EUROCLIMA Program, which has been contributing to improving the knowledge of policy makers in Latin America and the Caribbean since 2010 on the problems and consequences of climate change and, more recently with EUROCLIMA+, assisting the implementation of strategic actions to comply with the Nationally Determined Contributions.
    - The Cooperation Program between Latin America and the Caribbean and the European Union on Drug Policies (COPOLAD), which has served as a cooperation instrument in the fight against drugs since 2011. It has had 3 editions and has mobilized more than EUR 30 million.
    - The Europe Latin America Assistance Program against Transnational Organized Crime (EL PAcCTO), since its launch in 2017, has enabled mobilizing valuable technical assistance and experience exchanges to strengthen capacities and facilitate international cooperation.
    - The EUROFRONT Program, which contributes to security and improves respect for and protection of human rights and social and economic development by strengthening border management, especially in (i) integrated border management; and (ii) the fight against migrant trafficking and smuggling.
    - The EUROsocial Program, which has supported reducing inequalities, improving social cohesion levels, and institutional strengthening in Latin American countries since 2005, by providing support in designing, reforming and implementing public policies and their focus on the areas of gender equality, governance and social policies.
    - In addition, it is important to highlight the European Investment Bank (EIB) and European Development Finance Institutions (EDFIS) due to the significant amount of funding they provide for development projects in the region, the BELLA Program that supports interconnectivity between Europe and Latin America, the significant aid provided by European countries for development cooperation and by the EU through COVAX and direct health assistance, especially during the COVID-19 pandemic, and others, such as Erasmus+, Horizon Europe, and Copernicus.

THE EU'S PLANS ARE CLEAR: ITS COMMITMENT TO THE AGENDA 2030, THE SIGNIFICANT AGREEMENTS REACHED THROUGH THE EUROPEAN GREEN DEAL AND THE NEXT GENERATION EU, AND THE *GLOBAL GATEWAY* INITIATIVE.

EUR 30 billion for Africa or the EUR 8.5 billion for Asia and the Pacific. This is evidence of Europe's shift of attention to Africa and the Middle East (Jung Altrogge. T, 2021).

Historically, the EU has been a key player in the region's development, as the main provider of Official Development Assistance (ODA). It is set to be an essential partner in LAC's efforts to comply with the SDGs. The current geopolitical, economic and social context and the challenges of the 21st century open up a new opportunity for collaboration in which post-pandemic recovery, the food and energy crisis, climate change, weakening institutional systems and democracies, human rights and the multilateral order must be at the center of the agenda.

The EU's plans are clear. Its commitment to the 2030 Agenda, the important agreements reached through the European Green Deal[2] and Next Generation EU[3], and the Global Gateway initiative, are evidence that the EU is focused on advancing the post-pandemic recovery through a green, digital and social transformation of its economy and boosting its relationships and positioning with the rest of the world through a significant political and financial commitment. This translates into a great opportunity to renew and strengthen relations with LAC: (i) intensifying political dialogue; (ii) modernizing, updating and complementing the network of existing trade and partnership agreements between the two regions; (iii) cooperating and investing pragmatically in shared priorities and interests, such as the green and digital transition and social cohesion; and (iv) promoting peace, democracy and human rights (Borrell, J. 2022). The EU must carry out all these actions in close cooperation with

2. The European Green Pact will be funded by 1/3 of the EUR 1.8 trillion from *Next Generation EU*, with which the EU expects to reduce its net greenhouse gas emissions by at least 55% by 2030 and be emission-free by 2050.
3. *Next Generation EU* is the recovery plan the EU hopes to use, not only to emerge stronger from the COVID-19 crisis, but to transform its economy and society and design the Europe of the future..

regional organizations and groups, and its multilateral partners.

In recent decades, China has gained ground in the region over Europe and the United States in terms of political relations and the use of integration instruments and infrastructure financing. Proof of this are the more than 77 meetings between state leaders in the last 12 years (Dourado, L. 2021)[4], its incorporation as a permanent observer in the Organization of American States (OAS), its integration into the Inter-American Development Bank (IDB), its extensive work agenda and investment plans along with CELAC, having created the China-LAC Cooperation Fund, the Special Loan Program for China-Latin America Infrastructure Projects, the incorporation of 20 LAC countries into the Belt and Road Initiative[5] (BRI), and the significant package of support measures that were activated during the worst phases of the pandemic through donations in materials and vaccines[6] (Roy, D. 2022).

China has a clear vision and objectives in the region, and has also activated financing programs in sectors in which the region has significant resource needs. However, according to a recent study conducted by the *Friedrich Ebert Foundation*, Latin Americans and Caribbeans continue to perceive the EU as their natural and preferred ally and partner. This finding shows that the EU has open doors to regain rapprochement with the region at a time when their interests are more aligned than ever (Schulz, M. 2022). LAC will play a fundamental role in the global energy and digital transition, as it has a significant amount of the world's reserves of essential elements for producing advanced technologies;

THE EU IS FOCUSED ON ADVANCING POST-PANDEMIC RECOVERY THROUGH A GREEN, DIGITAL, AND SOCIAL TRANSFORMATION OF ITS ECONOMY.

4. In total, the leaders of China and LAC countries have met at least 191 times since founding the People's Republic of China. In the first 40 years (1949-1890), 18 meetings were held, mostly promoted by LAC. Between 1990 and 1990, 46 meetings were held, including the first visit to the region by a Chinese president. Between 2000 and 2009, 51 meetings were held. Finally, 77 meetings were held between 2010 and 2019.
5. The *One Belt One Road* Initiative (OBOR), now the *Belt and Road Initiative* (BRI), was launched in 2013 by China and led by President Xi Jinping as his key foreign action policy program. Initially, the initiative was designed to modernly connect China with its South Asian neighbors, but its scope has grown, expanding to many corners of the world, financing the development of traditional infrastructure (roads, power plants, railroads, ports, telecommunications infrastructure, smart city initiatives, *cloud computing solutions, e-commerce,* mobile payment systems, etc.).
6. The EU also activated significant support plans for the region during the pandemic, but these were slow to arrive due to the EU's institutional difficulties in approving support packages quickly. Nevertheless, the EU has been a key player on the global stage when it comes to accelerating vaccine research and development. It has been a major contributor to the multilateral COVAX initiative to ensure international vaccine solidarity. In the case of LAC, almost EUR 3 billion was committed to address humanitarian and emergency health needs. In addition, over 80 million vaccine doses were channeled to the region through COVAX and direct exports and donations.

significant potential to feed a large part of the planet; because it has a large part of the world's primary forests and global biodiversity; and because it is the world's least polluting region. This has led to initiatives, such as *friend-shoring*, *near-shoring* and *green-shoring*, which could play an important role in the region's development in the coming years.

The emphasis on a relationship based on common values is not an empty statement. On the contrary, Latin Americans confirm this community of values in their perception of the EU. According to the survey on the perception of the EU in LAC, 64% of respondents believe the EU is the best partner, compared to China and the US, on environmental issues, and the EU is also the best partner in the fight against poverty and inequality (54%), for culture and education (46%) and for strengthening democracy.

Latin Americans also perceive the EU as a great promoter of peace (63% of those surveyed), with a majority (48.1%) supporting the EU as the region with which it is most convenient for their countries to relate, compared to 19% who prefer a relationship with the U.S. A. (Latinobarómetro, FES, 2023). Another important aspect of the relationship between the two regions and their common values is their commitment to democracy and the rule of law. Despite a certain setback, surveys indicate that support for democracy as a political regime in LAC is predominant with respect to other alternatives. In fact, 67% of those surveyed believe "democracy may have problems, but is the best system of government." Moreover, although there has been an increase in extremist political proposals, as in the EU, such radicalization has not been observed in citizen's ideological self-perception, which remains in the center: 68% of the electorate defines themselves as centrists, center-left or center-right (Malamud, Ruiz, Talvi. 2023).

One dimension to be taken into account is the interpersonal connections with LAC. Latin Americans favor North America and Europe as the regions with which they have the most relevant social exchange. This implies that these two are the regions to which the greatest number of international students travel, the most attractive regions for migration, and the regions from which a greater exchange of remittances flows (Malamud, Ruiz and Talvi. 2023). This social proximity also fuels tourism, and cultural and innovative exchanges. Both region's citizens have a high level of mutual understanding, which favors and reduces the economic and social cost of exchanges of all kinds.

Moreover, the EU and LAC are also key partners in defending and strengthening a rules-based international system. In total, the countries that make up these regions represent almost one-third of the members of the United Nations. LAC is a region that, despite the weaknesses of its regional integration systems, has always been committed to multilateralism and using its causes both to promote a vision of development and for the governance of the international system, its regulation and to solve problems. In fact, it is the region of the world with the fewest inter-state conflicts.

Development banks have played a very relevant role in the two region's shared understanding on multilateralism and the necessary promotion of development from this level. These are indispensable elements of countercyclical policy for Latin America because they provide three key supports. First, medium- and long-term financing to the public and private sectors in countries with underdeveloped financial markets and restricted access to the global market. Second, through financing, they provide foreign currencies to a region with external current accounts in deficit. Finally, they are a source of technical assistance, which means the knowledge to solve problems and formulate better policies and ensure the quality of operations (Poli, 2020).

The EU is a pioneer in its regional development strategy and capacity to generate financing instruments, despite the great and evident asymmetry between Latin American and European countries. There are significant synergies and opportunities for collaboration between their regional systems. The CAF, as a development bank, can provide strategic value by contributing to the governance of green and digital transition initiatives and contributing its experience and capacity to act successfully in the Latin American environment.

THE EU AND LAC (LATIN AMERICA AND THE CARIBBEAN) ARE KEY ALLIES IN ADVOCATING FOR AND STRENGTHENING AN INTERNATIONAL SYSTEM BASED ON RULES.

The economic and financial dimension

Between 2001 and 2021, the value of trade in goods between the EU and LAC increased from USD 98.5 billion to USD 245.3 billion. During this period, trade flows between these regions grew at a compound annual rate of 4.7%. However, the EU has lost weight and relative importance as a trading partner for the region, mainly due to China's growing positioning, which experienced a compound annual growth rate in trade exchanges of goods with Latin American and Caribbean countries of 18% during the same period. In 2014, China became the second-largest trading partner for LAC, moving the EU to third place behind the US and China. The EU went from being the destination of 25% of LAC exports in 2001 to 8.3% in 2021. In terms of imports, it went from being the origin of 22.9% of LAC imports in 2001 to 11.8% in 2021 (Figures 1 and 2).

Figure 1.
Evolution of total bilateral trade in goods between the EU, China and the USA with LAC

Source. International Trace Centre, Trademaps.

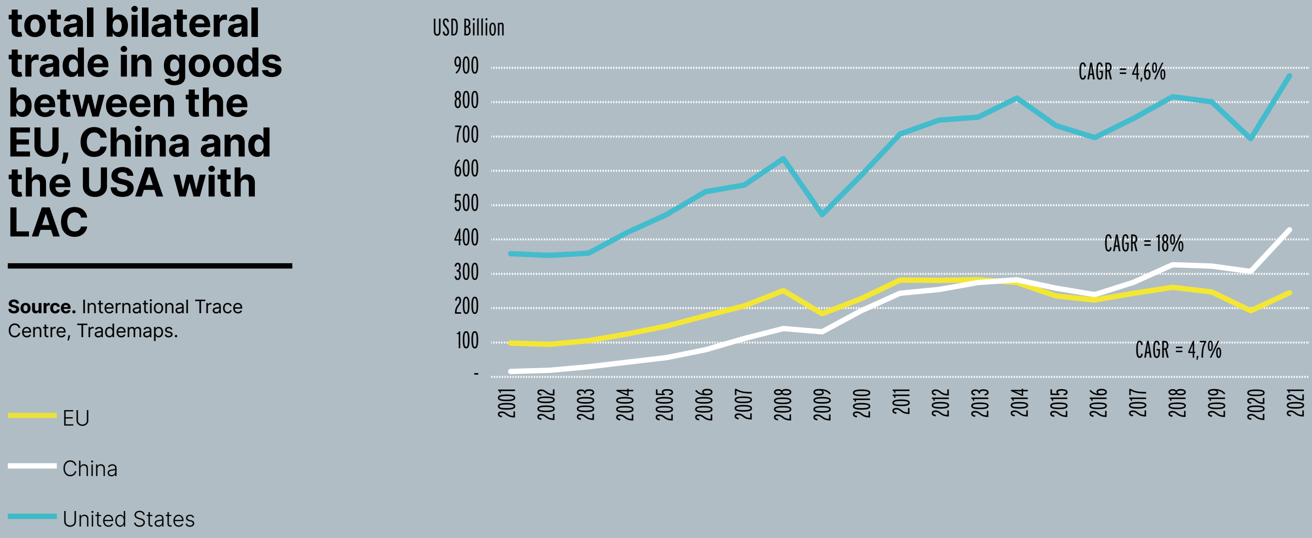


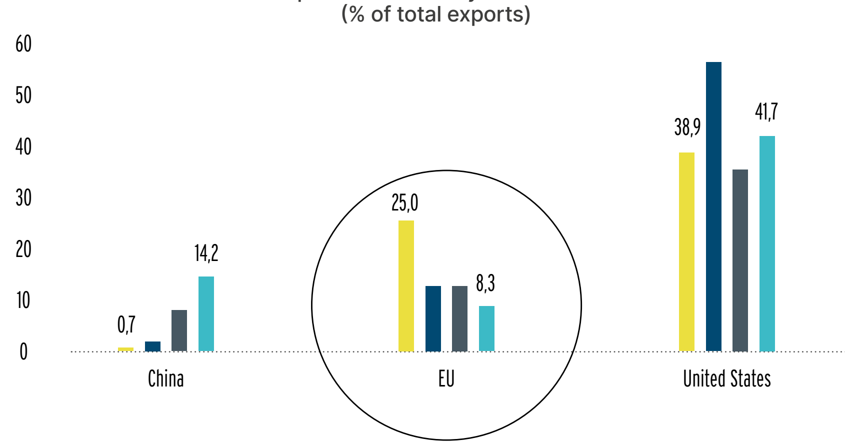
Figure 2.

LAC exports and imports of goods by destination and origin in %

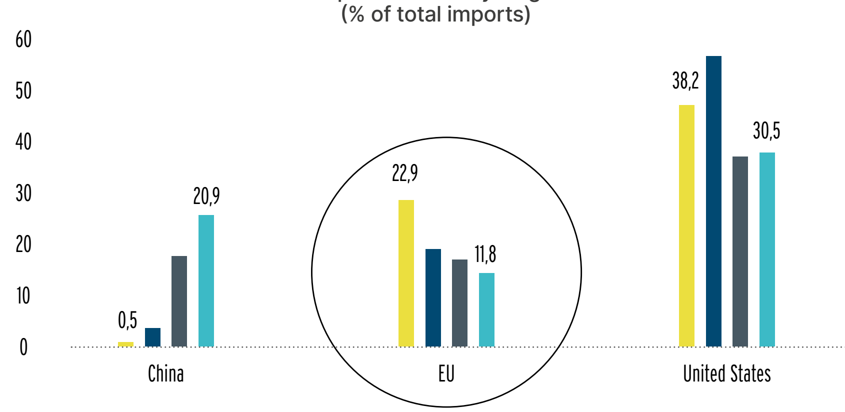
Source. International Trace Centre, Trademaps.

- 1990
- 2001
- 2011
- 2021

Exports from LAC by Destination
(% of total exports)



Imports to LAC by Origin
(% of total imports)



- 1990
- 2001
- 2011
- 2021

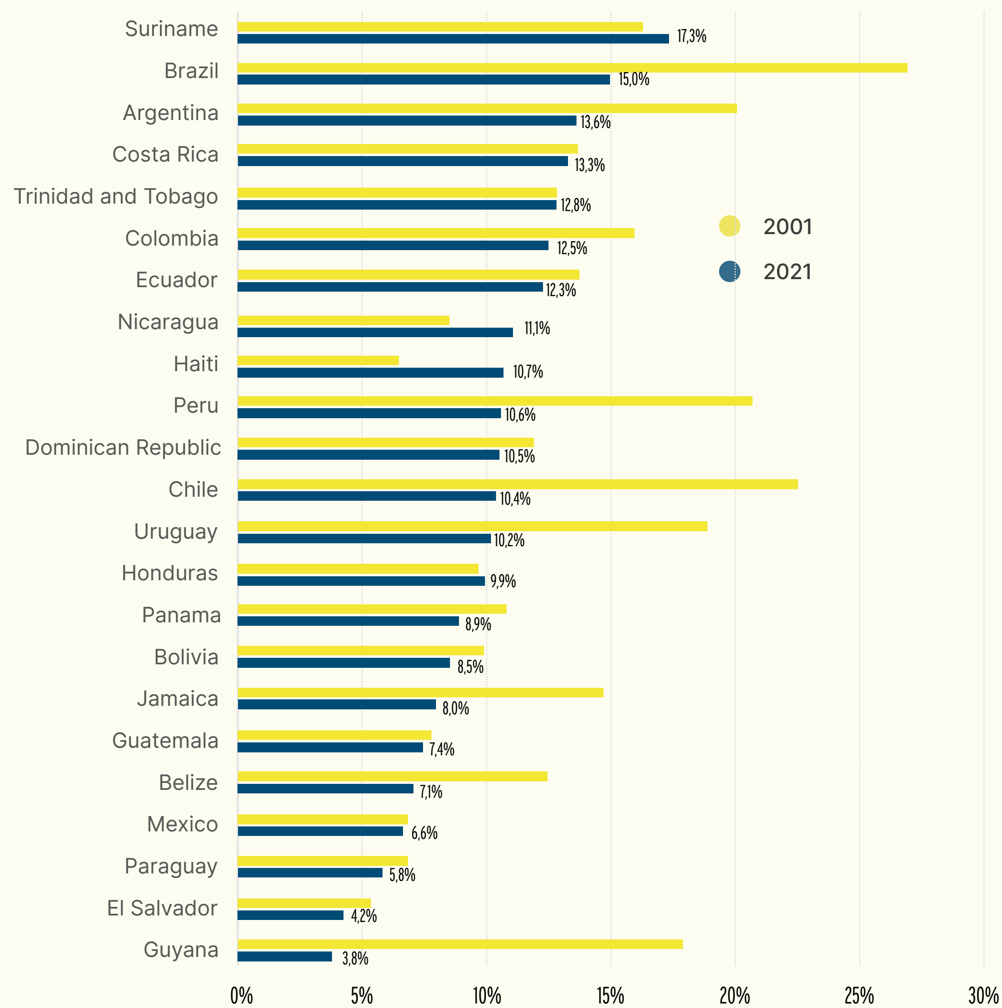
Despite the loss of relative positioning in trade, the EU continues as a close and relevant trade partner for the region, and it is growing in absolute terms:

(a)
it has trade agreements in effect with 27 of the 33 LAC countries, has recently concluded negotiations to modernize the existing agreement with Chile and is in a similar process with Mexico. On the other hand, the EU is in the process of renegotiating and ratifying the agreement with the Southern Common Market (MERCOSUR, for the Spanish original), which, if reached, would lead to trade agreements with 31 of the 33 countries in the region (*European Commission*, 2022).

(b)
it represents between 15% and 8% of total trade in goods for most of the region's countries (Figure 3). The ranking of main trading partners by country shows that it continues to be the 2nd or 3rd main trading partner in goods for most LAC countries (Annex 1).

Figure 3.
Trade in goods with the EU as a % of total trade in goods by LAC countries in 2001 and 2021

Source. International Trace Centre, Trademaps.

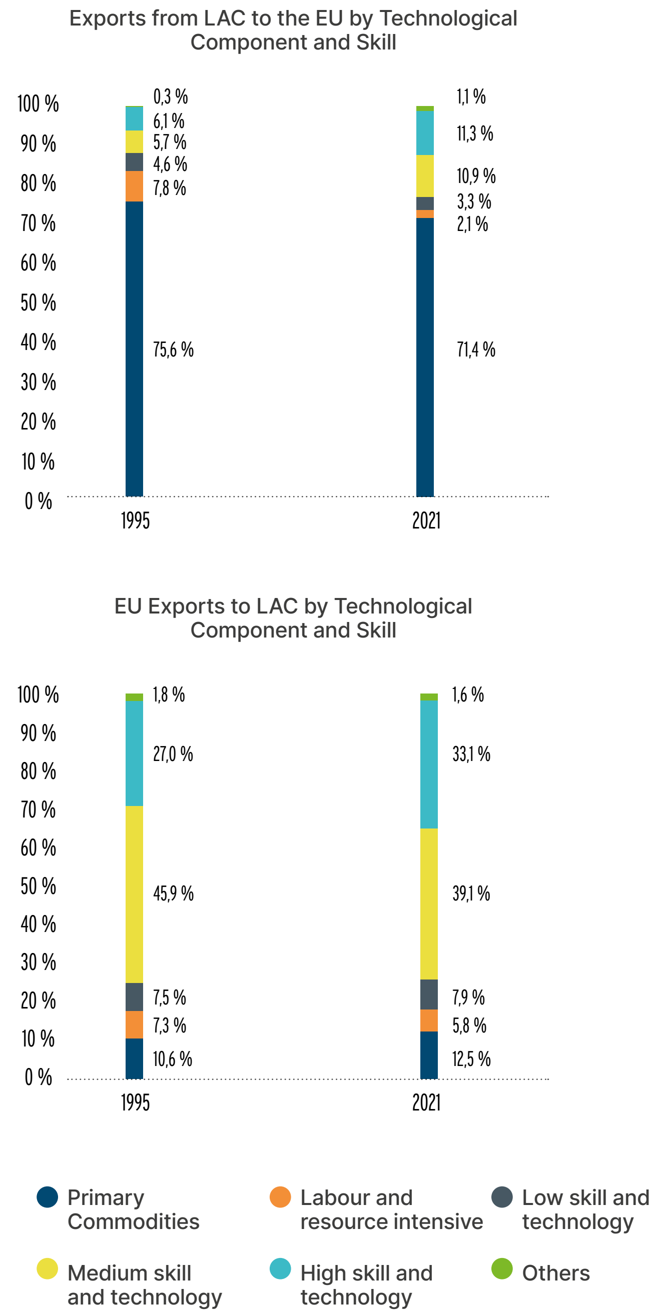


(c)
in terms of trade exchanges in services, the trend is also growing. In 2019, it is estimated that there were transactions amounting to about USD 90 billion, with the EU being the destination of 19.7% of LAC services exports (vs. 18.5% in 2012) and 31.2% of the origin of imports into LAC (vs. 24.3% in 2012). The EU mainly exports transportation and financial services to the region, while it mainly imports travel and professional services (Gayá R, 2022).

(d)
there is significant room to strengthen trade relations by managing complementary export matrices with a wide differentiation between them. LAC exports to the EU are primarily focused on raw materials, representing 71.4% of total exports (less focused on raw materials than with China, where they represent 94% of the region's total exports to the country; but more than the USA, where raw materials only represent 23% of the region's exports to that country). On the EU side, 87.5% of its exports to LAC correspond to manufactured items, mostly technological components and medium and high skills (Figure 4).

Figure 4.
Matrix of EU and LAC exports by skill level and technological component

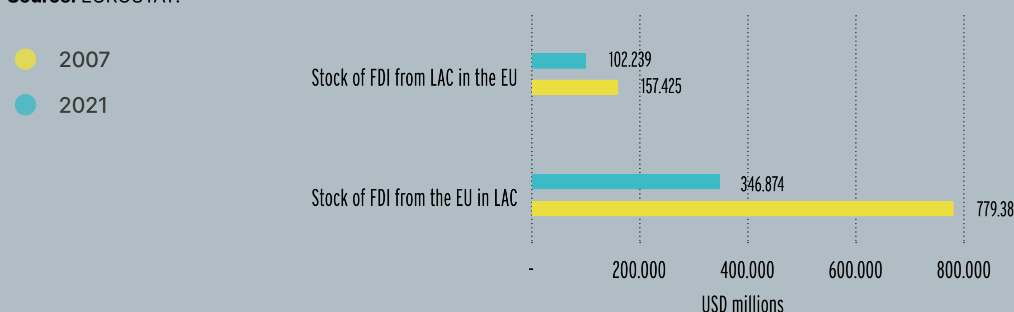
Source. UNCTAD.

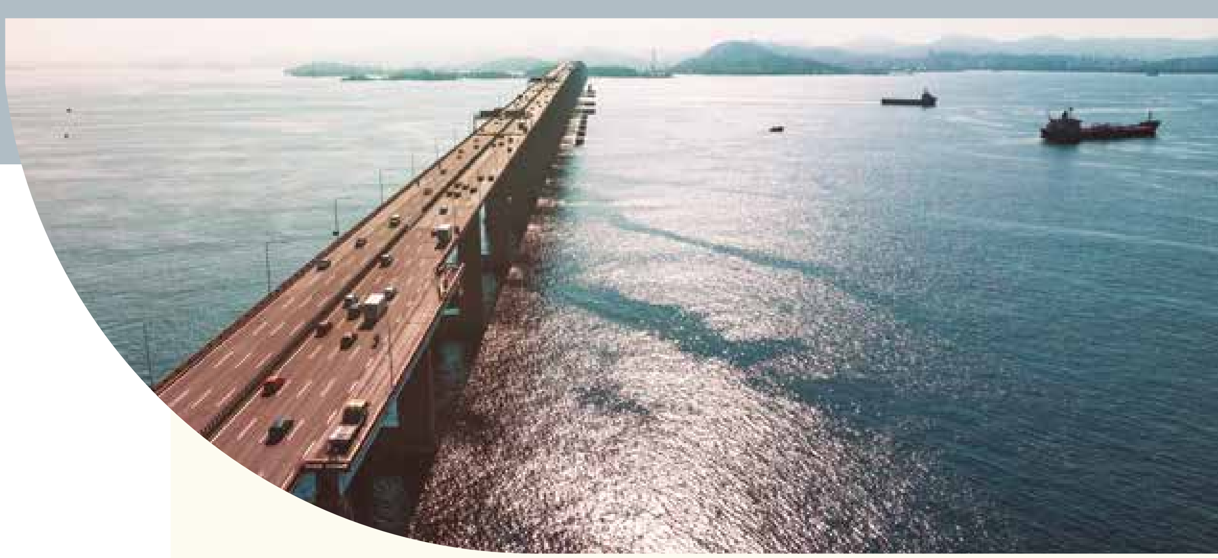


In terms of Foreign Direct Investment (FDI), LAC received USD 2.07 trillion of FDI from abroad in 2020, and the EU was the main source of that investment. More specifically, the USD 779.386 billion invested represented 37.6% of the total. On its part, LAC has investments abroad of USD 707.618 billion, of which USD 157.425 billion are located in the EU, representing 1.3% of total FDI in the EU (Figure 5).

Figure 5.
FDI stock between the EU and LAC in 2007 and 2020

Source. EUROSTAT.





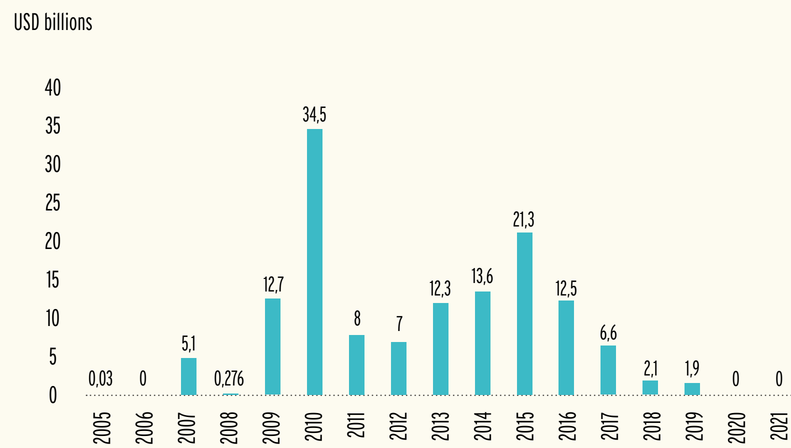
These investments from the EU are considered to be high quality and of technological content, and are largely focused on the information technology, infrastructure, renewable energy, automotive, aeronautics, chemical, and pharmaceutical industries, as well as in other more traditional sectors, such as the extractive industry, financial services, transportation and logistics (Fierro, L. 2022).

On its part, China has positioned itself as an significant source of financing for the region, not only in terms of FDI, but also by financing projects through loans to Latin American and Caribbean governments through China's public banks, mainly the China Development Bank (CDB) and the Export-Import Bank of China, reaching a total financing of USD 137.906 billion in the 2005-2021 period[7] (Figure 6). Chinese commercial banks have also increased their financing in the region, mainly when it comes to energy and infrastructure projects. The positioning of commercial banks expanded heavily when China's BRI initiative began being rolled out.

However, all these economic and financial dynamics face the challenge of climate change, which forces everyone to rethink a development model that is sustainable for this

Figure 6.
China's role as a project financier in the region

Source. The Dialogue, China – Latin America Finance Database.



7. As a reference, the main multilateral development banks in the region had the following level of approvals during the same period: CAF, USD 177.766 billion; Inter-American Development Bank (IDB), USD 170.136 billion; and the World Bank, USD 155.557 billion.

and future generations. Scientific evidence, widely supported by the UN's Intergovernmental Panel on Climate Change (IPCC), reveals that the earth's average surface temperature has increased by approximately 1.0 °C above pre-industrial levels and that each of the last four decades has been warmer than any of the previous decades.[8]

This is a trend that translates into the desertification of dry areas, torrential rains in humid areas and the acidification of oceans, which implies a collective awareness and in which the EU and LAC have already made joint efforts, such as the one implemented for the 2015 Paris Agreement, laying the foundations for a bi-regional ecological, digital and socioeconomic agenda, due to the systemic nature of the triple transition.

In this sense, current decisions must be evaluated both for their economic profitability and sustainability, although the good news is that harmonizing both demands is possible on the basis of the experience the EU and LAC have been accumulating in recent years. LAC is a vital region for the planet's ecological stability, accounting for more than 50% of the world's biodiversity. It is also a major food producer, with 14% of world production and 45% of net international trade in agri-

LAC IS A VITAL REGION FOR THE ECOLOGICAL BALANCE OF THE PLANET, ACCOUNTING FOR OVER 50% OF GLOBAL BIODIVERSITY.

food products. It is also a major powerhouse in renewable energy. In fact, its generation mix has the highest share of renewable energy in the world, at 61% in 2021.

Its wealth of minerals and other natural resources makes LAC one of the strategic areas for global development, including resources such as lithium, of which two thirds of proven global reserves and half of the global supply come from the so-called "lithium triangle" in Argentina (24%), Bolivia (15%), Chile

8. Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate (high confidence level). See "Summary for Policymakers - Global Warming of 1.5 ºC": https://www.ipcc.ch/sr15/download/

(14%) and Peru (14%) (Ruano, 2023). However, the region's wealth requires very effective management and a great political effort to make it a factor of equitable development for its entire population and to avoid deepening economic primarization and a predatory extractivist model.

LAC needs to create synergies to better use its resources. It needs technology transfers and to create value-added chains. It also requires clarity and consistency in regulatory frameworks and agencies that make international agreements and investments feasible. Therefore, a set of proposals for inclusive public policies that are consistent with ecology, digitization and socioeconomic development are presented below, in contrast to what actors, such as China, are proposing, whose presence in LAC tends more towards a reprimarization of its economies and a more negative environmental impact.

THE WEALTH IN MINERALS AND OTHER NATURAL RESOURCES MAKES LAC ONE OF THE STRATEGIC REGIONS FOR GLOBAL DEVELOPMENT.

02 Public policy proposals

This section analyzes how generating synergies in public policies in key areas of development can contribute to transforming the relations between the EU and Latin America and the Caribbean.

There is significant space for strengthening relations between the EU and LAC, and the conditions are ripe for action from a political, economic, institutional, environmental, strategic autonomy, human rights and security point of view. This can be achieved by searching for synergies and increased integration, which can be transformed into shared plans for the future, uniting the efforts of European institutions with those of regional organizations and multilateral financial institutions and using existing instruments and mechanisms for work and financing. The following are some ideas for strengthening the bi-regional relationship:

Sustainable cities

The EU and LAC are two of the most urbanized regions on the planet, with rates of 74% and 81%, respectively[9]. European cities, with vast experience in urban regeneration, are great partners when it comes to promoting a vision of sustainable development in cities in Latin American and Caribbean, as well as maximizing the potential of initiatives by multilateral organizations, such as the BiodiverCities Network: promoting CAF Considering the tangible impact on the lives of citizens, an EU-LAC partnership on sustainable cities, framed by the ecological, digital and socioeconomic transitions, makes the importance of quality and trusting relations between both blocs even more visible, since it transcends the extractivist paradigm and focuses its actions on issues such as, public space, water and air quality, solid waste management, mobility, green infrastructure, circular economy, and other extremely important issues, to address common challenges.

9. The most urbanized areas are: North America: 82%, Latin America and the Caribbean: 81 %, Europe: 74%, Oceania: 68%. Asia, despite its low level of urbanization (close to 50%), is home to 54% of the world's urban population, followed by Europe and Africa, with 13% each. Africa, in contrast, is predominantly rural, with 43% of its inhabitants living in cities. See https://www.un.org/development/desa/es/news/population/2018-world-urbanization-prospects.html (last consultation: January 19, 2023).

Biodiversity Protection and Environmental Activists

Biodiversity as a whole must be taken into account, in line with the public policy proposal on sustainable cities, and special attention must be paid to the threat to natural areas, such as the Amazon, and to the people who risk their lives to denounce illegal logging and mining. According to the organization Global Witness, LAC has registered close to 1,200 murdered environmentalists in the last decade. This reality that requires action by the various States as universal guarantors of human rights and designing comprehensive policies aimed at protecting biodiversity and activists.

Debt-for-climate swaps

CELAC, in the framework of the last Climate Summit held in Egypt in November 2022, has proposed to swap part of its debt for climate action projects. With the successful precedent of the Araucaria Project, through which Spain canceled a bilateral debt of almost 10 million euros to Uruguay in 2005 by building a wind farm, the proposal looks feasible in view of the debt problems of many of the region's countries and the incentives created through the participation of companies from the country or countries involved in developing new green infrastructures. Debt-for-climate swaps respond to redirectioning debt services (interest and capital) to projects focused on the 2030 Agenda.

THE CONDITIONS ARE IN PLACE FOR ACTION TO BE TAKEN FROM A POLITICAL, ECONOMIC, INSTITUTIONAL, ENVIRONMENTAL, STRATEGIC AUTONOMY, HUMAN RIGHTS, AND SECURITY PERSPECTIVE.

Digital skills

Although digital cooperation between the EU and LAC has some pillars (workshops on digital cooperation organized by the European Commission or training programs for educators in digital skills designed by Spanish cooperation), there is a clear opportunity to further promote this cooperation through online education and possibly creating a joint EU-LAC website offering courses, workshops, conferences and certifications under the umbrella of the European Digital Competence Framework (DIGCOMP), seeking to make it Euro-Latin American based on a fluid dialogue between experts. DIGCOMP, designed to be part of the new economy and avoid job exclusion, describes 21 digital competencies grouped into 5 areas: information and digital literacy, communication and collaboration, digital content creation, security and problem-solving. This is a massive opportunity for training on both sides of the Atlantic and to connect with a public opinion that is often distant from bi-regional issues in a tangible way.

THIS CAN BE ACHIEVED THROUGH THE SEARCH FOR SYNERGIES AND GREATER INTEGRATION THAT TRANSFORM INTO SHARED PLANS FOR THE FUTURE.

Content generation

In a world dominated by fake news and post-truth, joint communication actions between the EU and LAC are essential, providing information about projects, investments, values and common strategies, but also taking into account the changes in new audience's consumption of information, whose main sources of inquiries are social networks and news exchanges. Communication strategies and channels to connect with over 1.1 billion citizens merit new approaches.

Cooperation laws

Spain, a natural partner of LAC, is designing a new cooperation model with the Bill on Cooperation for Sustainable Development and Global Solidarity. This future regulation, which will update the 1997 regulation, is aligned with the 2030 Agenda for Sustainable Development, the Paris climate change agreements and other international instruments that value the need to maintain and improve Official Development Assistance (ODA) to middle-income countries (MICs), in light of the existing gaps and concentration of poverty in each territory. The regulation also gives a legal status to the commitment Spain acquired within the United Nations and European Union to allocate 0.7% of Gross National Income to Official Development Assistance by 2030, making it a key document for relaunching EU-LAC relations. It forecasts coordinated cooperation between the General State Administration, autonomous communities, local entities and city councils.

Institutional heritage

The EU is a global benchmark for democratic governance. Member countries have had to adapt their rules and regulations to harmonize taxation, social security systems or mechanisms to prevent money laundering, among other matters related to the institutional heritage. In contrast, LAC is often criticized for its lack of legal certainty, high tax evasion rates and the enormous weight of the informal economy. Therefore, designing cooperation programs aimed at institutional strengthening and exchanging experiences could help both Latin American and Caribbean countries individually and the region's complex and historical integration process.

Higher education

A particularly successful area in LAC-EU relations has been academic cooperation. Programs, such as Erasmus+ 2023, with an annual budget of EUR 4.2 billion, or BELLA (Building the Europe Link with Latin America), which solves long-term interconnection needs of the European and Latin American research and education communities, are opportunities to continue making progress in projects that cover other levels of the educational system while delving into both block's matters of interest, especially in terms of the challenges inherent to the triple transition.

Investment projects

The natural alignment that has occurred in most countries' vision of development, focused on an ecological, digital and socioeconomic transition, makes this the ideal time to design plans and investment packages jointly. Integrating these can generate significant benefits and advantages on a local level, as well as interesting positive externalities towards other sectors, markets, countries and regions. In the specific case of EU-LAC relations, progress could be made in developing an investment program, such as the one the EU presented for Africa, under the "Global Gateway" program, similarly focusing on the opportunities and needs existing in LAC. In this regard, some suggestions are presented for the plan to be developed and executed successfully:

1.
Joining efforts and consolidating synergies from the outset: joining efforts and consolidating synergies from the outset: including European institutions, multilateral financial institutions operating in LAC, regional integration mechanisms and the private sector in developing and designing the investment plan. The objective would be to define projects focused on long-term benefits that take into account each country's specific needs and requirements by going beyond the extractivist paradigm and adding them to value chains, the concerns of the private sector for their development, and for them to have support from the main financiers of development projects in the region.

2.
Focusing on pre-investment: defining and designing mechanisms to identify, evaluate and prioritize investments and policies. The objective is to use existing resources as efficiently as possible and to ensure the proper development, execution and monitoring of projects.

3.
Designing projects with an integral vision: including plans to dynamize and create opportunities on a local level and preserve the historical, natural and cultural heritage in the plans and projects. The objective is to develop projects in an environmentally and socially sustainable manner.

Promoting *friend-shoring*[10] as a foreign policy instrument and strengthening political-economic relations:

The pandemic and Russia's invasion of Ukraine have highlighted the global economy's heavy dependence on the stable functioning of all the parts and gears of global production chains and the significant economic and social costs and consequences of unforeseen and uncontrollable situations that divert them from their proper functioning. Different modalities of friend-shoring, such as near-shoring or power-shoring, could be interesting policies to strengthen EU-LAC relations.

LAC has significant advantages in terms of proximity and costs, political affinity and proximity, clean energy matrices and enormous potential for developing renewable energy. However, it must make progress on important pending challenges if it is to attract investment from the EU, especially in terms of legal stability, the reduction of bureaucracy, and environmental commitments. For example, the Carbon Border Adjustment Mechanism (CBAM) the EU is evaluating would equalize the price of carbon between domestic and imported products, seeking to make sure the EU's climate commitments are not diminished by relocating production to countries with more lax environmental policies (Arbache, J. 2022a and 2022b).

10. *Friend-shoring* is a new trend of commercial regionalization and relocating part of the production chain to partnered and stable economies. The idea emerged during the pandemic due to the fragility and high fragility of global logistics chains, and is based on the philosophy that countries that support a common set of values regarding international trade and behavior in the global economy should trade and profit from said trade. The objective is to have multiple sources of supply and not be overly dependent on some countries supplying crucial items, especially those with which they have different views or tensions on a geopolitical level.

Sector-specific Notes

Sector-specific Note on Human Development

Social policy challenges in Latin America and the Caribbean: Analysis and Policies

This chapter explores synergies between Europe and Latin America and the Caribbean to reduce levels of poverty, inequality, or informal labor, while simultaneously promoting sustainable economic growth in the medium and long term.

Complete digital version

Deficits in social mobility

LAC faces two major problems. First, it is one of the most unequal regions in the world. It is not only a matter of income; inequality extends to other dimensions, such as education and health, among others. Second, there is a huge per capita income gap with respect to more developed countries. There is a strong connection between high inequality and low absolute and relative social mobility, which perpetuates the region's high levels of inequality and makes individual well-being highly dependent on social origin.

The region is among those with the world's highest absolute educational mobility. In the 20th century, 6 out of 10 people surpassed their parents' educational level. However, paradoxically, the region is among those with the world's lowest relative mobility: years of education completed by children is very strongly associated with their parents'. These mobility problems are reflected in four dimensions:

1.
Educational mobility is profoundly marked by quality. This persistent deficiency partly explains why the increase in educational coverage has not translated into a generalized increase in better skills for access to good jobs.

2.
Occupational mobility, another mechanism of inequality, has barely changed in the last five decades. The children of parents with low complexity occupations only have an 11% probability of moving up to high complexity occupations, while that figure is almost 60% for children of parents with complex occupations.

3.
The informality of labor is extensively linked to inequality. Differences in formality trajectories in the life cycle of employees play a critical role in two dimensions: access to social security, including the possibility of accumulating enough time in a formal job to access a pension upon retirement; and access to learning opportunities and skills acquisition on the job.

4.
The income earned by children in the region is more strongly linked to the income earned by their parents compared to other regions in the world. 90% of the income differences in the parents' generation are transferred to the children's generation, compared to Europe or North America, where these differences are only 40%.

Specific groups

In addition to these deficiencies, CAF studies have identified three groups with acute mobility problems.

Gender
Women's participation in labor is 30% lower than that of men, one of the world's largest gaps, and their income is 35% lower. Part of these gaps could arise from differences in productive characteristics between men and women. However, these persist and even grow larger when conditioned by characteristics, such as age, education and place of residence.

Belonging to an ethnic group
Gaps in educational mobility are amplified in these groups. Coupled with other job market barriers, this means skin color is negatively associated with key outcomes, such as unemployment, self-employment, the likelihood of having a business that employs others, and access to formal employment.

Population in underprivileged areas
Nearly a quarter of Latin Americans live in informal settlements, and they receive the worst health, education and transportation services. They are also the most exposed to environmental pollution. This urban segregation also makes daily commuting difficult to areas with a high concentration of quality jobs, which are usually located far from the most disadvantaged areas. The possibilities for new generations to reside in areas of the city that are closer to formal jobs are lower than those of workers with families in lower socioeconomic strata. In addition, according to surveys, area of residence can be a barrier to employment.

Institutional factors in the wake of persistent inequality and low social mobility

POOR PERFORMANCE DOES NOT STEM FROM A BIAS IN THE ECONOMIC STRUCTURE TOWARDS CERTAIN UNPRODUCTIVE SECTORS; RATHER, IT IS PERVASIVE ACROSS ALL ECONOMIC ACTIVITY.

The combination of high inequality and low relative mobility contrasts with the increase in public social spending (PSS), which doubled its share in the Gross Domestic Product (GDP) over the last three decades, from 7% to 14%, a trend similar to that of the average of OECD countries. However, the comparison between the OECD and the region shows a worrying result: the relative ineffectiveness of PSS in reducing income inequality generated by the market. Beyond its level measured as a percentage of GDP, PSS has significant structural problems. It does not reach those who need it most, in addition to not contributing to social mobility.

In most countries, the increase in spending was concentrated on expanding conditional cash transfer programs, pensions and health care for informal workers. However, this expansion in PSS over the last three decades was not very successful in reducing inequality. Among the many factors that explain this situation, the job market's inability to facilitate mobility is one of the most significant.

Low Productivity

The region has demonstrated stagnation in productivity, which implies low growth. The average GDP per capita in LAC compared to the United States' has stagnated since 1960, while Spain went from one third to two thirds and South Korea from 7% to 67%. This poor performance is not due to a bias of the economic structure towards certain sectors that are not very productive. Instead, it is transversal to all economic activities and is explained both by the low productivity of many companies within each sector, and deficiency in assigning resources to the most productive companies.

This is evident in two dimensions: the high level of self-employment and small scale of most enterprises. Over half of workers in the region are self-employed or in companies with less than 5 workers, and approximately half work in companies with less than 10 employees. The problem is an institutional framework that creates incentives to operate behind fiscal, labor and financial regulations on a small scale and not to innovate or adapt new technologies. While many institutions are responsible for this situation, dysfunctional job markets with little capacity to translate the human capital gains of vulnerable groups into formal and productive employment stand out.

The job market is by far the most important link between productive processes and social development. When it fails, the result is persistently high inequality and low relative social mobility, as well as stagnant productivity. The main causes of job market failures are: the abovementioned deficiencies in access to, quality and relevance of education and a segmented social security architecture that discriminates between formal and informal workers.

This architecture implicitly taxes formal employment and subsidizes informal employment by promoting it. The combination of differences in educational quality between groups, with incentives that punish formality and reward informality, makes the job market a systemic impediment to relative social mobility and faster growth.

THE MAIN CAUSES OF LABOR MARKET FAILURES ARE THE ALREADY MENTIONED DEFICIENCIES IN ACCESS, QUALITY, AND RELEVANCE OF EDUCATION.

Policy proposals

Two groups of policies are proposed to address human capital problems and the low capacity of the region's labor markets to promote social mobility. On one hand are systemic policies, or general policies, aimed at the entire population. On the other hand are policies focused on disadvantaged groups.

Systemic policies

Quality and relevance of human capital

Although the problems of quality and relevance are present throughout schooling, the actions that would yield the most immediate results are in middle or high school education and in job training programs. However, the impact of the deficit in coverage and quality of early childhood on the entire school cycle cannot be disregarded. This requires five types of policies.

- **Improving physical infrastructure.** In some cities, investments in water, sanitation and electricity, among others, are required for inclusive and environmentally sustainable spaces. Investments in digital technologies are also required everywhere: connectivity and access to devices and the cloud as enablers and enhancers of learning in face-to-face, virtual or hybrid formats.

- **Adapting the content of curricula:** digital skills, languages and an emphasis on natural sciences, engineering and mathematics. This requires revaluing skills associated with data handling and management, logical or computational thinking and learning based on problem solving.

THE EXPANSION OF SPECIALIZED TECHNICAL EDUCATION (ETE) IN THE REGION CAN OPEN UP NEW CHANNELS FOR MORE EFFECTIVE SOCIAL MOBILITY AND CONTRIBUTE TO FORMING A BETTER-PREPARED WORKFORCE.

Improving teachers' skills to teach the new content, as well as their digital skills, and those of school managers and staff. This implies policies and programs for digital and data infrastructure, curricula designed for technological inclusion and the development of digital skills, underpinning content and the measurement of results.

Strategies to prevent and reverse school dropout. For example, by extending income transfers until the age of 18 or 20, conditioned upon the completion of studies and through early warning programs that focus efforts to accompany students and protect their schooling.

Strengthening learning recovery strategies by extending time in school through, for example, double shifts.

The following is proposed for higher education:

With the same resources intended up until now for training for work (between 0.1% and 0.2% of the GDP), there are significant opportunities to improve coordination between supply and demand, using data from local labor markets more intensively and ensuring the participation of business organizations in designing curricula and certifying skills. The functions of design, management and evaluation should also be clearly separated, keeping the same agency from carrying out all three. Finally, the offers for *upskilling and reskilling* must be strengthened and diversified, designing financing systems that are not detrimental to formal hiring.

Moreover, expanding Specialized Technical Education (STE) in the region can open new, more effective social mobility channels while simultaneously contributing to training a better-prepared work force for job markets characterized by growing technological dynamism.

Social spending that reduces inequalities without undermining productivity

Addressing the incentives behind self-employment, and entrepreneurial dwarfism and informality. One recommendable path is to gradually aim for systems whose financing is independent from the employment status of individuals, with more "universal" coverage for risks that all workers face, without depending on the type of employment relationship. Making progress in improving the quality of jobs and increasing social mobility in areas, such as access to credit and support for businesses, improving tax policies and promoting research and development of new technologies.

Policies for specific groups

Gender

The main objective is to increase labor participation in formal, better-paying jobs with better career prospects. The following is necessary to that end:

- **Reducing the personal and economic cost of caring for dependents by:** expanding the supply of child care services without aggravating informality and discrimination; extending the length of the school day in basic education; and promoting health care policies for the elderly, taking into account the rapid process of demographic aging.

- Family planning through comprehensive sexual and reproductive health actions, addressing the gap between actual and desired fertility and early pregnancy.

- **Reforming labor and social security legislation to avoid discrimination, highlighting two actions:** reviewing parental leave for newborn care and conducting a systemic labor legislation review to make sure it does not discriminate against women's formal employment.

- Curricular and pedagogical reforms throughout the educational cycle to favor women's presence in better-quality occupations and in technological sectors and to promote affirmative action policies to stimulate women's participation in decision-making positions.

PROMOTING THE PRESENCE OF WOMEN IN HIGHER-QUALITY OCCUPATIONS AND IN TECHNOLOGICAL SECTORS.

Ethnic groups

●

Human capital policies and investment in infrastructure and accessibility to urban services in the areas where they reside.

●

Anti-discrimination policies promoting regulations to implement practices that make sure ethnicity and race are not an aspect that negatively impacts the employment process. Addressing the systemic aspects of discrimination: promoting partnerships for ethnic-racial equality and inclusion as actors in development; providing support for institutional capacity-building, including improvements to information systems, in order to collect data and share statistics to support monitoring systems on the ethnic-racial situation in the region's countries.

Population in underprivileged areas

●

Improving mobility by increasing mass public transportation infrastructure and regulating its proper operation and financing. Housing policies should include support for legalizing housing, documenting ownership and inheritance, designing innovative regulations and instruments to provide access to housing for the poor, and developing financing mechanisms (land market, mortgage loans and rental systems).

●

More investment is required in infrastructure policies for basic services connected to housing, public safety and public spaces in vulnerable neighborhoods.

ADDRESSING SYSTEMIC ASPECTS OF DISCRIMINATION: PROMOTING ALLIANCES FOR ETHNIC-RACIAL EQUITY AND INCLUSION AS DEVELOPMENT ACTORS.

LAC-EU opportunities for collaboration on social matters

LAC-EU opportunities for collaboration on social matters are wide-ranging and cover a variety of areas. Both regions have different experiences and approaches to addressing social issues, and can mutually benefit from sharing knowledge, resources and best practices. Some of the collaborative areas could include:

- **Development Assistance:** Collaboration could focus on SDG implementation through technical cooperation and targeted social projects. The two regions could work together to address challenges, such as poverty, hunger, health, education and access to clean water and sanitation.

- **Good Practices:** Promoting reforms that take advantage of experiences in progressive taxation and the efficient and impactful use of social spending.

- **Human Rights:** Promoting and protecting human rights is an important area for collaboration. The regions can share experiences in strengthening justice and gender equality, fighting discrimination, and promoting diversity.

- **Education and Training:** Academic exchanges and training programs could strengthen capacities on both continents. Student mobility, faculty exchanges and collaborative research programs could enrich educational systems and foster innovation. This could lead to a better fit with the job market, increase productivity, and reduce poverty and exclusion.

- **Health:**
Cooperation in health care could range from medical research to health crisis management and social security management in aging societies. Exchanging knowledge on health care systems, communicable and non-communicable diseases, and access to medicine could be beneficial for both parties.

- **Rural Development and Sustainable Agriculture:**
Collaboration in this area could address issues, such as food security, sustainable natural resource management and strengthening rural communities.

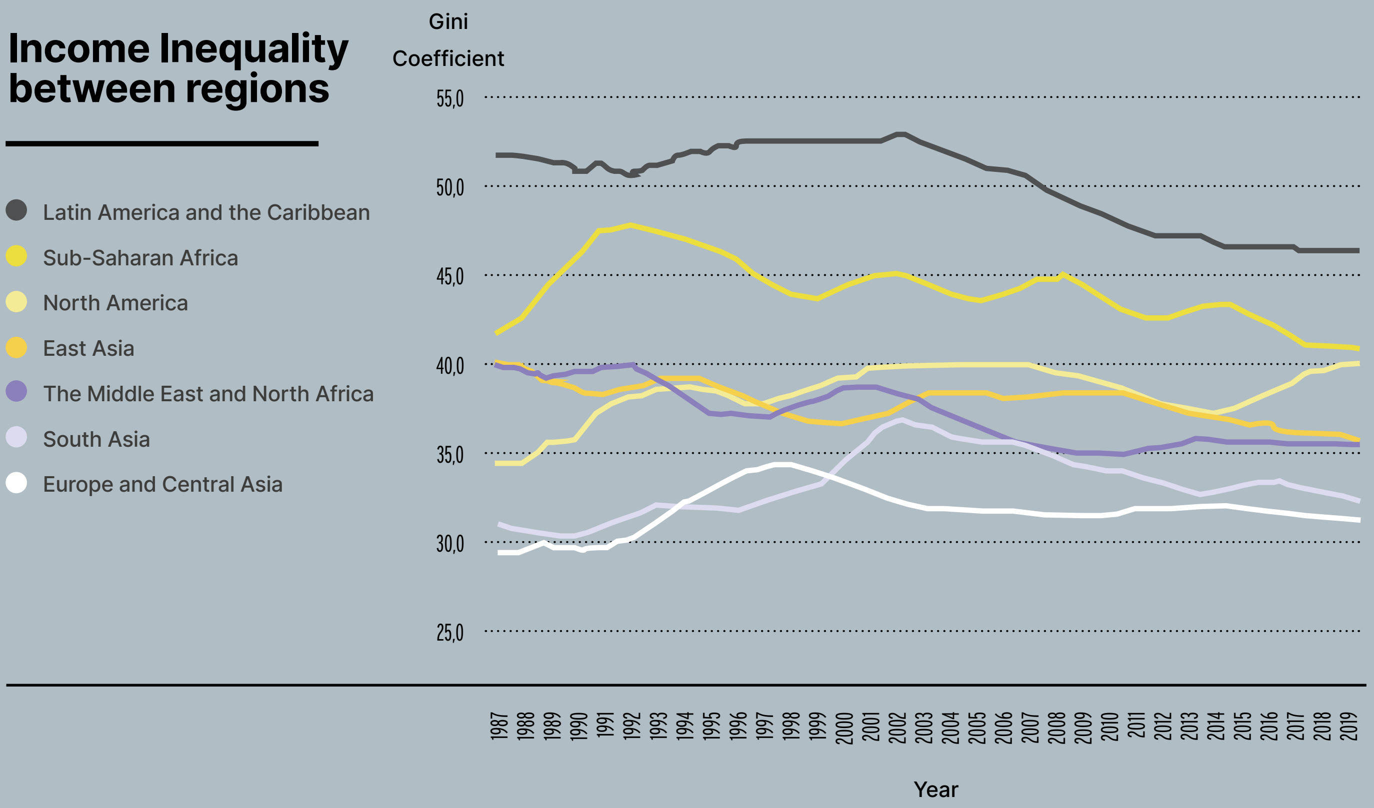
- **The quality of job markets, employment and social protection:**
The two regions can establish a close synergy, both through cooperation and partnership agreements, that will lead to strengthening these three fundamental dimensions for LAC to overcome its structural gaps.

THE EUROPEAN UNION HAS BEEN ONE OF THE MAJOR PROMOTERS OF SOCIAL DIALOGUE IN THE REGION.

In order to carry out effective collaboration, it is important to establish adequate coordination, dialogue and financing mechanisms specific to the social area. In addition, cultural, political and economic differences should be considered to achieve an equitable and beneficial cooperation for all involved parties.

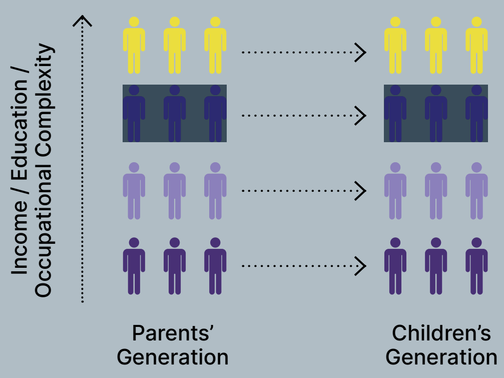
The bi-regional relationship enjoys a wealth of good practices, experiences and close relationships between public and private actors. In fact, the European Union has been one of the region's major promoters of social dialogue, while active Latin American civil society has contributed to strengthening the relationship.

Income Inequality between regions

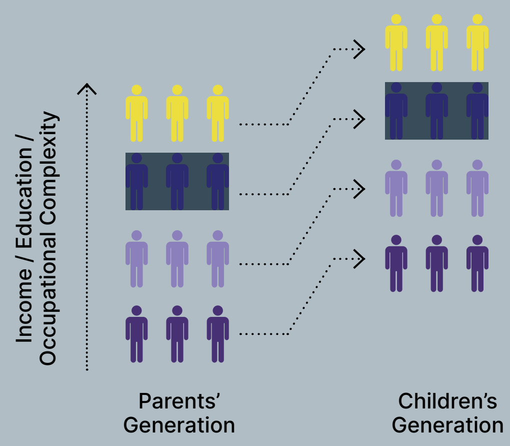


Absolute and Relative Mobility Scenarios

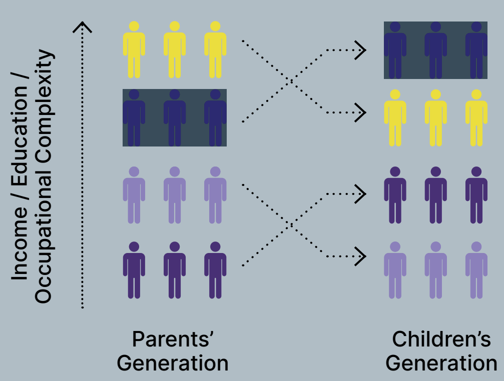
Scenario 1:
Zero relative mobility with zero absolute mobility



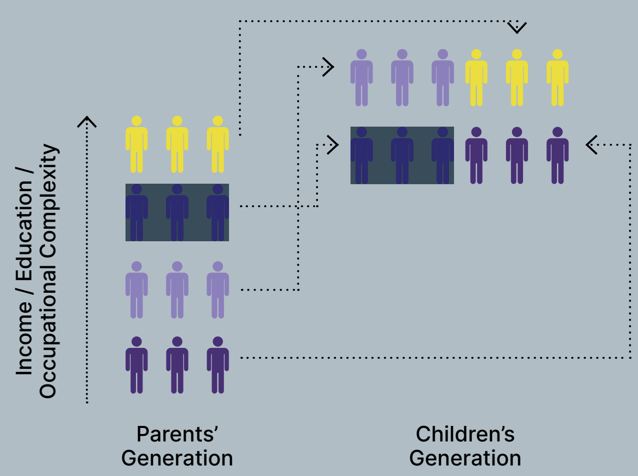
Scenario 2:
Zero relative mobility with upward absolute mobility



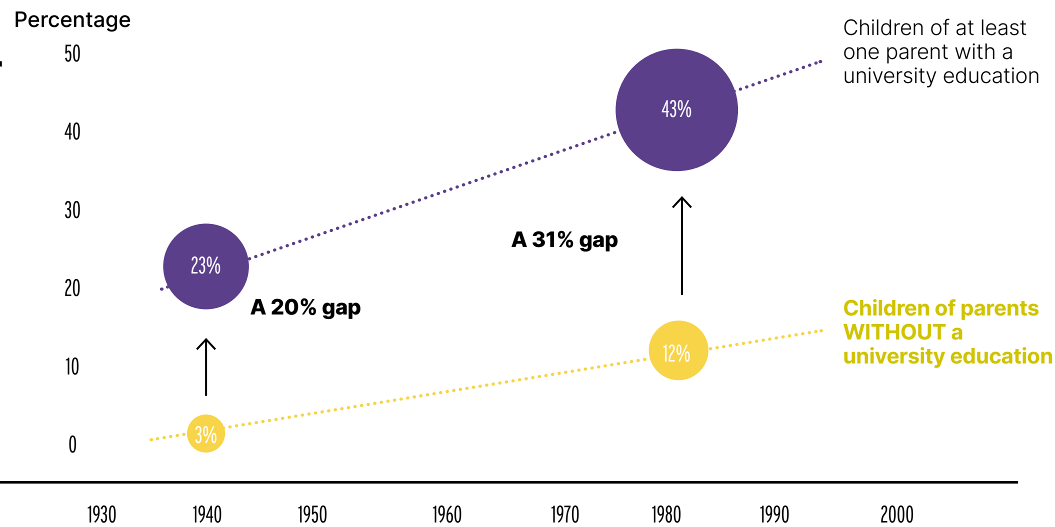
Scenario 3:
Relative mobility with upward and downward absolute mobility



Scenario 4:
Relative mobility with upward absolute mobility



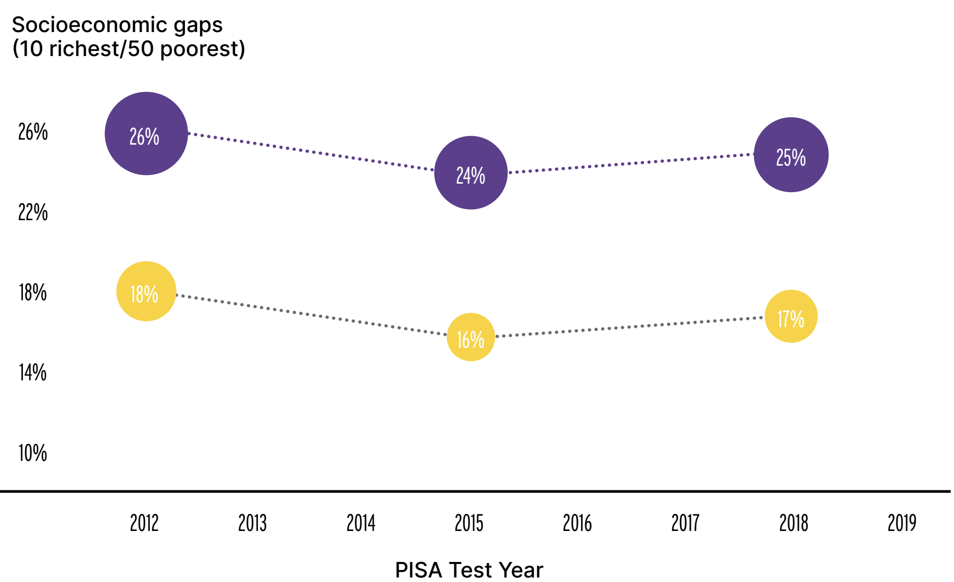
Probability of Completing Higher Educations at 24-25 Years of Age.



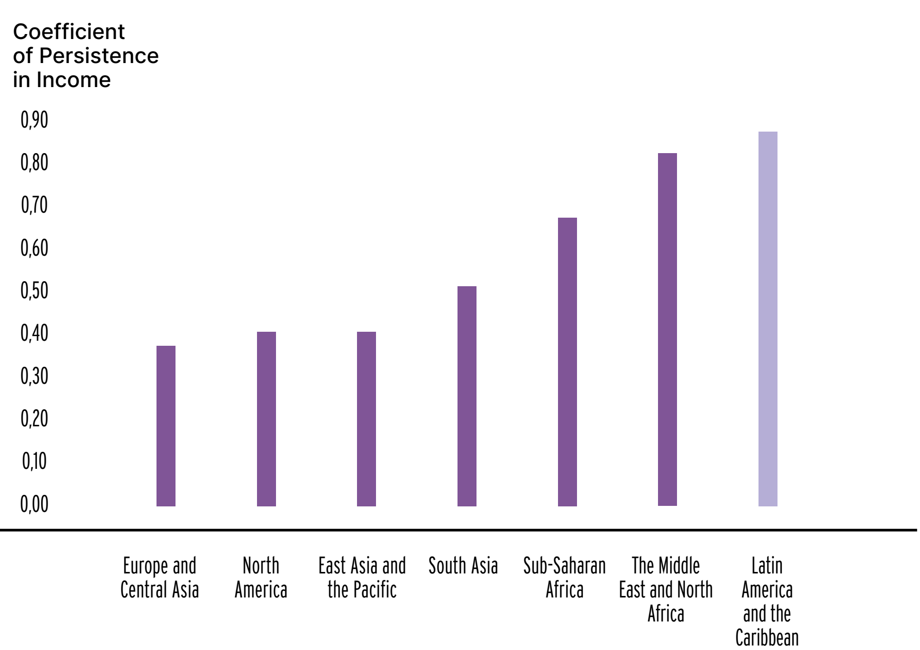
Socioeconomic Gaps in Educational Quality: Latin America vs. OECD Countries

Latin America

OECD
(excluding Latin American countries)



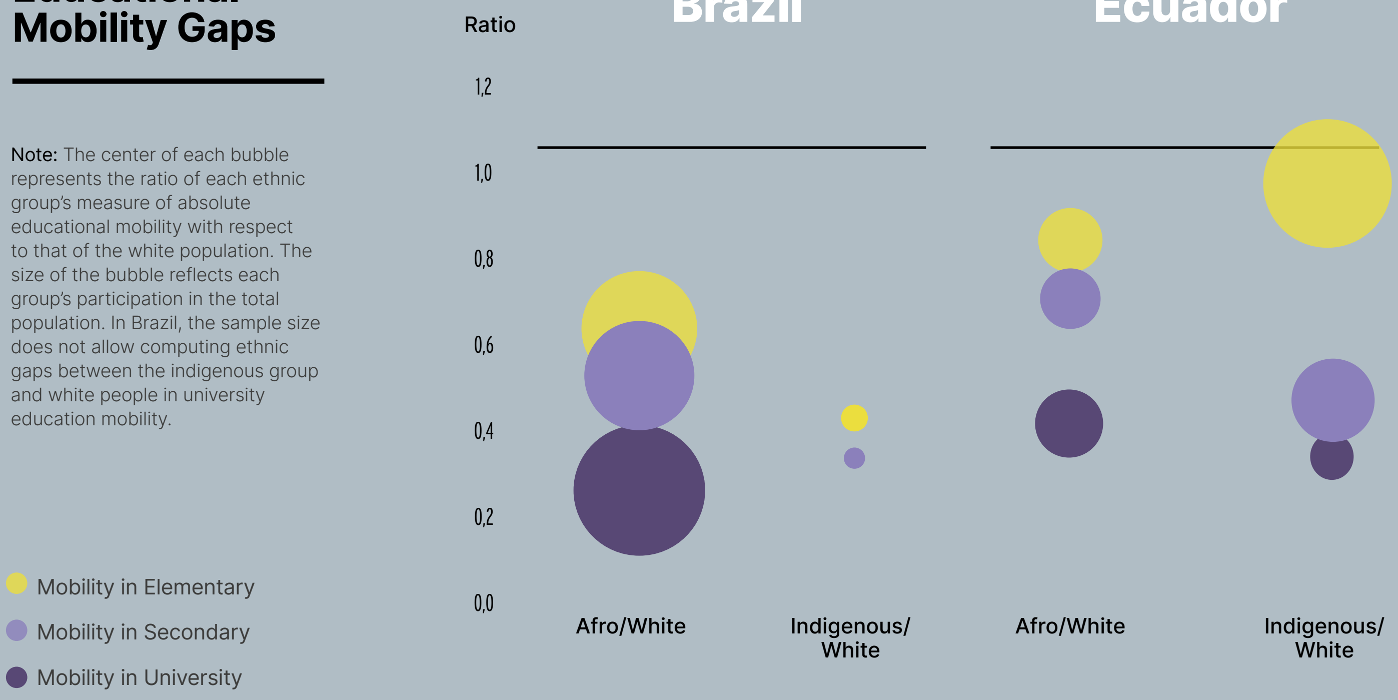
Intergenerational Persistence in Income



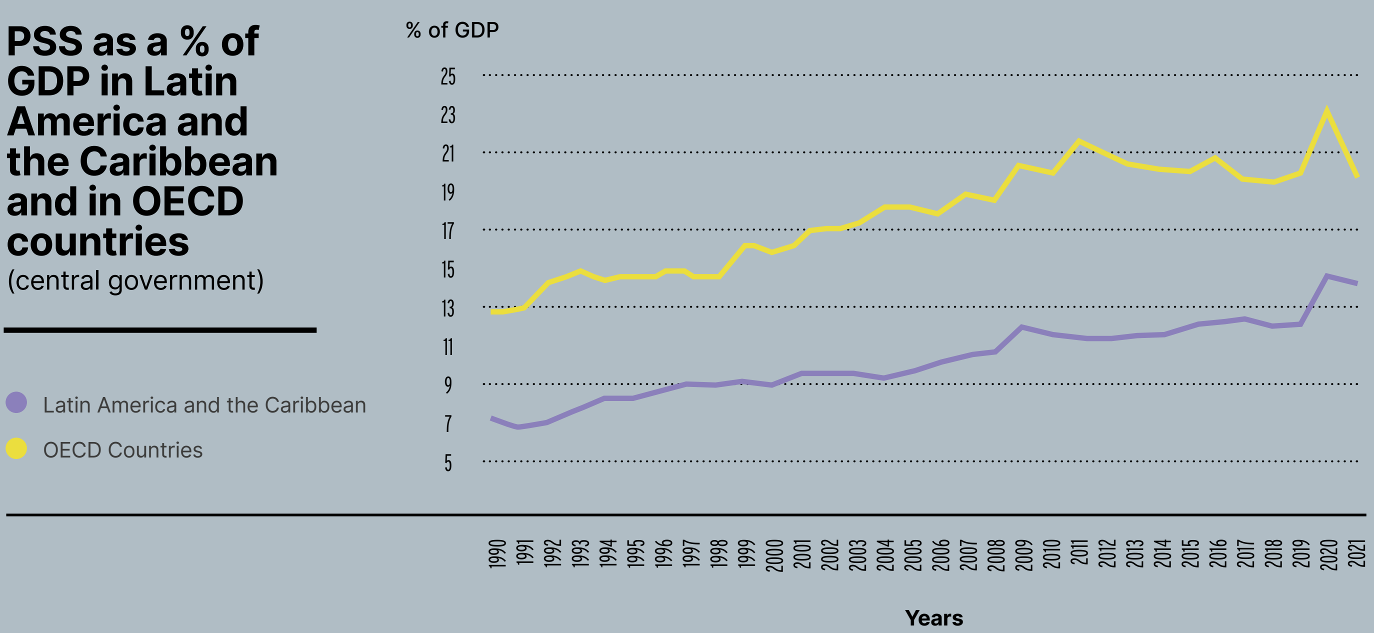
Note: Simple averages between countries in each region. Information is presented for cohorts of children born in the 1960s or 1970s. The average for Latin America and the Caribbean includes Bolivia, Brazil, Chile, Colombia, Ecuador, Guatemala, Panama and Peru.

Upward Absolute Educational Mobility Gaps

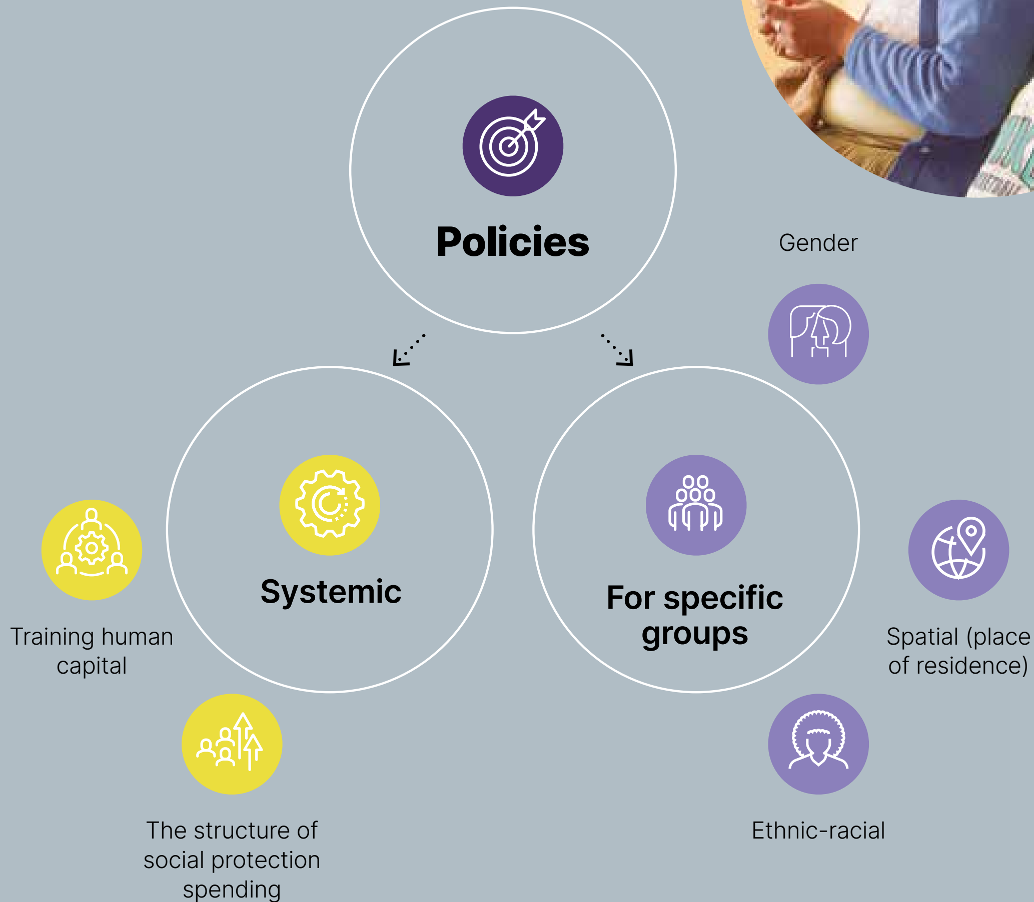
Note: The center of each bubble represents the ratio of each ethnic group's measure of absolute educational mobility with respect to that of the white population. The size of the bubble reflects each group's participation in the total population. In Brazil, the sample size does not allow computing ethnic gaps between the indigenous group and white people in university education mobility.



PSS as a % of GDP in Latin America and the Caribbean and in OECD countries
(central government)



Policies for less inequality and more growth



Sector-specific Note on Digital Transformation.

Digital transformation progress and challenges in Latin America and the Caribbean

This chapter presents various opportunities for collaboration between the EU and Latin America and the Caribbean to drive a digital transformation that helps close the existing gaps in connectivity, infrastructure, training, regulation, and innovation. It also aims to combine efforts to promote green transition, gender equity, and social inclusion.

Complete digital version

Inclusive and secure connectivity

INTERNET USAGE AMONG WOMEN WAS NEARLY 12 POINTS LOWER THAN THAT OF MEN. ADDITIONALLY, THEY HAVE LESS PRESENCE IN THE ICT SECTOR'S ACTIVITY. ONLY 10% OF INNOVATIVE STARTUPS SEEKING FUNDING WERE FOUNDED BY WOMEN.

There are highlights and challenges in the progress of digital connectivity in LAC. The Internet has opened up great opportunities for the region's economies to become more productive, expand entrepreneurial possibilities and drive economic growth that integrates different sectors of society. According to the ECLAC, the percentage of Latin Americans subscribing to fixed broadband services rose to 62% in 2021, tripling the coverage in 2020, but far from the 100% of North America and 90% of Europe. Mobile broadband subscriptions stood at 78%, once again lower than the 105% in Europe and 150% in North America. Particularly in mobile connectivity, 4G usage reached 65% of the population in 2022, and 5G is expected to reach 11% in 2025. Along with the need for adequate speed to perform relevant productive and social activities, there are still challenges in terms of latency, as well as the resilience of connectivity infrastructures.

Geography remains central to explaining connectivity gaps. Although progress has been made, there is still a significant digital divide in LAC. Rural areas and low-income communities have low rates of internet connectivity. Around 70 million inhabitants of rural areas in LAC lack access to connectivity services with minimum quality standards.

The gaps in digital connectivity, as well as in leadership and financing innovative ventures, are especially apparent for women. Connectivity for women is lagging behind in practically all dimensions of the digital economy. Internet use among women was

almost 12 points lower than among men. In addition, they have less of a presence in ICT sector activities. Only 10% of innovative ventures seeking funding were founded by women, and when they are, they receive 23% less funding. Moreover, the outlook is not too favorable, since only one in four graduates in engineering or telecommunications infrastructure are women, despite more women completing their higher education.

Telecommunications operators, arguing the high costs of infrastructure deployment, often focus their efforts on urban and densely populated areas, thus neglecting connectivity in rural areas. A similar situation occurs with optical fiber. Although it often reaches municipal capitals, it does not extend to the households of the most vulnerable people. A combination of technological innovation is needed to overcome these challenges, including technologies, such as 5G, 4G, optical fiber, LPWAN and satellite connectivity. Moreover, both public and private investment and inclusive policies that prioritize equity in digital access are essential.

Despite the fall in relative prices, connectivity costs still represent a high access barrier for lower-income citizens. A challenge of expanding mobile connections is that the region's poorest people cannot afford data plans and internet-enabled devices. On average, the cost of a 1GB data plan represents 2.7% of monthly household income, which is above the International Telecommunications Union's 2% affordability threshold. The price of smartphones must also be added to these costs, which represents between 31% and 34% of the average household income in some LAC countries, reaching up to 84% in the most critical case. In view of this situation, proposals such as the basic basket consisting of a laptop, smartphone and tablet, are relevant.

The need for investment in physical infrastructure, demand subsidies and digital skills is a challenge LAC cannot meet without external support. The International Telecommunication Union estimates that the region would require USD 51 billion by 2030 to close the digital divide in infrastructure, skills and regulation. On the other hand, the think tank of the Inter-American Association of Telecommunications Operators (ASIET) calculates that LAC needs three times that figure, USD 161 billion, to reach OECD connectivity standards on a nearer horizon, by 2025.

Progress in connectivity must go hand-in-hand with improvements in digital security. Connectivity with online security is the only sustainable and acceptable agenda in LAC. As dependence on digital technology increases, so does cybercrime. In 2018 and 2022, between 52% and 62% of organizations felt like they received more attacks than the immediately preceding year. Despite the incipient development of national cybersecurity strategies in a third of the countries

APPROXIMATELY 70 MILLION RESIDENTS OF RURAL AREAS IN LATIN AMERICA AND THE CARIBBEAN LACK ACCESS TO CONNECTIVITY SERVICES WITH MINIMUM QUALITY STANDARDS.

in the region, the technical capacities of the State and awareness of public actors are still insufficient. The lack of interoperability between government platforms and the absence of cyber-industrial data protection legislation are other determining factors in the sector's outlook.

THESE INVESTMENTS CAN ENHANCE THE QUALITY OF LIFE FOR CITIZENS THROUGH ACCESS TO DIGITAL SERVICES, ENABLE THE DIGITAL ECONOMY, AND FACILITATE DIGITAL INCLUSION.

A multidimensional cost-benefit analysis confirms the returns of this inclusive and secure connectivity agenda. Investment in optical fiber, the expansion of 4G and 5G networks, and higher quality and cybersecurity standards can be complex and costly from an economic perspective, since investments in hardware, software, services, training, and support are required. However, these investments can enhance the quality of life of citizens through access to digital services, enable the digital economy, facilitate digital inclusion, enable social development opportunities with access to health care and education, and support economic growth through trade and new services.

Digital talent for the future of work

The deficit of specific digital talent conditions the region's future. Globally, LAC countries rank in the bottom third for the availability of technology skills. Unfortunately, despite the multiplication of programs, the situation has not changed, with most countries in the region at below 50%. This low availability of technological skills is reflected in an unmet demand for talent by companies. Thirty-two percent of LAC companies have problems finding skilled workers. This figure is significantly higher than that of the EU and the world average Technical skills and basic and intermediate (soft) skills are required in different specialized areas. More specifically, interpersonal skills include capacity for teamwork and communication; organizational skills include service orientation and the identification of business opportunities; personal skills include problem-solving and an orientation towards change; and technological skills include information management.

Training and certification are key to tailoring programs and driving the upskilling and reskilling of the existing workforce. It is estimated that the demand for certified and updated IT professionals will multiply by 2030. This is because 70% of Latin American companies are already in their early stages of digital transformation and 59% made investments in cloud infrastructure for 2024. This leads to the need for IT professionals certified in artificial intelligence (AI), the cloud, Internet of Things (IoT) and data science.

In the process of preparing for the future of work, it is essential to implement a comprehensive skills plan as of early stages. This involves engaging younger children in learning to code, encouraging STEM+A (science, technology, engineering, mathematics, and art) training, and promoting data analytics in schools. Significant investments should be made in non-university technical training, focusing on key areas, such as cybersecurity, cloud computing, automation and data analytics, as well as skills related to critical thinking, adaptability, information management and collaborative work. It is essential for this training process to involve both students and teachers to ensure a comprehensive and holistic approach.

TRAINING AND CERTIFICATION ARE CRUCIAL FOR ADAPTING PROGRAMS AND PROMOTING THE RE-EDUCATION (*UPSKILLING AND RESKILLING*) OF THE EXISTING WORKFORCE.

Agile and connected states

Administrative procedures are a barrier to access to development. Central governments in the region handle between 1,000 and 5,000 different procedures, depending on the country. On average, a Latin American adult carries out at least five procedures per year. Among these are those required to apply for a driver's license, immigration procedures and those related to the commercial registry. Half of the administrative procedures require two or more trips to public offices and long waits. Procedures can be barriers to access to services and reduce public revenues, exacerbate informality, and generate excessive costs. The digitization of procedures provides an effective, low-cost solution that can be implemented in more remote areas.

Adopting digital technologies in the provision of public services facilitates access to information, simplifies bureaucratic processes and improves efficiency in government management. For this reason, digitization can also increase transparency and accountability, which strengthens citizens' trust in public institutions. Low-cost digital public services enable more efficient information gathering, processing, and distribution among people. On average, digital public services are 74% faster than their on-site equivalents and are 95% cheaper for public institutions.

Artificial Intelligence (AI), Blockchain, the Internet of Things (IoT), the Metaverse, Big Data, Virtual Reality (VR) and Augmented Reality (AR) also offer promising avenues. IoT can increase the efficiency of public services and promote the development of smart cities and territories. Blockchain enables using automated public contracts and ensures the immutability of information. AI supports process automation and decision-making. The Metaverse opens the door to new forms of teaching and research. Big Data enables deep analysis and pattern detection for formulating more effective policies. VR and AR are tools to improve training, simulation and information visualization for improved decision-making. By adopting these emerging technologies, governments not only become more efficient, but also more inclusive and forward-looking, laying the foundation for the country's growth and competitiveness.

For all the benefits of 4.0 technologies to become a reality, it is critical for governments to address regulatory challenges. Technology often advances faster than existing regulations, reason why agile regulatory mechanisms are required, such as sandboxes that provide controlled testing environments in which new technological solutions can be implemented and their impacts can be evaluated prior to expansion. This encourages innovation and makes sure technology is used safely and responsibly for the benefit of society.

Industry 4.0

ARTIFICIAL INTELLIGENCE SUPPORTS PROCESS AUTOMATION AND DECISION-MAKING. THE METAVERSE OPENS THE DOOR TO NEW FORMS OF TEACHING AND RESEARCH.

LAC's digital markets are increasingly important for the region's development, but the digitization of the economy is still relatively passive instead of mainstream. Companies adopting technology, along with complementary investments in digital skills, organization and other types of intangible capital, can improve competitiveness and lead to growth in productivity. Although the pandemic accelerated the use of technology, only the use of computers is in the majority among exporting companies in the largest economies, while big data and mobile platforms are at levels of 40%, artificial intelligence at only 35% and, cybersecurity, which is indispensable, is at 29%.

Entrepreneurship in technology-intensive sectors can help foster innovation, create new markets and spread the benefits to other sectors. In this way, digital financial services can promote more efficient and convenient payments. This is a cornerstone for developing e-commerce and digitally enabled platform business models. Accordingly, digital transformation can boost exports, which are projected to represent more than 2% of the GDP in six Latin American countries (Argentina, Brazil, Chile, Colombia, Mexico and Uruguay) by 2030. The value of the digital industry grew by 14% between 2010 and 2022. Although more modest than the observed global growth (329%), it is significant in light of the 29% drop in traditional sectors over the same period. This dynamism in the digital economy is attributed to the strong growth of e-commerce platforms and internet services, which increased by 248% and 200%, respectively, between March 2019 and March 2022.

Start-ups based on advanced technology are key drivers of digital development. Of every ten start-ups, almost nine are based on digital technologies or are in that sector. Most digital start-ups are concentrated in Brazil (57%) and Mexico (13%). Regionally, these companies are based on information technologies and software, with solutions supported by artificial intelligence (7%), and financial service technology (fintech), educational technology (edtech) and agricultural technology (agritech). Despite the progress in the last decade, LAC is lagging behind other regions and countries that are closer to the technological frontier.

These advances in digital transformation are not the same in all sectors, with some cases lagging behind significantly. There are significant differences in the degree of digitization, with low levels in agriculture, mining and manufacturing, three of the most important sectors for the region's GDP. For example, the use of digital technologies in sourcing, manufacturing and distribution processes is lagging far behind that of more developed countries.

European investment opportunities in Latin America and the Caribbean with economic and social impacts

Connectivity, trust and digital security

One of the main challenges is to connect the population, both in rural and remote areas, as well as in urban areas and lower-income households. Despite Latin American countries' efforts to update their regulatory frameworks and develop digital policies, implementing large-scale solutions has not been possible due to significant infrastructure investment needs. Common obstacles include limitations in the use of universal access funds, energy and road infrastructure problems, high investment costs, and lower profitability for operating companies in rural areas.

Overcoming these challenges requires investing in multiple infrastructures, such as 4G and 5G communications networks, optical fiber expansion, LPWAN (Low-Power Wide-Area Network), access to satellite services with public-private partnerships, and general tax incentives that enable private sector scale investments in infrastructure, literacy and digital skills. Denmark, the Netherlands and Spain are the leaders in connectivity in Europe with levels above 95%, according to the European Commission's *Digital Economy and Society Index.* In this regard, the *UNICO Broadband Program* launched by Spain with support from Europe's *NextGenerationEU*, under which aid was granted to telecommunications operators to reach areas where it was not planned for the next three years, could work as inspiration to advance connectivity in remote areas in LAC.

In terms of cybersecurity, the EU can contribute to strengthening national strategies in LAC. They can do so by exchanging knowledge, training, generating best practices and standards, and creating cybersecurity agencies and hubs. In addition, investments in network security, data protection, identity and access management, and incident response must be considered. The European strategy designed by the recent *Cyber Solidarity Act*, which structures and reinforces actions to detect and respond to cybersecurity incidents, with a regional shield and emergency mechanisms that Member States can call upon, may be a good reference point for LAC.

DEVELOP SUSTAINABLE AND REPLICABLE CAPABILITIES IN OTHER SECTORS, INCLUDING THE ABILITY TO ADDRESS CUTTING-EDGE EXPONENTIAL TECHNOLOGIES.

An agile state and talent

Collaboration in this area can include sharing good practices and experiences in implementing digital solutions in the public sector, providing support in creating regulatory and policy frameworks that encourage innovation and investment in the digital sector, and training public officials in the digital skills and competencies needed to meet the challenges of digital transformation. In this regard, it is essential to establish synergies between the scientific-technological systems of LAC and the EU in order to generate sustainable and replicable capabilities in other sectors, including the possibility of addressing exponential cutting-edge technologies, such as quantum computing and the incorporation of semi-conductors in some key links of the value chain.

A governance model for this transition towards agile and connected States could be based on govtech ecosystems that bring together governments and start-ups. The Europe-LAC partnership is natural in this area, given the good examples of innovation and digital entrepreneurship in Ibero-American cities, such as Barcelona, Bogota, Buenos Aires, Mexico, Madrid and São Paulo. LAC govtech start-ups have achieved a particular dynamism due to the expansion of megacities, which accentuates the challenges of their mayor's offices. However, it simultaneously broadens opportunities due to the availability of talent and creativity, and the investment concentrated in these large cities. In Europe, the GovTech Catalyst programs in the United Kingdom, GovTech in Portugal, GovTech Program in Denmark, GovTech in Poland, and GovTech in Lithuania, Estonia, comprehensively, and, at a subnational and local level, Smart Dublin, CivTech in Scotland and STIR Amsterdam, stand out on a national level.

CYBER SOLIDARITY LAW THAT STRUCTURES AND STRENGTHENS ACTIONS TO DETECT AND RESPOND TO CYBERSECURITY INCIDENTS, WITH A REGIONAL SHIELD AND EMERGENCY MECHANISMS.

Industry 4.0 and sectors

Collaboration between Europe and LAC and Europe on industry 4.0 could include developing reindustrialization policies and strategies, transferring technology and knowledge, and training and educating the human capital needed to boost the adoption of 4.0 technologies in the region. This reorientation towards more technology- and knowledge-intensive sectors could focus on renewable energy, pharmaceuticals, medical devices or service exports The 4.0 digitization of tourism represents a remarkable opportunity for a region with such a rich historical heritage and biodiversity. This sector, one of the pioneers in digitization with online air transportation and hotel management, can make a qualitative leap with smart travel facilitation (visas and registrations), smart destinations with strategic tourism flow management using data analytics, and job creation based on training programs.

Digitization applied to electric power supplies, transportation and mobility, water and sanitation, and infrastructure construction and maintenance, based on the experience of large European companies, represents an enormous opportunity. A 5% increase in service efficiency through increased production efficiency (derived from the impact of digitization on loss reduction, energy efficiency and process automation) would result in USD 200 billion in incremental GDP over a decade.

DIGITIZATION APPLIED TO THE PROVISION OF ELECTRICITY, TRANSPORTATION, AND MOBILITY, BASED ON THE EXPERIENCE OF LARGE EUROPEAN COMPANIES, REPRESENTS A TREMENDOUS OPPORTUNITY.

Global financial diplomacy. Boosting a competitive, equitable and green digital economy

The European agenda has some distinctive hallmarks recognized in the very launch of the Global Gateway initiative, which can be specified in the digital sphere as competitive rules of the game and a focus on equity, environmental sustainability and ethics and rights. The EU has been leading the regulatory and tax innovation agenda for years to ensure a competitive environment for the digital sector on the continent and worldwide. LAC could continue drawing inspiration not only from regulatory texts, but also from the processes and pilots implemented to move towards data protection standards and the accountability and transparency of large digital platforms, thereby promoting competition, security and fundamental rights in the use of AI.

Implementing efficient digital tax systems with taxes adapted to the new digital product and service economy is key, making sure multinational companies pay a fair share of taxes in the countries in which they operate. The *OECD/G20 Inclusive Framework on BEPS* should be implemented in a coordinated and as expeditious manner as international treaties and national regulations and capacities allow. The urgency is clear, since economies in the region have begun to implement or are in the public or legislative consultation phase of different taxes on income from digital services, especially motivated by income needs.

The gender dimension should be added to the social component of digital transformation. In order to correct the gaps in connectivity, financing and job progression, specific programs are needed for women in using and developing of digital services, financing startu-ups and female leadership in digital companies and projects, training, and venture capital funds with a gender impact. In the digital sphere, the Women TechEU program could be an example to provide support funding and accelerating women-led businesses.

A distinctive dimension of the digitization agenda in Europe is the emphasis on digital rights, recently illustrated by the *Digital Rights Charter* (Government of Spain, 2021), *the Declaration on European Digital Rights and Principles for the Digital Decade* (European Commission, European Parliament and Council of Europe, 2022) and the *Ibero-American Charter of Online Principles and Rights* (SEGIB, 2023). Their implementation within national digital regulations would make it possible to fulfill the aspiration to promote a human-centered digitization with facts. These charters on the ethical principles of artificial intelligence are complemented by the ethical recommendations on artificial intelligence of UNESCO and the OECD, and add to the work the CAF has performed in LAC promoting ethical frameworks, governance, data and talent associated with artificial intelligence and establishing methodologies for responsible use in health care, education, justice and employment, among others. In these projects, the CAF is developing comprehensive talent policies,

LAC COULD CONTINUE TO DRAW INSPIRATION NOT ONLY FROM REGULATORY TEXTS BUT ALSO FROM PROCESSES AND PILOTS IMPLEMENTED TO ADVANCE TOWARDS DATA PROTECTION STANDARDS.

THE GLOBAL GATEWAY IS POISED TO LEVERAGE DIGITAL INITIATIVES WITH THE GREATEST ENVIRONMENTAL AND SUSTAINABILITY IMPACT.

AI ethics laboratories, AI ethics committees for cities, data trust for exchanging data and regulatory sandboxes on AI and privacy, among others. In addition, a Regional Council on AI and Ethics has been established in the region jointly with UNESCO.

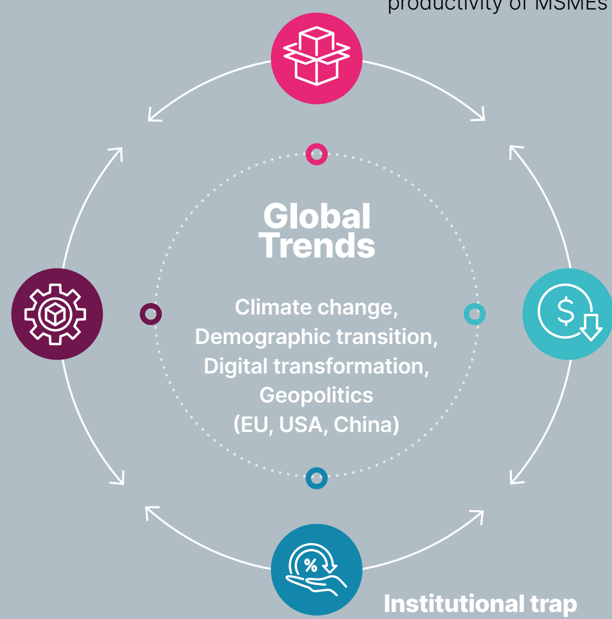
To strengthen the green, digital symbiosis, we must work on developing better statistics and promoting environmentally friendly information and communication technologies, as well as actively using them to preserve biodiversity and natural ecosystems. The Global Gateway is in a position to leverage digital initiatives with the greatest environmental and sustainability impact. The development of IoT for urban management, people's mobility, energy use, waste recycling and industrial complex management is one of the safe bets of this combination. Using big data and cloud data to monitor ocean temperatures is also a promising development. Artificial intelligence and 5G have enormous potential for biodiversity protection by capturing information from remote at-risk areas and geo-referencing heavy machinery in real time, helping avoid deforestation. Finally, there is a vast field for biomimicry, which is technological developments inspired by nature.

Additionally, the European cooperation and investment agenda in LAC should prioritize creating a regional digital market, or at least favor a greater integration of connectivity, access to online goods and services, and e-commerce. Actions from the EU have contributed to increasing the integration of markets of goods and services in the region, facilitating flows of people and digital trade. Digital integration in LAC may be less challenging than physical integration, since it does not require infrastructure to overcome geographical barriers. To this end, the announced establishment of a continuous coordination mechanism between the EU and the Community of Latin American and Caribbean States (CELAC) is essential.

In summary, the EU Global Gateway represents a unique opportunity for financial, technical, business and regulatory collaboration in Latin America's digital transition, in combination with the green and just transitions. The EU-CELAC *Digital Alliance* is one of the flagship projects for achieving the objectives of the digital investment strategy. Financial, technical, business and regulatory collaboration between the EU and LAC in areas, such as industry 4.0, smart cities and territories, and agile and connected States, can have a significant impact on sustainable development and digital inclusion in the region. These approaches complement and reinforce efforts in connectivity and digital security and offer a unique opportunity to build lasting and effective partnerships to drive digital transformation in Latin America. It is important for projects, such as submarine cables, optical fiber, creating neutral networks, creating cybersecurity hubs and data processing centers for Tier IV private clouds, financing digitization strategies for sectors, such as health care, justice, transportation, migration and taxes, to grow in the region. ■

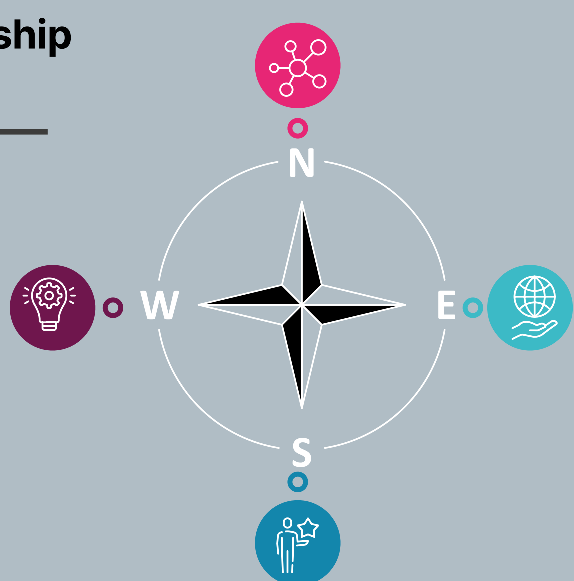
ACTIONS FROM THE EU HAVE CONTRIBUTED TO INCREASING THE INTEGRATION OF GOODS AND SERVICES MARKETS IN THE REGION, FACILITATING THE FLOW OF PEOPLE AND DIGITAL TRADE.

Development traps in Latin America and the Caribbean



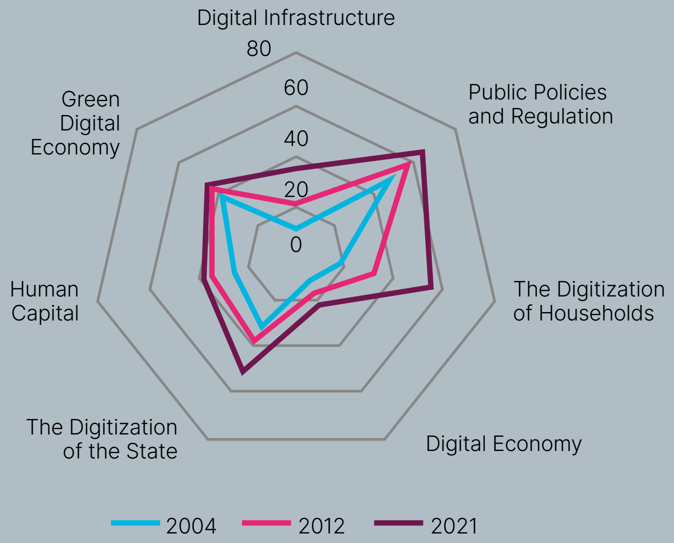
Source: CAF/OECD//ECLAC/EU (2019) and prepared by author

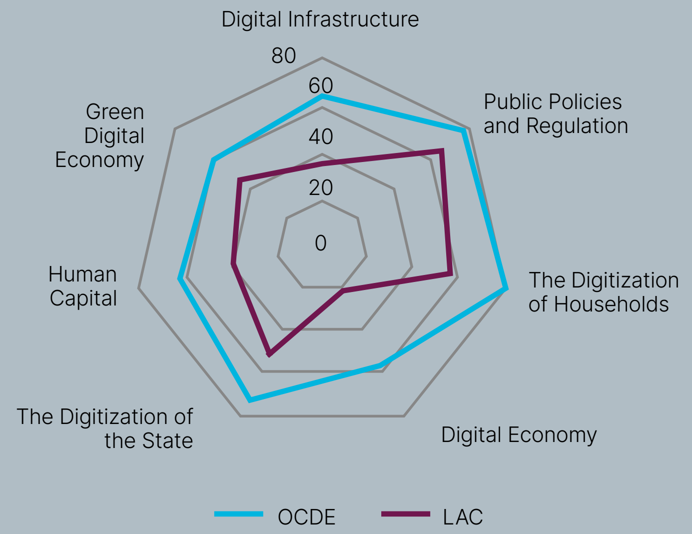
Axes of the European Union's digital investment and cooperation partnership in LAC



Source. Prepared by author

Progress in the digital economy in LAC and the OECD

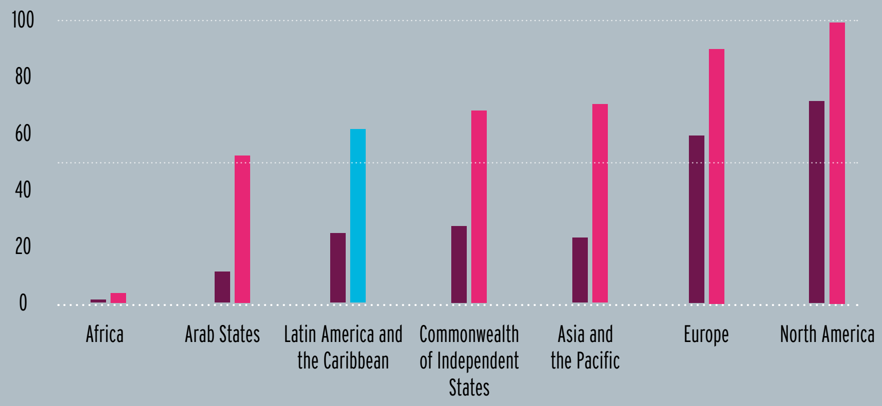




Source. Digitization index prepared by Telecom Advisory Services for the CAF. Maximum = 100. (2022).

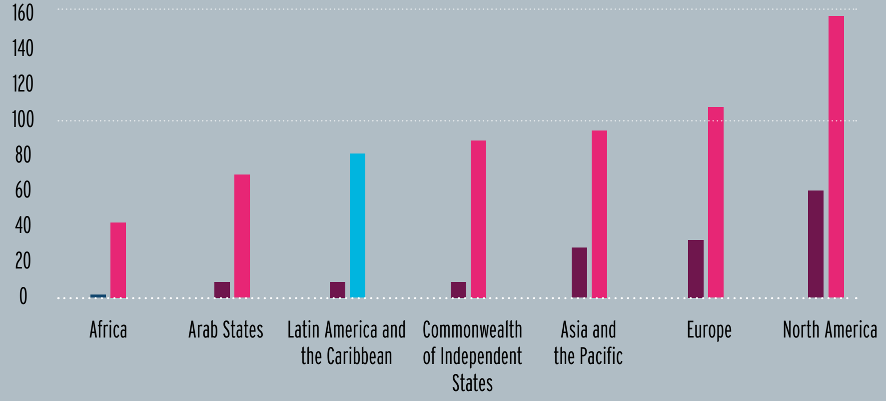
Broadband subscribers
(In percentages of households)

• 2010
• 2021



Mobile broadband subscriptionsl
(As a percentage of the population)

• 2010
• 2021



Source.
ECLAC (2022b) with ITU data

Cybersecurity strategies in Latin America and the Caribbean, 2020

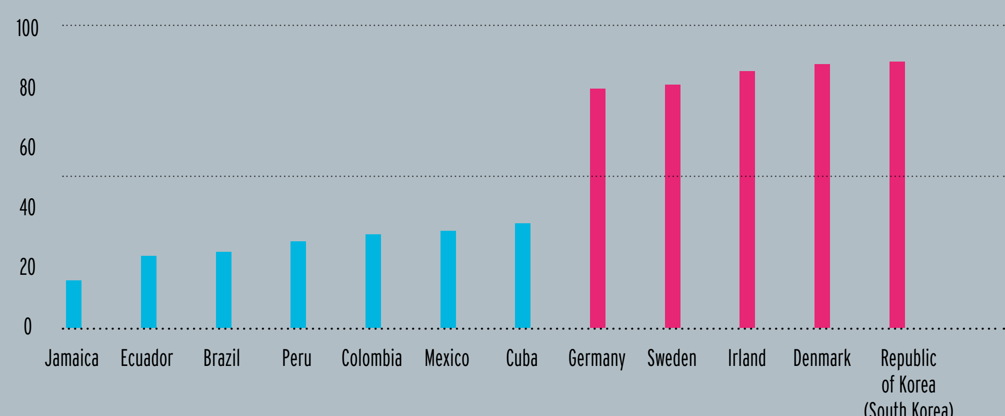
Source. IDB and OAS (2020)

- Countries with a National Cybersecurity Strategy
- Countries currently developing a National Cybersecurity Strategy

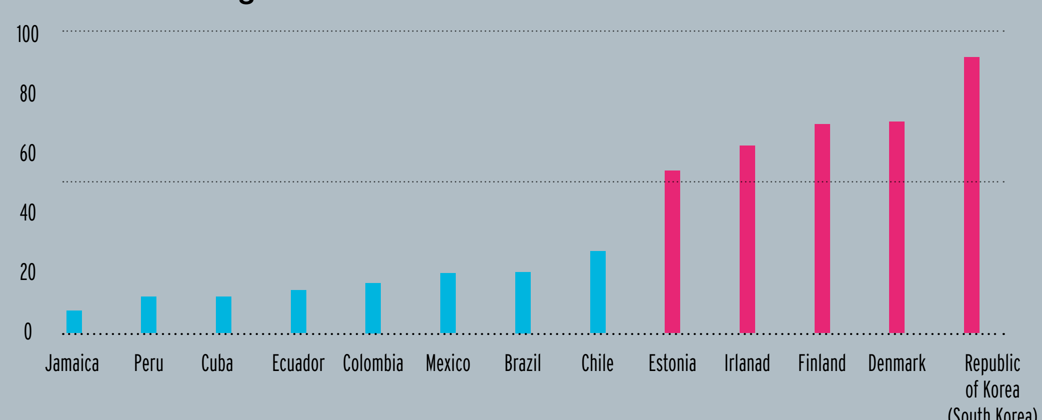
Main digital skills of the population aged 15 and older

Source. ECLAC (2022b)

A. Basic digital skills



B. Intermediate digital skills



Utilization of technologies in Argentina, Brazil, Colombia, and Mexico
(In percentages, n=500)

Source. CEPAL (2022b) based on data from the Inter-American Development Bank (BID).

Nota: n is the number of surveyed companies (100 companies in sectors with the highest export potential - agroindustry; chemicals, petrochemicals and pharmaceuticals; machinery and tools; automotive industry; mining and metallurgy; optical and medical instruments; and knowledge-based services.

Sector-specific Note on Green Transition.

A roadmap for environmental and sustainable collaboration between LAC and the EU

From the LAC perspective, developing a strong climate partnership with Europe can be a successful strategy for reindustrialization, with a focus on green products. Generating the revenue to effectively protect LAC's biodiversity is another possible by-product of this partnership. Win-win opportunities are possible, but not assured unless both parties take decisive action.

Complete digital version

Asymmetries between LAC and the EU

THE KEY MESSAGE IS THAT LAC IS MUCH MORE VULNERABLE AND HAS LESS CAPACITY TO CONFRONT CLIMATE CHANGE.

Geography has re-emerged as an important factor in explaining differences in economic development, mainly because it is a major determinant of exposure to climate change. In fact, a climate change exposure index that measures exogenous risks based on the physical characteristics of natural disasters indicates that countries closer to the equator, such as those in LAC, are more exposed to climate change. Average temperatures are also higher in most LAC countries compared to Europe, reason why the negative effects of increases in global temperatures are significantly greater.

The composition of emissions is another source of asymmetries between the two regions. Energy (including power generation, transportation and the use of fuel in industrial processes) accounts for 43% of total CO_2 emissions in LAC, compared to 72% in the EU. In contrast, the Agriculture, Forestry and Other Land Use sector accounts for 40% of LAC's total emissions, in contrast to the EU, where negative land use emissions have been observed since 2020.

Another key factor is related to investment in adaptation, which is indispensable for avoiding the economic setback caused by climate change. Countries with a higher exposure also show a lower adaptive capacity, especially low-income countries and emerging economies. The greatest risks, which are associated with geography, are amplified by institutional factors that limit adaptive capacity. EU countries not only have lower exposure levels; they also have a significantly higher adaptive capacity compared to LAC countries. The key message is that LAC is much more vulnerable and has less of a capacity to cope with climate change, despite having much lower per capita greenhouse gas emissions than the EU.

Its low adaptive capacity is aggravated by fiscal and financial factors. For example, LAC's higher cost of capital reduces the number of bankable and implementable climate projects (compared to those in the EU). Differences in interest expenditure on public debt (as a percentage of GDP) illustrate this point. Although European countries have much larger public debts (as a percentage of GDP), they paid an average of 1.26% of GDP in interest in 2020 (compared to an average of 5.02% of GDP in 1993), almost half of what LAC countries paid (2.54% of GDP in 2022). Higher interest payments also create budgetary rigidity that reduces the ability to finance climate action.

In addition, countries with a higher climate vulnerability face a higher probability of debt default compared to more resilient countries to climate change. Although vulnerability to climate change does not have a significant impact on the credit ratings of advanced economies, it is negatively correlated with the sovereign credit ratings of emerging economies and developing countries. This implies a vicious cycle for LAC countries: financing environmental projects is difficult, but climate risks worsen credit ratings and increase the cost of funds, further restricting the possibility of effective climate action.

Despite these differences, a partnership between the EU and LAC can become an example of cooperation between advanced economies and the countries of the Global South.

COUNTRIES WITH HIGHER EXPOSURE ALSO DEMONSTRATE LOWER ADAPTIVE CAPACITY, ESPECIALLY LOW-INCOME COUNTRIES AND EMERGING ECONOMIES.

EU and LAC climate action

EU Environmental Policies

In 2019, the EU established an agenda to address climate change, primarily through the European Green Deal and the Climate Law. This law commits the EU to achieving carbon neutrality by 2050 and reducing greenhouse gas emissions by 55% by 2030 compared to 1990 levels. It represents a firm commitment, which is unlikely to be reversed.

One of the milestones in European legislation for mitigating climate change was introducing the Emissions Trading System (ETS) in 2005. This system obliges over 10,000 power plants and factories to have permits for every ton of CO_2 they emit, seeking to encourage the private sector to invest in less carbon-intensive technologies. Like other carbon pricing mechanisms, this system is suitable for incentivizing investments in energy efficiency and reducing GHG emissions in a cost-effective manner.

The EU adopted the Fit for 55 package to expand climate action through industrial policies. One of the main revisions consists of ensuring the effectiveness of the ETS by including new provisions, such as:

- Extending to emissions from shipping, road transportation and buildings.
- A faster reduction of emission allowances in the system, particularly including a phase-out and the ultimate exclusion of free allowances in certain sectors (including several heavy industries).
- A carbon reduction plan for aviation.
- Introducing a “Market Stability Reserve” (a mechanism intended to limit CO_2 price volatility and, therefore, improve the resilience of the ETS to future disruptions).

Another important mechanism is the introduction of the Carbon Border Adjustment Mechanism (CBAM), which aims to reduce "carbon leakage" outside EU borders, where more flexible policies would allow companies to maintain high emissions by producing carbon-intensive goods. The CBAM, which is expected to become fully operational in 2026, is designed to ensure equivalent carbon pricing for imports and domestic products. It also aims to incentivize third country producers trading with the EU to use technologies that are more efficient in reducing GHG and generate fewer emissions. The mechanism was designed to comply with the rules established in the context of the World Trade Organization.

LAC Environmental Policies

LAC countries have established nationally determined contributions as signatories to the Paris Agreement, committing to significantly reduce greenhouse gas emissions by 2030 and, in some cases, become carbon neutral by 2050. In the last three years, 28 of the 33 LAC countries, including the six largest economies (Argentina, Brazil, Chile, Colombia, Mexico and Peru, also called the LAC-6), have updated or submitted new contributions, demonstrating their climate mitigation ambitions. These commitments were made in the context of increasing climate risks, as well as the need for an agroecological transition, given the composition of the region's emissions.

In terms of long-term strategies, LAC-6 countries have designed emission reduction targets aligned with nationally determined contributions, mainly focused on the Agriculture, Forestry and Other Land Use sector. The most significant initiatives include stopping deforestation. Within the energy sector, a shift to non-hydroelectric renewable energy is a focal point, along with energy efficiency measures. Improving renewable power generation is prominent in Argentina, Chile and Colombia. Brazil and Uruguay are at the forefront, and progress has been remarkable. Transportation, biofuels and electrification (mainly in public transportation) are central to future plans. Brazil, Chile and Colombia have declared producing green hydrogen as an objective.

The transition to a low-carbon economy will require significant capital expenditure for the region, which is constrained by significant risks (related to political stability, institutional factors, reputational issues and macroeconomic management) that are difficult to diversify. In addition, the green transition will require an average investment of 7-11% of GDP per year between 2021 and 2050 for the LAC-6, compared to around 6% of GDP per year for the European Union and the United States over the same period.

IN THE LAST THREE YEARS, 28 OUT OF THE 33 COUNTRIES IN LAC (LATIN AMERICA AND THE CARIBBEAN), INCLUDING THE SIX LARGEST ECONOMIES (ARGENTINA, BRAZIL, CHILE, COLOMBIA, MEXICO, AND PERU, ALSO KNOWN AS LAC-6), HAVE UPDATED OR PRESENTED NEW CONTRIBUTIONS.

Areas of Collaboration between the EU and LAC

Both LAC and the EU share a strong commitment to the fight against climate change and the green transition. However, the EU has managed to materialize this commitment in specific public policies within a binding legal framework, while actions in Latin America and the Caribbean have not been coordinated on a regional level. This has been reflected in differences in countries' levels of commitment, as well as in decarbonization strategies. This brings about challenges and opportunities for cooperation between the two regions.

Creating a mutually beneficial joint climate agenda can consider the following areas of collaboration:

- **Electrifying transportation, which includes producing electric vehicles and their components in LAC.** In Europe, the "Target 55" plan intends to increase the production of electric vehicles (EVs) and batteries, backed by the Green Deal Industrial Plan, while Latin America is considering measures to facilitate this transition. The EU Global Gateway requires proactive transition policies to counteract the loss in the value of assets, such as internal combustion engine vehicle manufacturing plants in Brazil, Mexico, Argentina and Colombia (especially those owned by European automakers). Electrifying public transportation in Latin American cities can also receive such support. On the other hand, LAC countries must find opportunities to leap ahead both in terms of technology and share in the global value chain. Collaboration between the two regions offers the potential for Europe to secure essential minerals and reduce vulnerabilities in supply chains, while avoiding an unbalanced division of labor. Therefore, a central objective must be to improve industrial capabilities in LAC, creating value from transitions to clean energy and technology. The pattern of dependence on raw material exports must not be reinforced, promoting mutual benefit and sustainable growth.

- **Renewable hydrogen production and use of comparative advantages.** The availability of renewable energy is an advantage for producing green hydrogen, which is part of both the EU's Fit-for-55 plan and the strategies of countries, such as Brazil, Chile, Colombia and Costa Rica, among others. Along these lines, at the recent EU-CELAC summit, the European Commission presented initiatives to invest EUR 2 billion in Brazil to support green hydrogen research and development. Collaboration could include supplying European electrolyzers and producing hydrogen-intensive goods in Latin America.

Producing and exporting Liquefied Natural Gas (LNG) from LAC, and increased fertilizer production for the global market. LNG, which emits 40% less CO_2 than coal and 30% less than oil, offers an attractive alternative for energy-constrained countries. It is a transitional fossil fuel while renewable technologies become more affordable. Due to Europe's interest in securing an adequate and reliable supply of LNG, LAC is well-positioned to develop projects that will increase its natural gas export potential, including natural gas transformed into fertilizers.

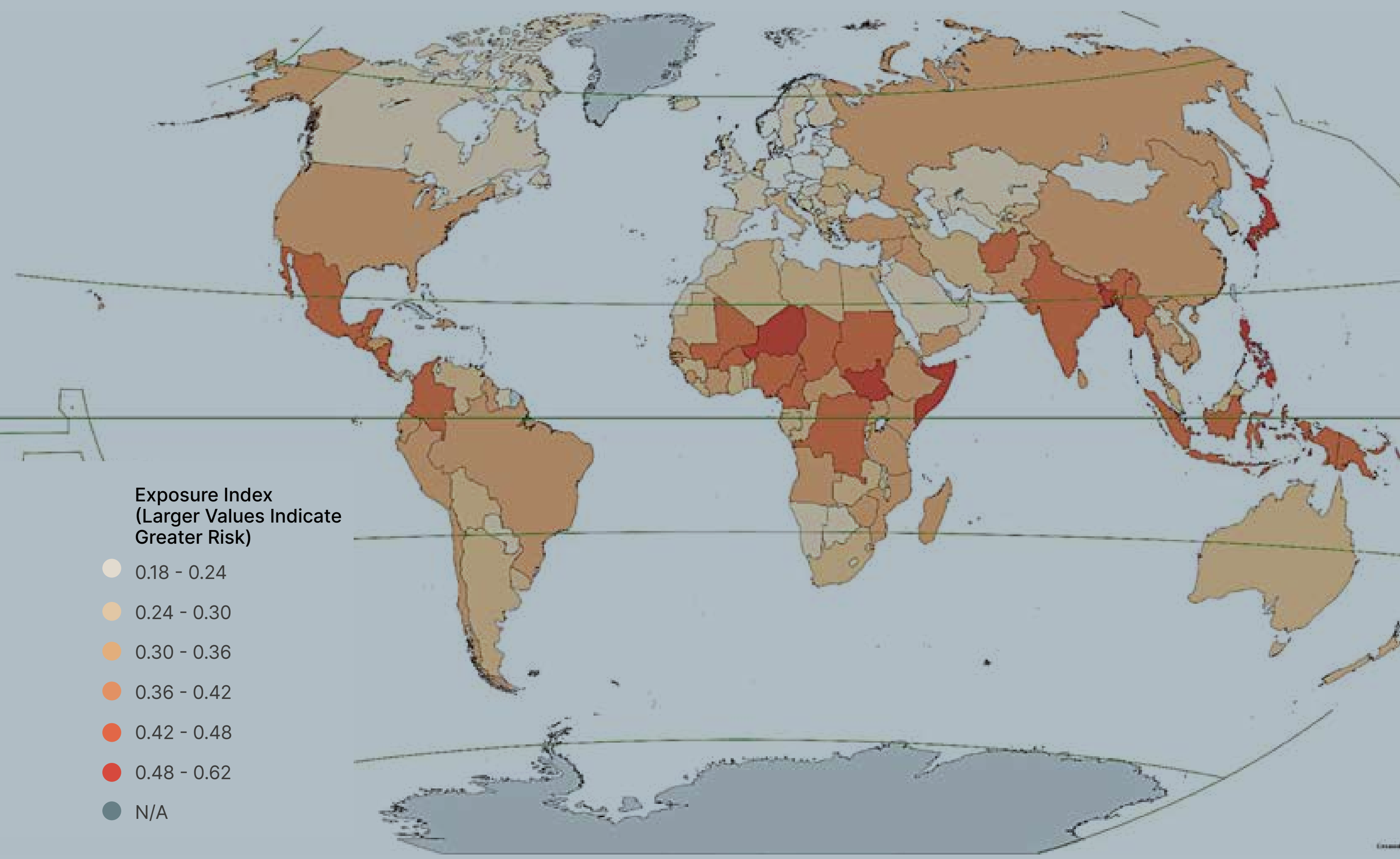
Investments in other renewable energies. LAC has the potential to be a vital partner of the EU because of its high photovoltaic and solar potential. Emblematic examples of significant deployment include Chile and Uruguay, followed by Brazil. These developments are consolidating LAC's power generation mix as the one with the highest share of renewables worldwide (61% in 2021). During the EU-CELAC summit, the EU increased its energy cooperation in renewables and methane emission reduction in Argentina and Uruguay by signing two memorandums of understanding. One specific area of collaboration is related to the global wind energy value chain. LAC and the EU can complement each other in terms of new installation capacity, the availability of minerals and production of turbine components, for both of them to have a greater joint participation in the global market for these technologies.

Access to long-term financing. Europe's role as a provider of capital and financing can contribute to reducing the cost of capital in LAC through greater involvement of European development banks. EU countries hold a significant influence on the decisions of multilateral banking, which requires more capital to support middle-income countries, not only low-income countries.

Joint plans for reducing deforestation in LAC, with an emphasis on the Amazon and other tropical forests. The EU has binding goals for protecting highly biodiverse ecosystems. By 2030, it expects to mobilize at least USD 200 billion/year within the Kunming-Montreal framework. This is particularly relevant in countries with a jurisdiction over tropical forests, such as the Amazon rainforest, El Chaco and the Mayan biosphere in South and Central America. As such, taking advantage of opportunities for sustainable forest management and nature restoration practices between the two regions is crucial because of the capital and technological needs of LAC, and the EU's growing commitment to mitigate climate change and the loss of biodiversity.

CAF - Development Bank of Latin America and the Caribbean- plays a key role in LAC-EU Collaboration. This is due to their capacity to catalyze green financing sources, including low-cost co-financing. The CAF promotes initiatives that encourage more equitable economic development based on conservation, the enhancement and sustainable use of biodiversity and responsible climate action. As a bridge between the European Union and Latin America and the Caribbean, the CAF aspires to become the region's green bank by reaching its goal of 40% of its financing being green by 2026.

More exposed countries are closer to the Equator

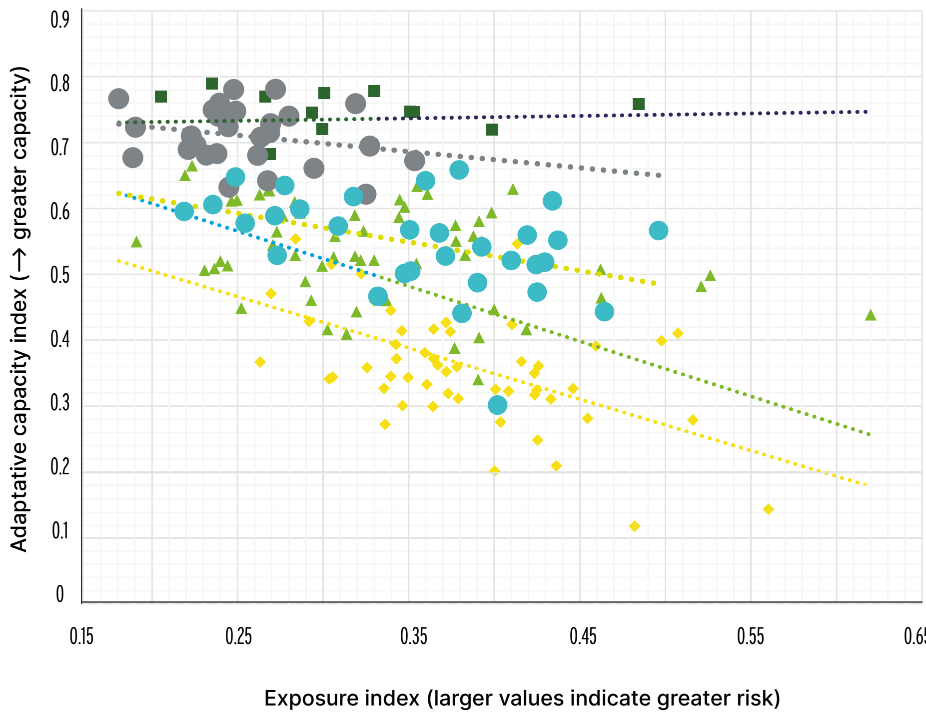


Source: Own calculations based on data from the IMF. Note: The figure uses the Exposure Index for 186 countries (data for 2022). The following countries have no data: Cuba, North Korea, Hong Kong, Taiwan, San Marino, Kosovo, Vatican City, Nauru, and Monaco.

More exposed countries have lower adaptive capacity

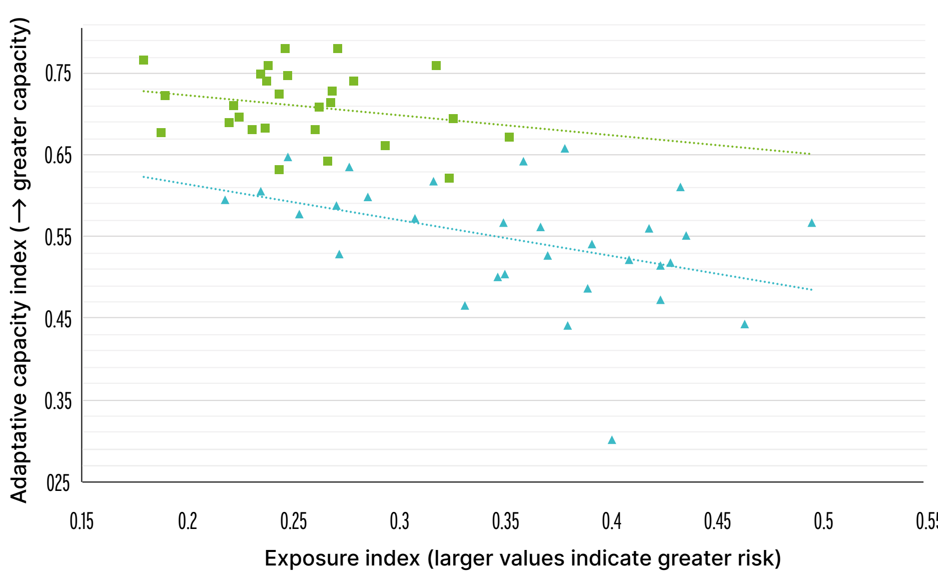
- Advanced economies
- Emerging markets
- Low-income countries
- LAC Countries
- EU Countries

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

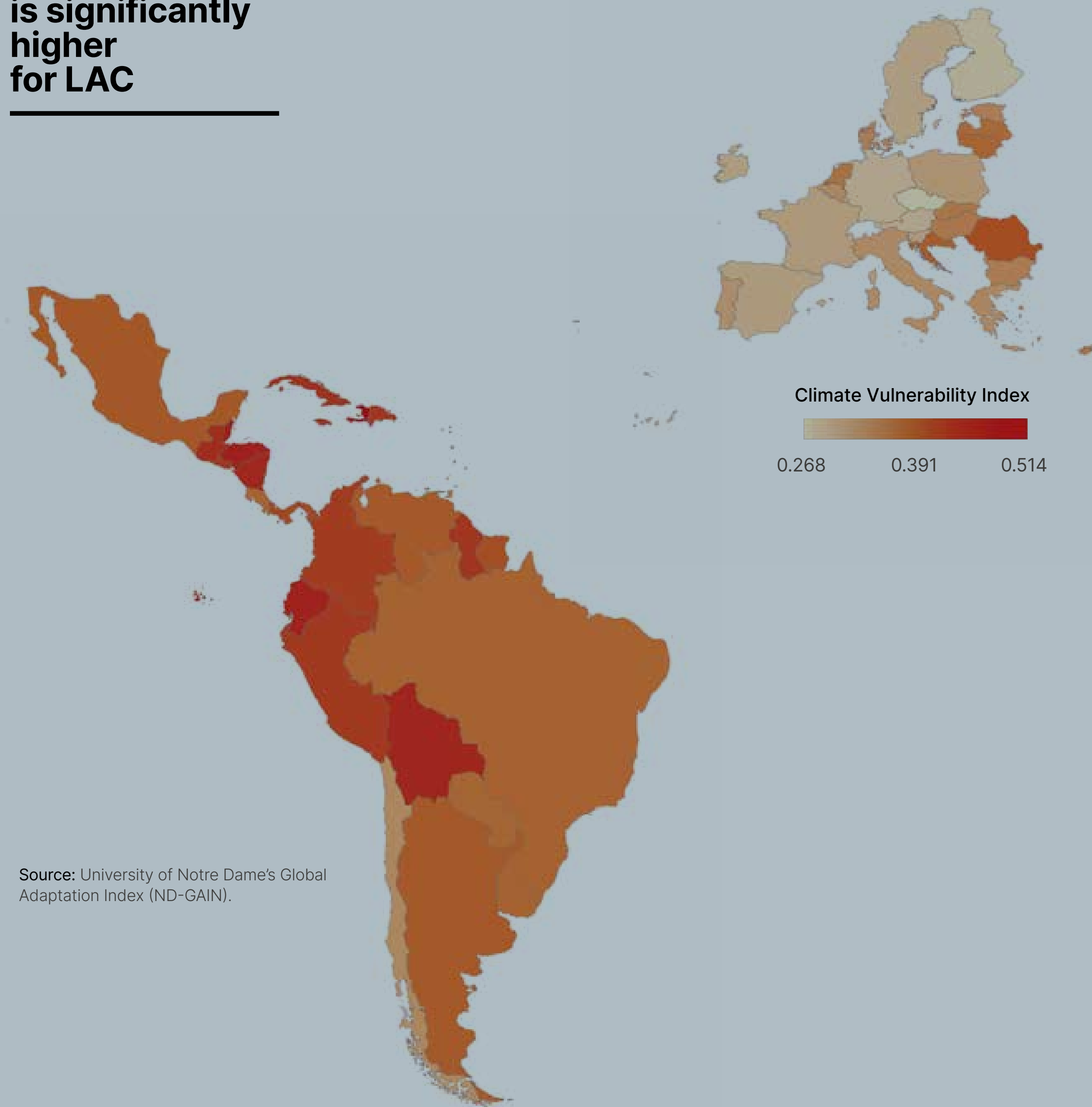


Exposure Index vs Adaptive Capacity Index for EU and LAC Countries

- UE Countries
- LAC Countries

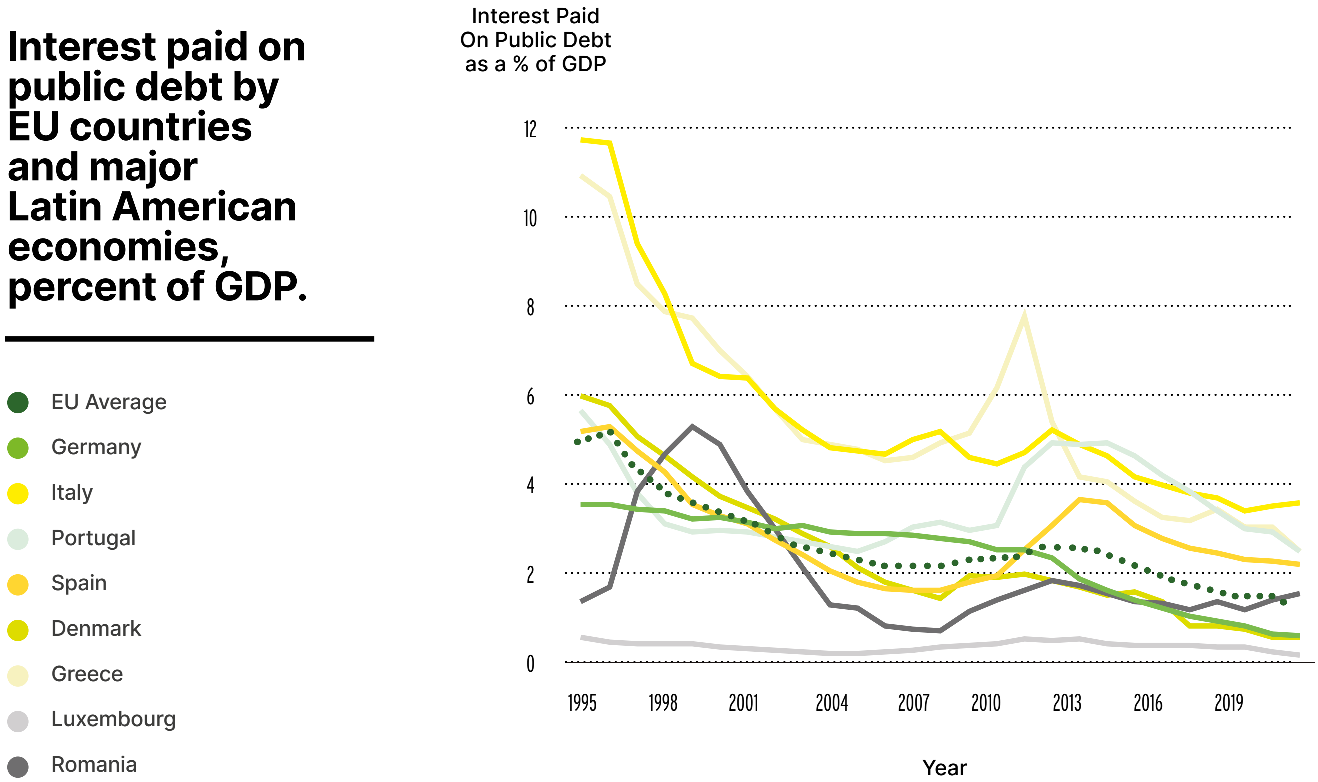


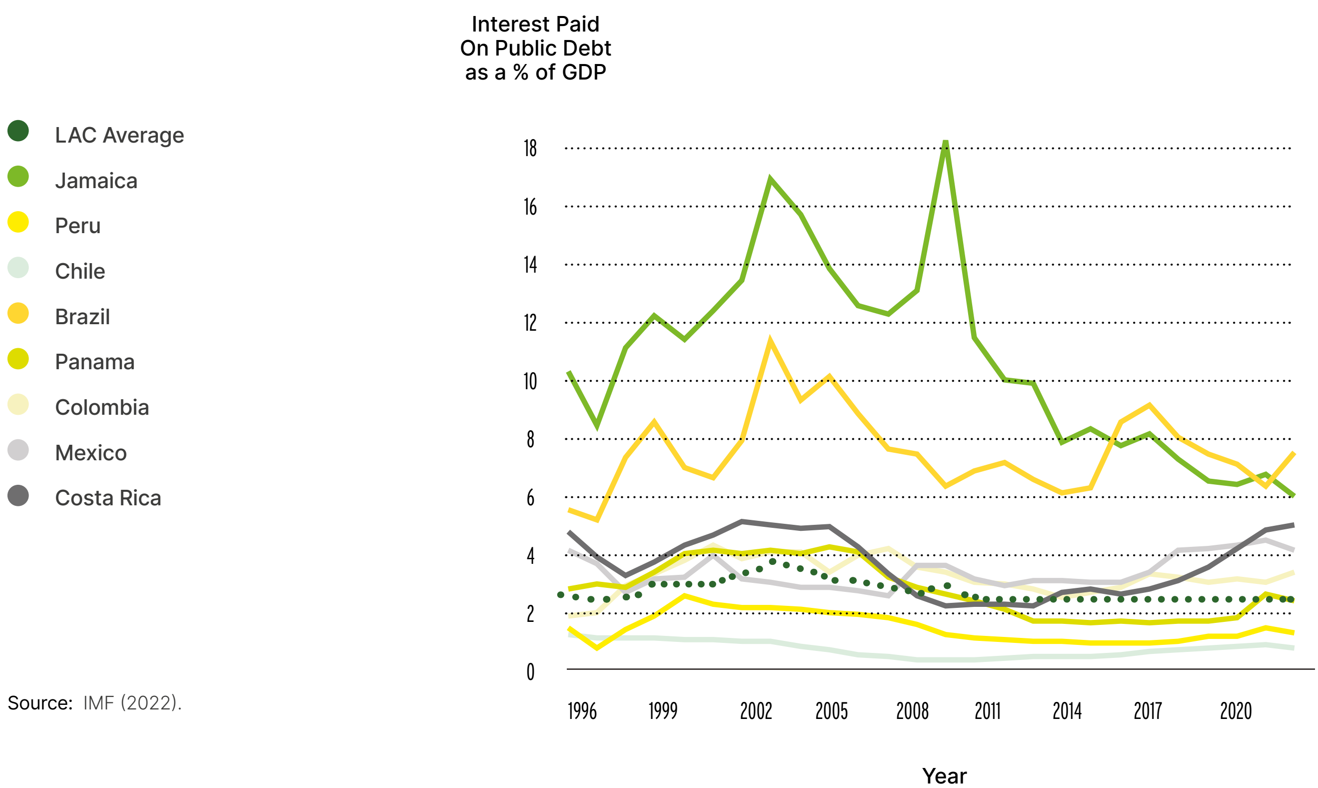
Climate Vulnerability Index is significantly higher for LAC



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

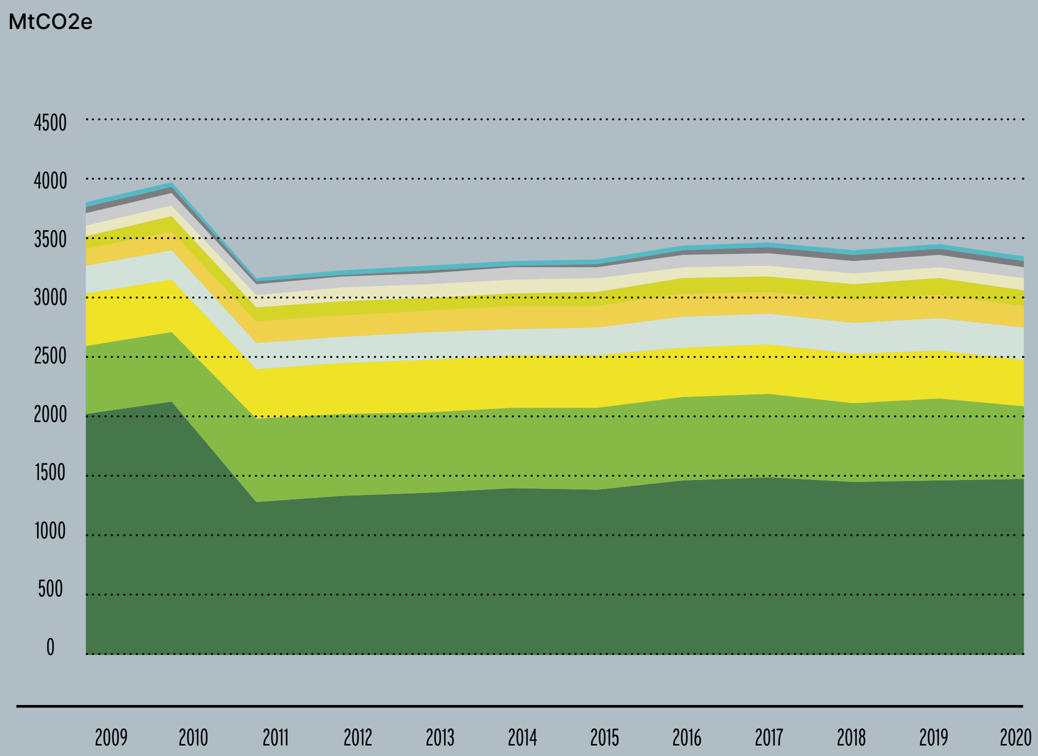
Interest paid on public debt by EU countries and major Latin American economies, percent of GDP.





Source: IMF (2022).

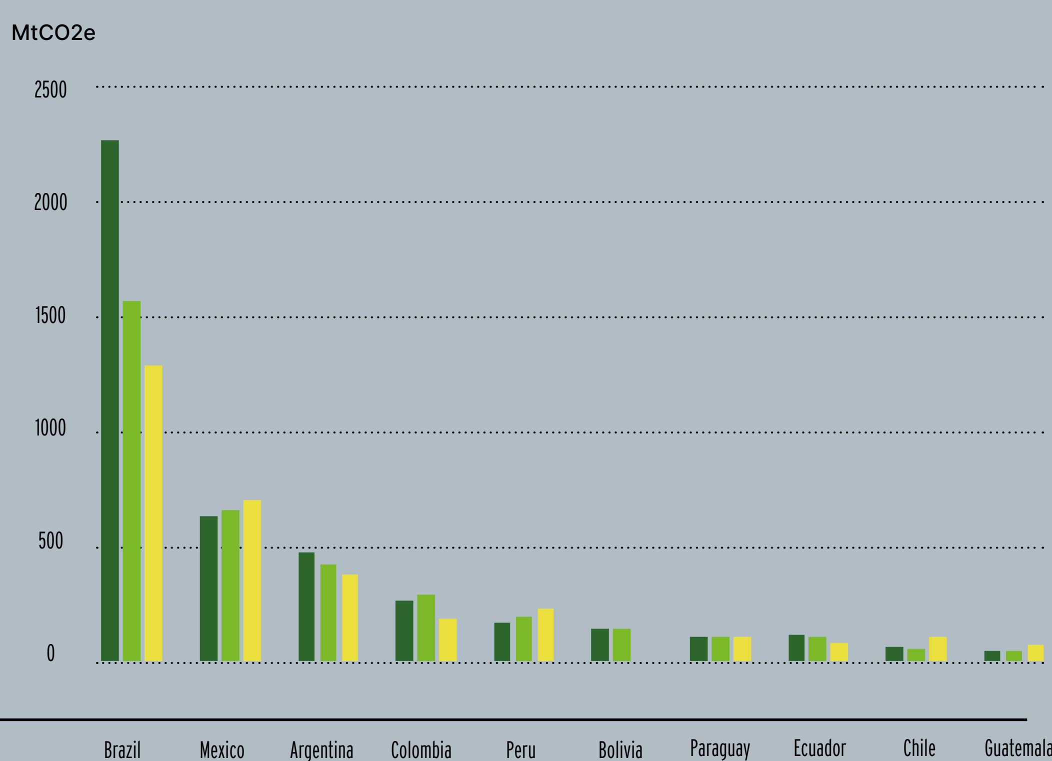
GHG Highest Emission Contributors for LAC Countries



- Brazil
- Mexico
- Argentina
- Colombia
- Peru
- Bolivia
- Paraguay
- Ecuador
- Chile
- Guatemala

Source: Climate Watch (2021).

Projected Emissions through Unconditional Pledges on NDCs for Highest LAC contaminants



- 2010
- 2020
- 2030

Source: Country-specific NDCs

Conclusions

EU-LAC relations require an exercise in pragmatism. In light of the evident asymmetries in their economies and other indicators that reflect disparate realities, the potential for mutual gains is enormous. There are clear incentives for bilateral, subregional and bi-regional agreements. The negative impact of the COVID-19 pandemic on the entire world, although very markedly in LAC countries (a 12-year setback in terms of poverty and 20 years for extreme poverty, according to ECLAC), as well as the global problems caused by Russia's invasion of Ukraine, with the EU as the main affected party (the violation of the United Nations Charter, attacks against civilians, supply issues and higher energy and food prices), provide opportunities on both sides of the Atlantic for cooperation based on legitimate interests, but also framed within a community of values.

These are interests and values that represent 25% of the world's GDP, one third of the members of the United Nations and almost half the members of the G-20. They have been instrumental in achieving multilateral agreements, such as the 2030 Agenda for Sustainable Development, the Addis Ababa Action Agenda and the Paris Agreement. Spain's role in the Presidency of the Council of the European Union during the second half of 2023, which, along with Portugal, plays a fundamental role in EU-LAC relations, represents a valuable opportunity to promote an agenda that addresses common and relevant needs, such as the digital, ecological and socioeconomic transition. It all makes full sense in initiatives, such as the BiodiverCities Network, promoted by the CAF, or BELLA (*Building the Europe Link* *with Latin America*), which solves long-term interconnection needs of the European and Latin American research and education communities.

Recognizing the asymmetries between the two regional blocs makes it necessary to promote genuine dialogues that renounce paternalistic logics and highlight the needs of all those involved, in order to make progress in cooperation through concrete actions and by designing inclusive public policies. Much progress has been made in this area, which building on what has been achieved is necessary. An inescapable challenge is how to deal with initiatives from countries with interests in LAC, but do not share the same values and interests with the EU. In this way, generating more and better content on EU-LAC relations, as well as the values that sustain it, merit a new approach to its dissemination. The world needs the EU-LAC strategic alliance to promote fairer societies and confront agendas that are not necessarily in pursuit of the common good.

Because of these common interests, shared values and common experiences in political-institutional, development cooperation, and economic and financial dimensions, the best of EU and LAC leadership has a vast learning experience to its credit for re-launching relationships that especially value the concept of open strategic autonomy, preventing both regions from being trapped in the logic of bipolarity or in narratives of a new cold war that do not benefit either side. In this sense, said autonomy leads to the ability to decide and implement their own rules in sensitive areas, such as energy and the social and digital sphere, and promotes cooperation with third countries. It also promotes regionalism and regional integration, and its contribution to multilateralism, and builds development cooperation with political objectives around democracy, peace and the fight against inequality, not technocratic or economistic, or around the geopolitical significance of trade agreements, as a diversification strategy (Sanahuja, 2023).

The CAF is an ideal bridge for strengthening relations between LAC and the EU because it is in two European countries, Spain and Portugal, the two nations with the closest relationship to the region, among other reasons.

THE WORLD NEEDS THE EU-LAC STRATEGIC ALLIANCE TO PROMOTE FAIRER SOCIETIES AND ADDRESS AGENDAS THAT DO NOT NECESSARILY PURSUE THE COMMON GOOD.

Annex 1

EU ranking as a trading partner of LAC countries

Country	Total trade with the EU		Exports to the EU		Imports from the EU	
	2001	2021	2001	2021	2001	2021
Argentina	2	**3**	2	**2**	2	**3**
Bolivia	4	**5**	5	**4**	4	**5**
Brazil	1	**2**	1	**2**	1	**3**
Chile	1	**3**	1	**3**	1	**3**
Colombia	2	**3**	2	**2**	2	**3**
Costa Rica	2	**2**	2	**2**	2	**3**
Ecuador	2	**3**	2	**3**	3	**3**
El Salvador	3	**7**	6	**6**	3	**5**
Guatemala	4	**5**	5	**4**	3	**4**
Guyana	2	**4**	2	**7**	3	**5**
Haiti	5	**2**	2	**2**	5	**2**
Honduras	2	**3**	2	**2**	3	**4**
Jamaica	2	**3**	2	**3**	3	**3**
Mexico	2	**3**	2	**2**	2	**3**
Nicaragua	3	**2**	2	**4**	6	**2**
Panama	2	**3**	2	**3**	2	**3**
Paraguay	3	**5**	4	**5**	4	**5**
Peru	2	**3**	1	**3**	2	**3**
Dominican Republic	2	**3**	2	**2**	3	**3**
Suriname	1	**1**	2	**3**	1	**2**
Trinidad and Tobago	2	**2**	2	**2**	2	**2**
Uruguay	3	**3**	2	**4**	3	**4**

Source: International Trace Centre, Trademaps

References

Arbache, J (2022a). "¿Una nueva geografía de las inversiones?" Retrieved from https://www.caf.com/es/conocimiento/visiones/2022/10/nueva-geografia-de-las-inversiones/

Arbache, J (2022b). "Powershoring." Retrieved from https://www.caf.com/es/conocimiento/visiones/2022/11/powershoring/

Atlantic Council (2022). *"US-China Vaccine Diplomacy, Lessons from Latin America and the Caribbean.*" Retrieved from https://www.atlanticcouncil.org/in-depth-research-reports/report/us-china-vaccine-diplomacy-lessons-from-latin-america-and-the-caribbean/

Beaumont, N (2020). *"EU and Latin American Relations: a return to multilateralism." Institute of European Democrats.* Retrieved from https://www.iedonline.eu/publications/2020/geopolitics-values/eu-and-latin-american-relations-a-return-to-multilateralism-beaumont

Borrell, J (2022). *"Intervention of the High Representative of the European Union for Foreign Affairs and Security Policy, Josep Borrell at the third CELAC-EU Foreign Ministers' Meeting"* on October 27, 2022. Retrieved from https://www.eeas.europa.eu/eeas/%E2%80%9Croad-2023%E2%80%9D-paving-way-towards-european-union-latin-america-stronger-partnership_en

IDB (2022). *"Nearshoring can add annual USD 78 billion in exports from Latin America and Caribbean."* Retrieved from https://www.iadb.org/en/news/nearshoring-can-add-annual-78-bln-exports-latin-america-and-caribbean

ECLAC (2012). *"European Union and Latin America and the Caribbean: investments for growth, social inclusion and environmental sustainability."* Retrieved from https://www.cepal.org/es/publicaciones/3083-la-union-europea-america-latina-caribe-inversiones-crecimiento-la-inclusion

ECLAC (2018). *"The European Union and Latin America and the Caribbean: Convergent and sustainable strategies in the current global environment."* Retrieved from https://www.cepal.org/es/publicaciones/43740-la-union-europea-america-latina-caribe-estrategias-convergentes-sostenibles-la

CIDOB (2021). "Keys to reactivating the EU-CELAC partnership and channelling the globalisation of the future." Retrieved from https://www.cidob.org/ca/publicacions/series_de_publicacio/notes_internacionals/247/claves_para_reactivar_la_asociacion_ue_celac_y_encauzar_la_globalizacion_del_futuro

Dourado, L (2021). *"China – Latin America and the Caribbean Relations: visits by state leaders from 1949-2020."* Retrieved from https://www.researchgate.net/publication/349668487_China_-_Latin_America_and_the_Caribbean_Relations_Visits_by_State_Leaders_from_1949_to_2020

European Commission (2021). *"Global Gateway."* Retrieved from https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/stronger-europe-world/global-gateway_es

European Commission (2022a). "Negotiations and agreements." Retrieved from https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/negotiations-and-agreements_en

European Commission (2022b). *"The Americas and the Caribbean Regional Multiannual Indicative Programme 2021-2027."* Retrieved from https://international-partnerships.ec.europa.eu/countries/americas-and-caribbean_en

European Union External Action (2021a). *"Europe and Latin America & the Caribbean: together for a greener, safer and fairer future."* Retrieved from https://www.eeas.europa.eu/eeas/europa-y-am%C3%A9rica-latina-y-el-caribe-juntos-por-un-futuro-m%C3%A1s-ecol%C3%B3gico-seguro-y-justo_es

European Union External Action (2021b). *"Road 2023": paving the way towards a European Union-Latin America stronger partnership."* Retrieved from https://www.eeas.europa.eu/eeas/%E2%80%9Croad-2023%E2%80%9D-paving-way-towards-european-union-latin-america-stronger-partnership_en

Fierro, L (2022). *"Economic relations between the European Union and Latin America and the Caribbean." EU-LAC Policy Brief No. 3. EU-LAC Foundation & Institut des Amériques.* Retrieved from https://eulacfoundation.org/en/economic-relations-between-european-union-and-latin-america-and-caribbean

Gaya, R (2022). *"EU-LAC Trade in Services. Presented at the ECLAC Conference, Trade in Services between the EU and Latin America and the Caribbean.* Retrieved from https://www.cepal.org/es/eventos/comercio-servicios-la-ue-america-latina-caribe

Hobbs, C y Torreblanca, J (2022). "Bything back: The EU´s digital alliance with Latin America and the Caribbean". *Policy Brief. European Council on Foreign Relations.* Retrieved from https://ecfr.eu/publication/byting-back-the-eus-digital-alliance-with-latin-america-and-the-caribbean/

International Trade Centre. *Trade Maps Database 2022.* Retrieved from https://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=1%7c068%7c%7c%7c%7cTOTAL%7c%7c%7c2%7c1%7c1%7c1%7c2%7c1%7c2%7c1%7c1%7c1

Jung Altrogge, T (2021). *"Un nuevo ciclo en la cooperación eurolatinoamericana: valores compartidos e intereses." Working Papers 47/2021 of Fundación Carolina's work program sponsored by the ICO Foundation "Relaunching cooperation between Latin America and the European Union: strategic autonomy and green and social recovery in the post-pandemic scenario."* Retrieved from https://www.fundacioncarolina.es/un-nuevo-ciclo-en-la-cooperacion-eurolatinoamericana-valores-compartidos-e-intereses/

Malamud, C. Ruiz, J; Talvi, E (eds) (2023) ¿Por qué importa América Latina? Report 32, June, Real Instituto Elcano; Retrieved from: https://media.realinstitutoelcano.org/wp-content/uploads/2023/07/informe-elcano-32-por-que-importa-america-latina.pdf

Mangas Martín, A (2010) *UE e Iberoamérica: fracaso del paternalismo.* El Mundo, 30-04-2010. Retrieved from http://www.agendadeprensa.org/2010/04/30/2479/

Muñiz de Urquiza, M (1989). *"Relaciones Europa – América Latina a partir de la integración de España en la Comunidad Europea." Revista Española de Investigaciones Socioeconómicas No. 45.* Retrieved from https://revistas.ucm.es/index.php/POSO/article/view/POSO8989330041A

Najera Ibañez, A (1986). *"Europa y América Latina, un lento proceso de acercamiento." Revista de Estudios Internacionales No. 7. Retrieved from* https://www.cepc.gob.es/publicaciones/revistas/revista-de-estudios-internacionales/numero-7-abriljunio-1986/europa-y-america-latina-un-lento-proceso-de-acercamiento-1

Pietikäinen, D (2020). *"EU-Latin America: reviving the other transatlantic relationship". Friends of Europe.* Retrieved from https://www.friendsofeurope.org/insights/eu-latin-america-reviving-the-other-transatlantic-relationship/

Poli, F (2020). El papel de los bancos regionales de desarrollo en América Latina en el mundo post COVID-19. ARI 126 Real Instituto Elcano. Retrieved from: https://www.realinstitutoelcano.org/analisis/el-papel-de-los-bancos-regionales-de-desarrollo-en-america-latina-en-el-mundo-post-covid-19/

Roy, D (2022). *"China´s growing influence in Latin America." Council on Foreign Relations.* Retrieved from https://www.cfr.org/backgrounder/china-influence-latin-america-argentina-brazil-venezuela-security-energy-bri

Sanahuja, J (2023). Ante la cumbre UE – CELAC (Bruselas, julio de 2023): La lógica renovada de las relaciones entre la UE y América Latina y el Caribe. Blog: Iberoamérica Global. Fundación Carolina. Retrieved from: https://www.fundacioncarolina.es/ante-la-cumbre-ue-celac-bruselas-julio-de-2023-la-logica-renovada-de-las-relaciones-entre-la-ue-y-america-latina-y-el-caribe-2/

Schulz, M (2022). *"The EU has neglected Latin America for too long."* Retrieved from https://www.euractiv.com/section/global-europe/special_report/eu-latin-america-relations-shared-values-and-missed-opportunities/

The Dialogue (2022). *"China – Latin America Finance Databases".* Retrieved from https://www.thedialogue.org/map_list/

UNCTAD (2022). "Data Centre." Retrieved from https://unctadstat.unctad.org/wds/TableViewer/dimView.aspx

References

Sector-specific Note on Human Development.

Social policy challenges in Latin America and the Caribbean: Analysis and Policies

Aguirre, G., Arvay, I., Auricchio, B., Berniell, L., de la Mata, D., Fainstain, L., Lara, E., Mejía, D. and Palacios, A. (2022). Los desafíos para la igualdad de género en América Latina. Work document. Caracas: CAF. http://cafscioteca.azurewebsites.net/handle/123456789/1887

BID (2020). La Crisis de la Desigualdad: América Latina y el Caribe en la Encrucijada, Washington, DC.

CAF (2016). RED 2016. Más habilidades para el trabajo y la vida: Los aportes de la familia, la escuela, el entorno y el mundo laboral. Caracas: CAF. http://scioteca.caf.com/handle/123456789/936

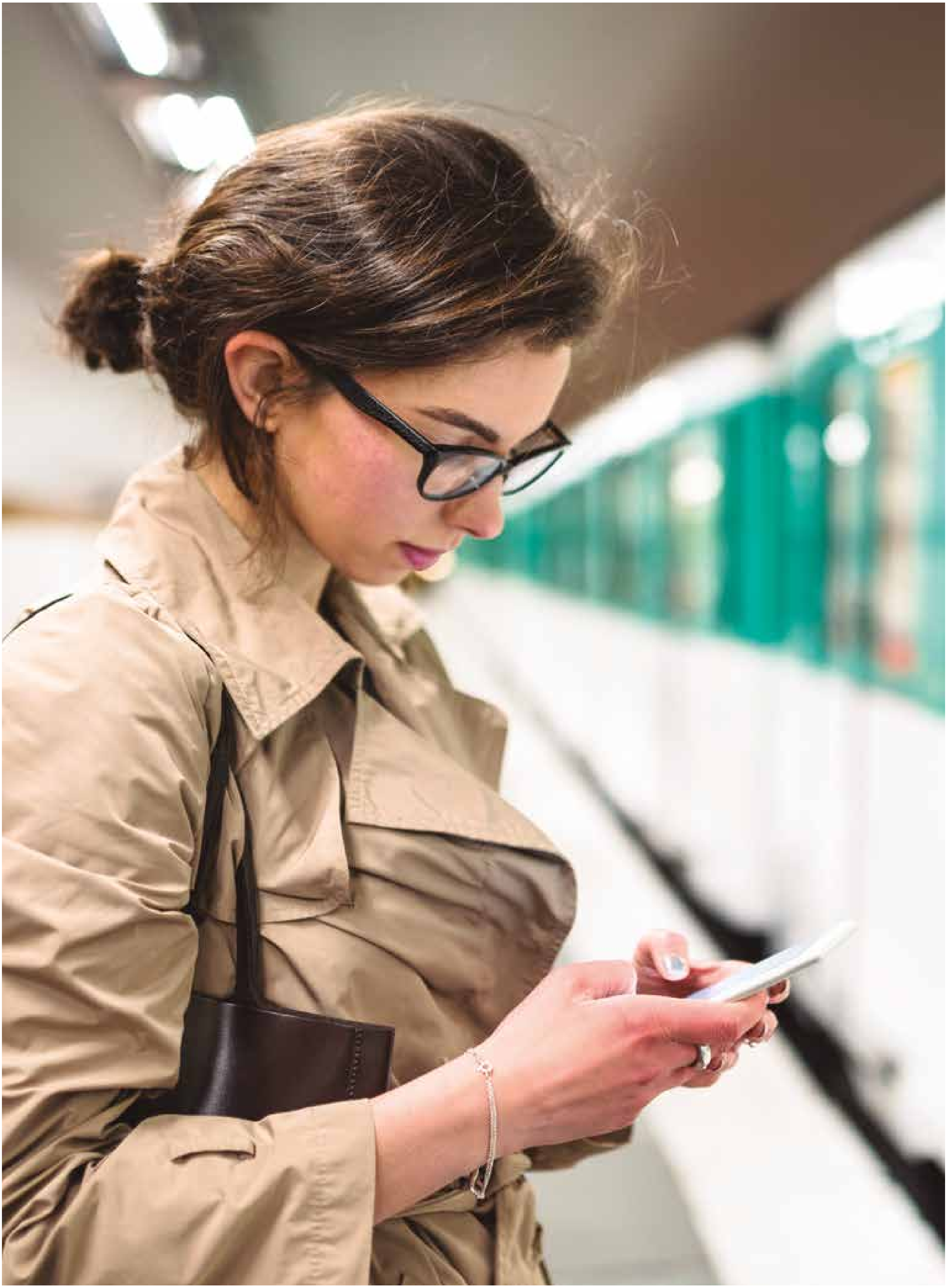
CAF (2017). RED 2017. Crecimiento urbano y acceso a oportunidades: Un desafío para América Latina. https://scioteca.caf.com/handle/123456789/1090

CAF (2018). RED 2018. Instituciones para la productividad: Hacia un mejor entorno empresarial. Caracas: CAF. https://scioteca.caf.com/handle/123456789/1343

CAF (2020). RED 2020: Los sistemas de pensiones y salud en América Latina. Los desafíos del envejecimiento el cambio tecnológico y la informalidad. Caracas: CAF. https://scioteca.caf.com/handle/123456789/1652

CAF (2022). RED 2022: Desigualdades heredadas. El rol de las habilidades, el empleo y la riqueza en las oportunidades de las nuevas generaciones. Caracas: CAF. https://scioteca.caf.com/handle/123456789/1981

Levy, S. (2021) Informality – addressing the Achilles Heel of social protection in Latin America. WIDER Annual Lecture 23. Helsinki: UNU-WIDER. https://www.wider.unu.edu/publication/informality-%E2%80%93-addressing-achilles-heel-social-protection-latin-america



References

Sector-specific Note on Digital Transformation.

Digital transformation progress and challenges in Latin America and the Caribbean

AlphaBeta (2020), *The digital sprinters: how to unlock a US$3.4 trillion opportunity.* Prepared for Google. https://accesspartnership.com/digital-sprinters-unlock-3-trillion-opportunity.

Angelidou, M. (2017), 'The role of smart city characteristics in the plans of fifteen cities', *Journal of Urban Technology*, 24 (4), pp.3-28. https://www.tandfonline.com/doi/abs/10.1080/10630732.2017.1348880.

Appendino, M., O. Bespalova, R. Bhattacharya, JF. Clevy, N. Geng, T. Komatsuzaki, J. Lesniak, W. Lian, S. Marcelino, M. Villafuerte and Y. Yakhshilikov (2023), 'Crypto assets and CBDCs in Latin America and the Caribbean: opportunities and risks", *IMF Working Paper* 23/37. https://www.imf.org/en/Publications/WP/Issues/2023/02/17/Crypto-Assets-and-CBDCs-in-Latin-America-and-the-Caribbean-Opportunities-and-Risks-529717.

Aracil, E., J. Jung and A. Melguizo (2023), 'Banking on mobiles to accelerate the uptake of financial services. Evidence from emerging economies worldwide', in review in *Research in International Business and Finance.* https://www.dropbox.com/s/9a4ug9ep7ci3621/RIBAF-S-23-00765.pdf?dl=0.

Azuara, O., L. Keller and S. González (2019), "Who Drives on Ride-Hailing Platforms in Latin America?: A Profile of Uber Drivers in Brazil, Chile, Colombia and Mexico," T*echnical Note* IDB-TN-1779, Labor Markets Division, Inter-American Development Bank. http://dx.doi.org/10.18235/0001973.

Bakker, B.B., B. García-Nunes, W. Lian, Y. Liu, C. Pérez Marulanda, A. Siddiq, M. Sumlinski, D. Vasilyev and Y. Yang (2023), 'The rise and impact of fintech in Latin America." *IMF Fintech Not*e 2023, https://www.imf.org/en/Publications/fintech-notes/Issues/2023/03/28/The-Rise-and-Impact-of-Fintech-in-Latin-America-531055.

Balmaseda, M. A. Melguizo and V. Muñoz (2023), "Cuarta Revolución Industrial: Verde y digital, la simbiosis del futuro," *América Futura/El País*. https://elpais.com/america-futura/2022-12-20/verde-y-digital-la-simbiosis-del-futuro.html.

Bazelon, C. and G. McHenry (2015), *Mobile broadband spectrum: a vital resource for the U.S. Economy,* Brattle Group. https://api.ctia.org/docs/default-source/default-document-library/brattle_spectrum_051115.pdf.

World Bank (2023), T*he Digital Economy Initiative for LAC* (DE4LAC). https://www.bancomundial.org/en/programs/de4lac.

World Bank (2016), *World development report 2016: digital dividends.* https://www.worldbank.org/en/publication/wdr2016.

Bhatia, K. (2022), "A $100 Billion Opportunity to Boost Digital Exports in Latin America," *Google blog*. https://blog.google/outreach-initiatives/public-policy/a-100-billion-opportunity-to-boost-digital-exports-in-latin-america.

IDB, Inter-American Development Bank and OAS, Organization of American States (2020), 2020 Cybersecurity Report: *Risks, Progress, and the Way Forward in Latin America and the Caribbean.* https://publications.iadb.org/es/reporte-ciberseguridad-2020-riesgos-avances-y-el-camino-seguir-en-america-latina-y-el-caribe.

Brichetti, J.P., L. Mastronardi, M.E. Rivas Amiassorho, T. Serebrisky and B. Solís (2021), *The Infrastructure Gap in Latin America and the Caribbean: Investment Needed Through 2030 to Meet the Sustainable Development Goals.* Washington DC: Inter-American Development Bank. https://publications.iadb.org/es/node/31152.

CAF, Inter-American Development Bank (2023), 'Govtech verde en Iberoamérica: Informe de políticas públicas sobre el uso y desarrollo de tecnologías verdes en la región'. *Policy Brief 35*. https://scioteca.caf.com/handle/123456789/1999.

CAF, Development Bank of Latin America (2022a). *Desigualdades heredadas. El rol de las habilidades, el empleo y la riqueza en las oportunidades de las nuevas generaciones.* Reporte de Economía y Desarrollo RED 2022. https://www.caf.com/es/especiales/red/red-2022/.

CAF, Development Bank of Latin America (2022b), *DIGintegrity: Digitally transforming the fight against corruption.* https://scioteca.caf.com/handle/123456789/1901.

CAF, Development Bank of Latin America (2021a), *RED 2021: Caminos para la integración: facilitación del comercio, infraestructura y cadenas globales de valor.* https://scioteca.caf.com/handle/123456789/1823.

CAF, Development Bank of Latin America(2021b), *ExperiencIA: datos e inteligencia artificial en el sector público.* https://scioteca.caf.com/handle/123456789/1793.

CAF, Development Bank of Latin America (2020a), G*ovtech y el futuro del Gobierno 2020*. https://scioteca.caf.com/handle/123456789/1645.

CAF, Development Bank of Latin America (2020b), *Estrategia para la transformación digital de los sectores productivos en América Latina.* https://scioteca.caf.com/handle/123456789/1665.

Cavallo, E., A. Powell and T. Serebrisky (2020), *From Structures to Services. The Path to Better Infrastructure in Latin America and the Caribbean. 2020 Development in the Americas.* IDB: Washington DC. https://flagships.iadb.org/es/DIA2020/de-estructuras-a-servicios.

Cet.la (2019), *Nuevo marco regulatorio para la convergencia.* Report prepared by Analysis Mason. https://t.ly/kJbp.

ECLAC (2023a), *Iberoamérica: espacio de oportunidades para el crecimiento, la colaboración y el desarrollo sostenible.* https://www.cepal.org/es/publicaciones/48769-iberoamerica-espacio-oportunidades-crecimiento-la-colaboracion-desarrollo.

ECLAC (2023b), *Digital Agenda for LAC* (eLAC2024). https://www.cepal.org/es/agenda-digital-america-latina-caribe-elac2022/agenda-digital-2024.

ECLAC (2022a), *Foreign Direct Investment in LAC 2022*. https://www.cepal.org/es/publicaciones/48520-la-inversion-extranjera-directa-america-latina-caribe-2022.

ECLAC (2022b), *A digital path for sustainable development in Latin America and the Caribbean.* https://www.cepal.org/es/publicaciones/48460-un-camino-digital-desarrollo-sostenible-america-latina-caribe.

ECLAC (2020), *Universalizing access to digital technologies to address the consequences of COVID-19*. https://www.cepal.org/es/publicaciones/45938-universalizar-acceso-tecnologias-digitales-enfrentar-efectos-covid-19.

European Commission (2023a), *The EU Cybersecurity Act*. https://digital-strategy.ec.europa.eu/es/policies/cybersecurity-act.

European Commission (2023b), *Joint communication to the European Parliament and the Council. A new agenda for relations between the EU and Latin America and the Caribbean*. https://www.eeas.europa.eu/eeas/joint-communication-european-parliament-and-council-new-agenda-relations-between-eu-and-latin_en.

European Commission (2023c), *Commission presents Global Gateway Investment Agenda with Latin America and Caribbean*. https://ec.europa.eu/commission/presscorner/detail/es/ip_23_3863.

European Commission (2022a), *Digital economy and society index 2022*. https://digital-strategy.ec.europa.eu/en/library/digital-economy-and-society-index-desi-2022.

European Commission (2022b), *EU launches second edition of Women TechEU.* https://eismea.ec.europa.eu/news/eu-launches-second-edition-women-techeu-2022-06-21_en.

European Commission (2022c), *Global Gateway in Latin America and the Caribbean: European Space Agency and the Commission join forces on Earth observation*' https://international-partnerships.ec.europa.eu/news-and-events/news/global-gateway-latin-america-and-caribbean-european-space-agency-and-commission-join-forces-earth-2022-12-06_en.

European Commission (2021a), *Global Gateway*. https://ec.europa.eu/info/strategy/priorities-2019-2024/stronger-europe-world/global-gateway_en.

European Commission (2021b), *BELLA programme completes cable construction connecting Europe and Latin America.* https://digital-strategy.ec.europa.eu/en/news/bella-programme-completes-cable-construction-connecting-europe-and-latin-america.

European Commission, European Parliament and Council of Europe (2023), *European Declaration on Digital Rights and Principles.* https://digital-strategy.ec.europa.eu/es/library/european-declaration-digital-rights-and-principles.

Council of the European Union (2023), *Declaration of the EU-CELAC Summit 2023*. https://ec.europa.eu/commission/presscorner/detail/en/statement_23_3924. 2023.

Council of the European Union (2020), *Proyecto de Conclusiones del Consejo sobre la digitalización en beneficio del medio ambiente.* https://data.consilium.europa.eu/doc/document/ST-13957-2020-INIT/es/pdf.

Cont, W., C. Romero, G. Lleras, R. Unda, M. Celani, A. Gartner, L. Capelli, L. Zipitria, B. Besfamille, N. Figueroa, S. López Azurmendi and R. Fisher (2021), IDEAL 2021: *Reducing service gaps: how digitalization can improve the use of infrastructure.* Caracas: CAF. https://scioteca.caf.com/handle/123456789/1762.

Coursera (2022), *Global skills report 2022.* www.coursera.org/skills-reports/global.

Cristia, J. P. and R. Vlaicu (2022), 'Digitalizing Public Services Opportunities for *Latin America and the Caribbean* https://www.iadb.org/en/events/digitalizing-public-services'. Latin American and Caribbean Microeconomic Report. Inter-American Development Bank. https://flagships.iadb.org/en/MicroReport/digitalizing-public-services-opportunities-for-latin-america-and-the-caribbean.

Dalio, M.A., A. García Zaballos, E. Iglesias, P. Puig, R. Martínez Garza (2023), 'Desarrollo de habilidades digitales en América Latina y el Caribe: ¿Como aumentar el uso significativo de la conectividad digital?,' *Technical Note* IDB-TN-2573. Inter-American Development Bank. https://publications.iadb.org/es/desarrollo-de-habilidades-digitales-en-america-latina-y-el-caribe-como-aumentar-el-uso.

Drees-Gross, F. and P. Zhang (2021), 'Poor digital access is holding Latin America and the Caribbean back. Here's how to change it'. *World Bank Blogs*, https://blogs.worldbank.org/latinamerica/poor-digital-access-holding-latin-america-and-caribbean-back-heres-how-change-it.

ENISA, European Union Agency for Cybersecurity. (2021), *ENISA threat landscape.* https://www.enisa.europa.eu/publications/enisa-threat-landscape-2021.

Fernández, C. and J. Benavides (2020), *Las plataformas digitales, la productividad y el empleo en Colombia.* Fedesarrollo. https://www.repository.fedesarrollo.org.co/handle/11445/3962.

IMF, International Monetary Fund (2023a), 'Global prospects and policies', *World economic outlook: a rocky recovery.* https://www.imf.org/en/Publications/WEO/Issues/2023/04/11/world-economic-outlook-april-2023.

IMF, International Monetary Fund (2023b), 'Geoeconomic fragmentation and foreign direct investment', *World economic outlook: a rocky recovery.* https://www.imf.org/en/Publications/WEO/Issues/2023/04/11/world-economic-outlook-april-2023.

World Economic Forum (2018), *The global gender gap report.* https://www3.weforum.org/docs/WEF_GGGR_2018.pdf.

Frost & Sullivan (2019), *Global security market analysis.* Forecast to 2025. https://store.frost.com/global-security-market-analysis-forecast-to-2025.html.

Government of Spain (2023), *Programa UNICO de impulso a la banda ancha,* https://planderecuperacion.gob.es/noticias/programa-unico-impulso-banda-ancha-prtr.

Government of Spain (2022), Programa nacional de algoritmos verdes. https://portal.mineco.gob.es/RecursosNoticia/mineco/prensa/noticias/2022/20221213_plan_algoritmos_verdes.pdf.

Government of Spain (2021), *Carta de derechos digitales.* https://www.lamoncloa.gob.es/presidente/actividades/Documents/2021/140721-Carta_Derechos_Digitales_RedEs.pdf.

GSMA (2023a), *Connectivity gaps in Latin America. A roadmap for Argentina, Brazil, Colombia, Costa Rica, and Ecuador.* https://www.gsma.com/latinamerica/resources/connectivity-gaps-in-latin-america/.

GSMA (2023b), *5G in Latin America, Unleashing the potential.* https://www.gsma.com/latinamerica/wp-content/uploads/2023/07/290623-5G-in-Latam-ENG-1.pdf.

GSMA (2022), *The state of mobile internet connectivity report 2022.* https://www.gsma.com/r/wp-content/uploads/2022/12/The-State-of-Mobile-Internet-Connectivity-Report-2022.pdf?utm_source=website&utm_medium=download-button&utm_campaign=somic22.

Gruffa, C., M. Barafani, D. Ros Roone and S. Cabello (2021), *Hacia una agenda integral de la adopción de tecnologías para el aprendizaje 4.0 en América Latina.* https://scioteca.caf.com/handle/123456789/1800.

Handler, S. (2021), "The 5×5 -The state of cybersecurity in Latin America". *The 5X5 Atlantic Council.* www.atlanticcouncil.org/content-series/the-5×5/the-5×5-the-state-of-cybersecurity-in-latin-america.

Hobbs, C. and J.I. Torreblanca (2022), "Byting back: The EU's digital alliance with Latin America and the Caribbean," European Council on Foreign Relations *Policy Brief*. https://ecfr.eu/publication/byting-back-the-eus-digital-alliance-with-latin-america-and-the-caribbean.

IDC, International Data Corporation (2020), *Tendencias para cerrar la brecha de habilidades de TI en América Latina*. www.idclatin.com/imp/2020/hu/whpap/ES/IDC_LA_WP_brecha%20habilidades_TI_SP.pdf.

ISACA (2022), *State of cybersecurity 2022.* https://www.isaca.org/go/state-of-cybersecurity-2022.

Katz, R., and J. Jung (2022). *The Role of the Digital Economy in the Economic Recovery of Latin America.* https://www.millicom.com/katz-report. Prepared for Tigo Millicom. Telecom Advisory Services.

KPMG (2023), *Taxation of the digitalized economy. Developments summary.* https://tax.kpmg.us/content/dam/tax/en/pdfs/2023/digitalized-economy-taxation-developments-summary.pdf.

Lebdioui, A. (2022), 'Nature-inspired innovation policy: biomimicry as a pathway to leverage biodiversity for economic development,' Ecological Economics, *Ecological Economics*, 202 (107585). https://www.sciencedirect.com/science/article/pii/S0921800922002476.

McKinsey Global Institute (2015), *The power of parity. How advancing women's equality can add $12 trillion to global growth.* https://www.mckinsey.com/featured-insights/employment-and-growth/how-advancing-womens-equality-can-add-12-trillion-to-global-growth.

Melguizo, A. and V. Muñoz (2022), I*nfraestructuras, hardware & IoT: oportunidades clave en la industria de servicios.* Santander X and ESADE.

Nam, T., and T.A. Pardo (2011), 'Conceptualizing smart city with dimensions of technology, people, and institutions,' *Proceedings of the 12th Annual International Digital Government Research Conference.* https://www.researchgate.net/publication/221585167_Conceptualizing_smart_city_with_dimensions_of_technology_people_and_institutions.

OECD (2023), *2023 Progress report on tax co-operation for the 21st Century: OECD Report for the G7 Finance Ministers and Central Bank Governors.* https://www.oecd.org/publications/2023-progress-report-on-tax-co-operation-for-the-21st-century-d29d0872-en.htm.

OECD (2020), *Making the most of technology for learning and training in Latin America.* www.oecd-ilibrary.org/education/making-the-most-of-technology-for-learning-and-training-in-latin-america_ce2b1a62-en.

OECD (2019a), *Going digital: shaping policies, improving lives.* https://www.oecd.org/sti/going-digital-shaping-policies-improving-lives-9789264312012-en.htm..

OECD (2019b), *Recommendation of the Council on artificial intelligence.* https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449.

OECD (2018), B*ridging the digital gender divide: include, upskill, innovate.* https://www.oecd.org/digital/more-needs-to-be-done-to-bridge-the-digital-gender-divide.htm.

OECD, CAF, ECLAC and EU (2022), *Latin American Economic Outlook 2022: Towards a Green and Just Transition.* https://www.oecd-ilibrary.org/development/perspectivas-economicas-de-america-latina-2022_f2f0c189-es.

OECD, CAF, ECLAC and EU (2020), *Latin American Economic Outlook 2020: Digital Transformation for Building Back Better.* https://www.oecd-ilibrary.org/development/perspectivas-economicas-de-america-latina-2020_f2fdced2-es.

OECD, CAF, ECLAC and EU (2019), *Latin American Economic Outlook 2019: Development in Transition*. https://www.oecd-ilibrary.org/development/perspectivas-economicas-de-america-latina-2019_g2g9ff1a-es.

OECD, CAF, ECLAC and EU (2018), *Latin American Economic Outlook 2018: Rethinking Institutions for Development.* https://www.oecd-ilibrary.org/development/perspectivas-economicas-de-america-latina-2018_leo-2018-es.

OECD, Manpower and ANDI (2018), *Hacia una ALC 4.0. Cerrando la brecha de habilidades.* OECD Development Center. Mimeo.

OAS and CISCO (2022), *Reporte sobre el desarrollo de la fuerza laboral de ciberseguridad en una era de escasez de talento y habilidades.* https://www.oas.org/es/sms/cicte/docs/Reporte_sobre_el_desarrollo_de_la_fuerza_laboral_de_ciberseguridad_en_una_era_de_escasez_de_talento_y_habilidades.pdf.

OAS and GPD (2022), 'National cybersecurity strategies: Lessons learned and reflections from the Americas and other regions'. https://www.oas.org/en/sms/cicte/docs/National-Cybersecurity-Strategies-Lessons-learned-and-reflections-ENG.pdf.

O'Hara, K and W. Hall (2018), 'Four Internets: the geopolitics of digital governance,' *Center for International Governance Innovation Papers 206.* https://www.cigionline.org/publications/four-internets-geopolitics-digital-governance.

Oookla (2023), 'Latency is the next frontier of consumer experience. Are you ready?', *Ookla Insights Articles*, February. https://www.ookla.com/articles/latency-the-next-frontier-of-consumer-experience.

Porrúa, M., M. Lafuente, B. Roseth, L. Ripani, E. Mosqueira, A. Reyes, J., Fuenzalida, F. Suarez, and R. Salas (2021), *Digital Transformation and Public Employment: The Future of Government Work. Inter-American Development Bank.* https://publications.iadb.org/es/transformacion-digital-y-empleo-publico-el-futuro-del-trabajo-del-gobierno.

Roseth, B., A. Reyes, P. Farias, M. Porrúa, H. Villalba, S. Acevedo, N. Peña, E. Estévez, Elsa, S. Linares Lejarraga and P. Fillottrani (2018), Wait No More: *Citizens, Red Tape, and Digital Government.* https://publications.iadb.org/es/el-fin-del-tramite-eterno-ciudadanos-burocracia-y-gobierno-digital.

Schwab, K. (2017), *The Fourth industrial revolution.* World Economic Forum. https://www.weforum.org/about/the-fourth-industrial-revolution-by-klaus-schwab.

SEGIB (2023), *Carta iberoamericana de principios y derechos en los entornos digitales.* https://www.segib.org/?document=carta-iberoamericana-de-principios-y-derechos-en-entornos-digitales.

Suominen, K. (2022), *Implications of the European Union's digital regulations on U.S. and EU economic and strategic interests.* https://www.csis.org/analysis/implications-european-unions-digital-regulations-us-and-eu-economic-and-strategic.

Suominen, K. (2017), 'Accelerating digital trade in Latin America and the Caribbean'. I*nter-American Development Bank Working Paper Series 790.* https://publications.iadb.org/handle/11319/8166.

Telecom Advisory Services (2022), *La transformación digital de ALC 2004 -2021*. Presentation prepared for the CAF, Development Bank of Latin America. Mimeo.

UNESCO (2022), *Recommendation on the Ethics of Artificial Intelligence.* https://unesdoc.unesco.org/ark:/48223/pf0000381137_spa.

ITU, International Telecommunications Union (2023), *Global cybersecurity index 2020*. https://www.itu.int/epublications/publication/D-STR-GCI.01-2021-HTM-E.

ITU, International Telecommunications Union (2020), *Connecting humanity. Assessing investment needs of connecting humanity to the Internet by 2030*. https://www.itu.int/hub/publication/d-gen-invest-con-2020.

UNCTAD (2021), *Technology and innovation report 2021. Catching technological waves: innovation with equity*. https://unctad.org/publication/technology-and-innovation-report-2021.

UNWTO (2023), *Tourism and digital transformation.* https://www.unwto.org/digital-transformation.

von der Leyen, U. (2023), Opening speech at the EU-LAC 2023 Business Round Table. https://ec.europa.eu/commission/presscorner/detail/en/speech_23_3888.

Worman, C., M. Huerta, and H. Mujica (2020), 'Here's how Latin American communities are bridging the skills gap,' *World Economic Forum blog.* www.weforum.org/agenda/2020/01/civil-society-skills-gap-digital-transformation.

Ziegler, S., J. Arias, M. Bosio and K. Camacho (2020), *Rural connectivity in Latin America and the Caribbean. A bridge for sustainable development in a time of pandemic.* https://repositorio.iica.int/handle/11324/12896. IICA, IDB and Microsoft.

References

Sector-specific Note on Green Transition.

A roadmap for environmental and sustainable collaboration between LAC and the EU

Bellon, Matthieu, and Emanuele Massetti. 2022. Economic Principles for Integrating Adaptation to Climate Change into Fiscal Policy. *IMF Staff Climate Note* 2022/001, International Monetary Fund, Washington, DC.

BlackRock. 2021. How to finance the net-zero transition in emerging markets. *BlackRock Investment Institute*. October 2021.

Cardenas, Mauricio, and Sebastian Orozco. 2023. The challenges of climate mitigation in Latin America and the Caribbean: Some proposals for action. *UNDP*. Latin America Policy Document Series.

Cazzola, Pierpaolo, Gerard, Frank, Gorner, Marine, Gibbs, Mark, and Katrina Young. (2023). Research for TRAN Committee: Assessment of the potential of sustainable fuels in transport. *Think Tank European Parliament.* March 2023.

Cevik, Serhan, and João Tovar Jalles. 2020. An Apocalypse Foretold: Climate Shocks and Sovereign Defaults. *IMF Working Papers* 2020/231, International Monetary Fund, Washington, DC.

Clean Hydrogen Partnership. 2022. Accelerating the hydrogen economy: additional funding of €200 million available for the Clean Hydrogen Partnership through Repower EU. *European Commission.* May 2022.

Climate Watch Data. 2022. The PRIMAP-hist national historical emissions time series v2.4 (1750-2021). zenodo. doi:10.5281/zenodo.7179775. *Earth Syst. Sci. Data,* 8, 571-603, doi:10.5194/essd-8-571-2016.

Council on Foreign Relations. 2021. The Climate Challenge and China's Belt and Road Initiative. *CFR.* March 2021.

Ember. 2023a. Global Electricity Review 2023. *Ember.* April 2023.

Ember. 2023b. Electricity Data Explorer. *Ember.* April 2023.

European Bank for Reconstruction and Development (ERBD). 2023a. Transition Report 2022-23. ERBD.

European Bank for Reconstruction and Development (ERBD). 2023b. Green Value Chain: The Facility. ERBD.

European Commission. 2018. Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources. *European Parliament.* December 2018.

European Commission. 2019. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Stepping up EU Action to Protect and Restore the World's Forests. *European Parliament.* July 2019.

European Commission. 2021. Questions and Answers on Global Gateway. *European Commission.* December 1, 2021

European Commission. 2022a. Green Deal: EU agrees new law on more sustainable and circular batteries to support EU's energy transition and competitive industry. *European Commission.* December 9, 2022

European Commission. 2023a. WTO appraises EU's trade policy and practices. *European Commission.* June 5, 2023.

European Commission. 2023b. European Green Deal: ambitious new law agreed to deploy sufficient alternative fuels infrastructure. *European Commission.* March 28, 2023.

European Commission. 2023c. Renewable Energy Directive. *European Commission.* 2023.

European Commission. 2023d. The Green Deal Industrial Plan: putting Europe's net-zero industry in the lead. *European Commission.* February 2023.

European Commission. 2023e. Global Gateway: Latin America and the Caribbean. *European Commission.* June 2023.

European Commission. 2023f. In Brazil, President von der Leyen announces EUR 10 billion of Global Gateway investments in Latin America and the Caribbean. *European Commission.* June 2023.

European Commission. 2023g. A New Agenda for Relations between the EU and Latin America and the Caribbean. *European Commission.* June 2023.

European Commission. 2023h. Commission outlines European Hydrogen Bank to boost renewable hydrogen. *European Commission.* May 2023.

European Commission. 2023i. Liquefied natural gas. *European Commission.* 2023.

European Commission. 2023j. European Fund for Sustainable Development Plus (EFSD+). *European Commission.*

European Commission. 2023k. Nature restoration law. *European Commission.*

European Commission. 2023l. Regulation (EU) 2023/1115 of the European Parliament and of the Council of 31 May 2023 on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010. *European Parliament.* May 2023.

European Commission. 2023m. Global Gateway Strategy. *European Commission.* June 2023.

European Commission. 2023n. Carbon Border Adjustment Mechanism. *European Commission.* August 2023.

European Council. 2023a. 'Fit for 55': Council adopts regulation on CO2 emissions for new cars and vans. *European Council.* March 2023.

European Environment Agency. 2023. Data viewer on greenhouse gas emissions and removals, sent by countries to UNFCCC and the EU Greenhouse Gas Monitoring Mechanism (EU Member States). *EEA.* April 2023.

European External Action Service. 2022. Tapping the full potential of trade and investment links for stability and prosperity. *EEAS Latin America and the Caribbean.* January 2022.

European Parliament. 2023. The EU Emissions Trading Scheme (ETS) and its reform in brief. *European Parliament.* April 2023.

European Parliament, 2023. Revision of the Renewable Energy Directive, version of 20 August 2023.

European Union. 2022. REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL Progress on competitiveness of clean energy technologies. European Parliament. November 2022.

European Union. 2023a. Fit for 55 Package. *European Council.* July 2023.

European Union. 2023b. Directive (EU) 2023/959 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union. *Office Journal of the European Union*, 10 May 2023.

European Union. 2023c. Regulation (EU) 2023/956 of the European Parliament and of the Council of 10 May 2023 establishing a carbon border adjustment mechanism (Text with EEA relevance). *Office Journal of the European Union*, 10 May 2023.

Eurostat. 2023. Government debt down to 91.6% of GDP in euro area. *European Commission.* April 2023.

Global Energy Monitor (GEM). 2023. Latin America can become a global renewable energy leader with potential 460% increase in wind and solar capacity. *GEM.* March 9, 2023.

G20. 2022. Boosting MDB's Investing Capacity. An Independent Review of Multilateral Development Banks' Capital Adequacy Frameworks. *G20*

International Council on Clean Transportation (ICCT). 2022. Zero-Emission Vehicle Deployment: Latin America. ICCT. April 20, 2022.

International Energy Agency (IEA). 2021. Hydrogen in Latin America. *IEA.* August 2021.

International Energy Agency (IEA). 2022. IEA and partners launch Cost of Capital Observatory to improve transparency over higher borrowing costs for energy projects in developing world. *IEA.* September 2022.

International Energy Agency (IEA) 2023. Baseline European Union gas demand and supply in 2023. *IEA.* Paris.

Inter-American Development Bank (IDB). 2023. Unlocking Green and Just Hydrogen in Latin America and the Caribbean. *IDB.* June 2023.

International Food Policy Research Institute (IFPRI). 2021. LAC and the Global Food System. IFPRI.

International Gas Union (IGU). 2022. World LNG Report. *IGU World LNG Report 2022 Study Group.* July, 2022.

International Organization of Motor Vehicle Manufacturers (OICA). 2022. World Motor Vehicle Production By Country/Region And Type. *OICA.*

IPCC. 2023. Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. *IPCC*, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001

Kneebone, James, and Andris Piebalgs. 2023. Are pipelines and ships an 'either or' decision for Europe's hydrogen economy? Planning import lines for hydrogen and derivatives. *Robert Schuman Centre for Advanced Studies Florence School of Regulation.* March 2023.

McKinsey & Company. 2021. A blueprint for scaling voluntary carbon markets to meet the climate challenge. *McKinsey's Public Sector Practice.* January, 2021.

Moreau, Vincent, Amarant de Oliveira Neves, Catarina, and François Vuille. 2019. Is decoupling a red herring? The role of structural effects and energy policies in Europe. *Energy Policy,* Volume 128, 2019, Pages 243-252, ISSN 0301-4215, https://doi.org/10.1016/j.enpol.2018.12.028.

Nolte, Detlef. 2023. The European Union and Latin America: Renewing the Partnership after Drifting Apart. *Leibniz-Institut für Globale und regionale Studien.* January 2023.

Notre Dame Global Adaptation Initiative. 2023. Country Index Technical Report. *University of Notre Dame.*

Observatory of Economic Complexity (OEC). 2023a. Iron and Steel Statistics. *OEC.*

Observatory of Economic Complexity (OEC). 2023b. Costa Rica Trade Profile. *OEC.*

Observatory of Economic Complexity (OEC). 2023c. Fertilizers Statistics *.OEC.*

OECD, European Commission, and CAF. 2022. Latin American Economic Outlook 2022: Towards a Green and Just Transition, OECD Publishing, Paris, https://doi.org/10.1787/3d5554fc-en.

Reuters. 2022. G7 establishes Climate Club to support green transition. *Reuters.* December, 2022.

Steele, Paul, Ducros, Anna, Patel, Sejal, and Emilé Newman. 2023. Opportunities and Challenges for Biodiversity-Positive Carbon Credits and Nature Certificates. *Global Environment Facility.* February, 2023.

Trading Economics. 2023. EU Carbon Permits. *Trading Economics.* August, 2023.

United Nations Convention on Biological Diversity. 2022. Kunming-Montreal Global biodiversity framework. *UN Environment Programme.* December 2022.

UNDP. 2022. NDC Status Guatemala. *UNDP Climate Promise.*

World Bank. 2019. Going Global: Expanding Offshore Wind to Emerging Markets. Washington, DC: *World Bank.*

World Bank. 2020. Global Photovoltaic Power Potential by Country. Washington, DC: *World Bank.*

World Bank. 2023. State and Trends of Carbon Pricing. http://hdl.handle.net/10986/39796. Washington, D.C: World Bank

World Bank. 2022. Country Climate and Development Report. Washington, D.C: *World Bank*. November, 2022.

World Economic Forum. 2021. What is green hydrogen and why do we need it?. *WEO Forum.* December 2021.

World Inequality Database. 2020. Global Inequality Data 2020 Update. *World Inequality Lab.*

Wood, Richard, Neuhoff, Karsten, Moran, Dan, Simas, Moana, Grubb, Michael, Stadler, and Konstantin Stadler. 2019. The structure, drivers and policy implications of the European carbon footprint. *Climate Policy*, 20:sup1, S39-S57, DOI: 10.1080/14693062.2019.1639489

CAF DEVELOPMENT BANK
OF LATIN AMERICA
AND THE CARIBBEAN

DEVELOPMENT BANK
OF LATIN AMERICA
AND THE CARIBBEAN