# Climate financing in Latin America and the Caribbean

## How are public development banks supporting the climate transition?

European Investment Bank | Global

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**Climate financing in Latin America and the Caribbean:**
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**About the EIB Economics Department**
The mission of the EIB Economics Department is to provide economic analyses and studies to support the Bank in its operations and in the definition of its positioning, strategy and policy. The department and its team of economists is headed by Debora Revoltella, director of economics.

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# Contents

# Executive summary

**Latin America and the Caribbean countries are paying a disproportionate price for the climate transition, given their low contribution to global $CO_2$ emissions.** Several countries in the region, mainly in the Caribbean, have some of the largest exposures to physical risks, despite their relatively small contribution towards global emissions. These risks have been particularly evident over recent years, with several examples of severe economic and human damage associated with climate events across the region, ranging from wildfires to floods, droughts and cyclones. Latin America and the Caribbean countries also face significant transition risks related to a high contribution from the agricultural sector, particularly in Central and South America. However, they are relatively less exposed than other regions in the world.

**Climate-related financing needs for the region are sizeable, reaching between 1.9% and 4.9% of the region's gross domestic product (GDP) per year ($110-290 billion)** according to estimates by the International Monetary Fund (IMF) and the Economic Commission for Latin America and the Caribbean (ECLAC), respectively. More than 60% of these needs are related to mitigation of physical risks, but investment needs for adaptation are also significant.

**This need for climate finance is set against a challenging macroeconomic and fiscal backdrop**. Latin America and the Caribbean countries are currently facing a combination of low economic growth and limited fiscal capacity. The region has one of the lowest investment levels in the world, reaching only 20% of GDP, and limited room for fiscal manoeuvre, due to the increase in governments' debt stocks following the COVID-19 pandemic and tighter financing conditions globally.

**The region of Latin America and the Caribbean has seen its share of global sustainable debt issuances increase, but current climate financing still doesn't match growing needs**. Sustainable finance has grown rapidly, particularly since 2020, driven by the official sector – government and state-owned enterprises – but the total annual issuance of climate-related bonds is still less than half of the yearly sustainable finance issuance and less than 10% of the climate financing needs. Given the significant needs, public financing will not be sufficient. Strengthening climate mitigation and adaptation in Latin America and the Caribbean will require an improvement in the institutional setup to attract private and foreign investors as well.

**Public development banks are more relevant in Latin America and the Caribbean than in other regions of the world and are of paramount importance to climate financing, potentially stepping in where the sovereign and private sectors do not**. The aim of this paper is to assess how public development banks are contributing to supporting the climate transition, and what is holding them back from further scaling up green finance.

**Our analysis shows that public development banks are already fulfilling their role in accommodating climate risks but will need to increase their climate lending**. The European Investment Bank (EIB) and the Latin American Association of Development Financing Institutions surveyed 28 public development banks in 15 countries, representing close to 50% of total public development banks' assets in the region. The survey shows that despite climate financing being seen as an opportunity, the majority of public development banks do not see themselves as trendsetters in climate finance. They identify the main constraints for scaling up green lending to be climate investments having a low priority for clients, ack of technical capacity from both clients and development banks and, for some banks, the lack of long-term funding to match the profile of climate investments.

**Policy priorities to increase climate financing in Latin America and the Caribbean should focus on long-term financing and building technical capacity**. Most countries in the region face financing constraints, and need to have access to affordable, long-term financing, largely provided by international financial institutions and multilateral development banks. However, given the sizeable financing needs, that alone will not suffice because, as shown by the EIB and the ALIDE survey, there is a significant need to raise awareness and build technical capacity for both clients and public development banks. Building this capacity is the key to boosting climate lending by development banks and reassuring private investors, catalysing much-needed private investments.

In this paper, we start by proving an overview of climate risks in Latin America and Caribbean countries, using the EIB's country climate risk scores. This introduction is followed by an assessment of the region's climate investment needs and potential sources of financing, against the current macroeconomic and fiscal backdrop. We describe the role of public development banks in the region, their current contribution to mitigating climate risks, and the results of our survey. In the last section, we present the main findings and policy recommendations.

## Climate risks

**Latin America and the Caribbean are increasingly experiencing the effects of climate change. Caribbean countries are the most exposed in the world to acute climate events, while the impacts of climate change are increasingly visible in both Central America and South America**. No country in the world is immune to climate change, but some areas are more exposed than others. Climate change is disproportionately affecting countries in hot areas – as heat impacts the productivity of labour significantly – small island states exposed to storms and rising sea levels, and countries where sectors sensitive to the climate – especially agriculture – play a large role in the economy. Moreover, in low- and middle-income economies, governments and firms are generally less able to invest in adaptation and mitigation measures to protect from and reduce the effects of climate change.[1] The combination of higher exposure to climate events and lower adaptation and mitigation capacity is making some countries particularly vulnerable.

**This region is already paying a high price for climate change, despite contributing less than 5% of global $CO_2$ emissions**. Rising temperatures, changes in typical rainfall patterns, flooding and hurricanes have induced severe human and economic impacts through acute events, and through gradual impact on productivity and economic growth, adding to existing economic and social challenges. Over the past two decades, the countries in the region have experienced as many as 1 350 natural disasters attributable to the climate, affecting more than 170 million people and causing almost 30 000 deaths. The economic damage associated with these events is estimated at over $170 billion.[2] Since 2022, there has been an increase of natural disasters in the region:

- wildfires in Argentina, Chile and the Pantanal region;
- heavy flooding in Guatemala, Peru, Bolivia, Colombia, Trinidad and Tobago, Venezuela, Honduras, Paraguay, Ecuador and Mato Grosso do Sul in Brazil;
- droughts in Argentina, Uruguay, Honduras and Brazil, which are heavily reliant on agriculture; and
- tropical cyclones in several countries, including Costa Rica, Guatemala, Belize and Honduras.

**To assess climate risk at country level, the EIB has developed a methodology to map both physical and transition risks at country level**. These risks are reflected in the EIB climate risk country scores (Ferrazzi et al., 2021). To build the physical risk component of our climate risk assessment, we estimate the impact of climate events on GDP for a short-medium term (between five and ten years). The total physical risk is given by the sum of damage deriving from natural disasters ("acute" events such as storms, floods, droughts, etc.) and the gradual long-term damage stemming from climate change, such as losses in agriculture due to rising temperatures and desertification, the impact of sea level rise on infrastructure, the impact of heat on labour productivity and the effects of water scarcity. The EIB's transition risk scores for countries are based on five main building blocks: (1) the level of emissions, (2) the exposure of the economy to fossil fuels and the level of mitigation, which is built on (3) energy efficiency, (4) the deployment of renewable energy and (5) country preparedness.

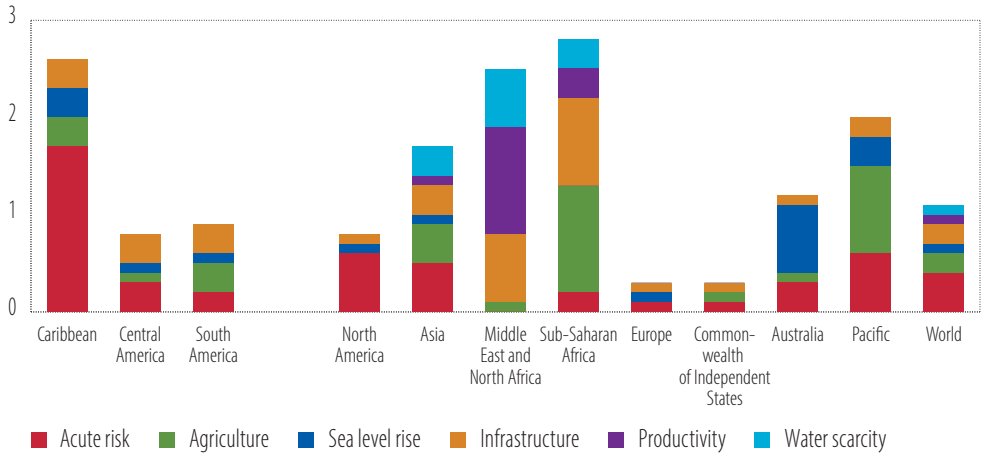
1 Adaptation capacity is the ability of a system to moderate any potential damage deriving from climate change or to cope with the consequences.

2 Despite usefully providing an estimated dimension of the different climate phenomena, such data – derived from the Emergency Events Database (EM-DAT) – are largely underestimated (Centre for Research on the Epidemiology of Disasters, 2021; Jones et al., 2022) due to the underrepresentation of some climate events. This pertains in particular to information on monetary damage, especially for lower-income countries. Moreover, these estimates are related only to first-round direct impacts, without taking into account possible second-round effects.

**According to the EIB climate risk country scores for physical risk, sub-Saharan Africa, the Middle East and North Africa, the Caribbean and Pacific Island states are the most exposed in the world to climate change.** These areas, considering both acute and chronic physical risk, are two and a half to three times more affected than the world average. Figure 1 gives an overview at the global level, comparing Latin America and Caribbean countries to other areas of the world, and separating the total impact by factor. Acute risk, related to the damage and natural hazards component (caused by storms, hurricanes, fires, droughts and floods), is more relevant for small island states; chronic risks, stemming from the gradual long-term impact of climate change, are more significant for Africa and the Middle East.

Figure 1

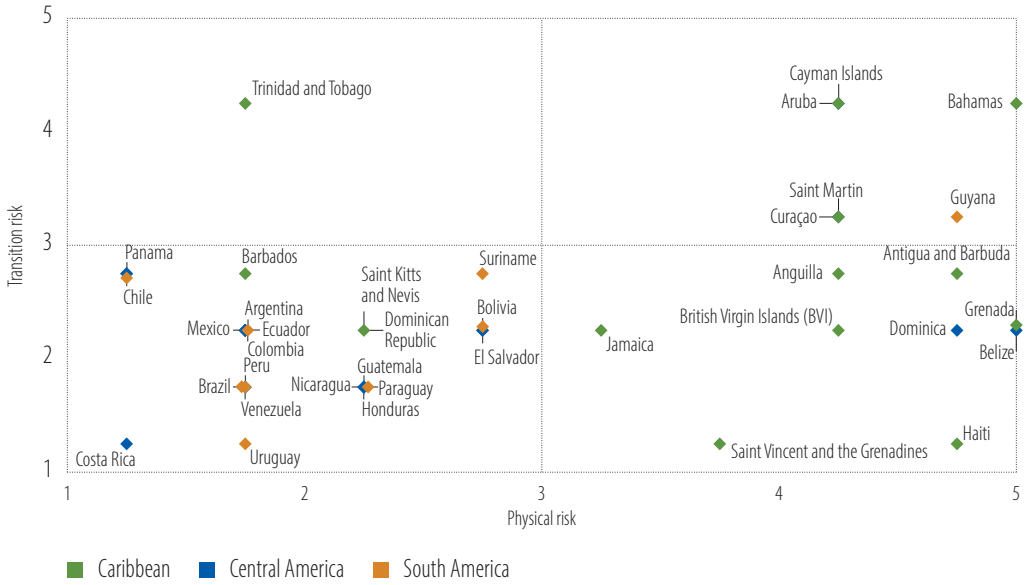
**Economic impact of physical risk in the world, by component** (world average = 1)




*Source:* *EIB climate risk country scores.*
*Note:* *World average is calculated as weighted average (weighted by the economic dimension of a country, meaning nominal GDP), and is by construction equal to 1.*

**Caribbean countries appear to be among the most affected in the world by the impacts of climate change (Figure 2), and specifically the most affected in terms of damages deriving from acute risk (like storms and hurricanes, for instance).** Despite accounting for just 0.2% of the world's GDP (and 0.4% of total $CO_2$ emissions, or 0.2% if calculated in cumulated terms), Caribbean countries account for ten times more in terms of the monetary damage derived from climate change, and 20 times more in terms of the number of climate events. We also estimate that for almost all the countries in the Caribbean, damage and losses deriving from climate change exceed 1% of GDP of the countries in the region per year. Ten Caribbean countries (out of the 17 under analysis) have experienced a yearly impact on their GDP of more than 2% due to climate, on average, over the last two decades. Five Caribbean nations figure among the top 20 globally in terms of fatalities per capita, and eight in the top 20 countries in terms of economic losses as a share of GDP during the last two decades (World Bank, 2022).

**Figure 2**
**EIB Climate risk country scores – physical versus transition**




*Source:* *EIB (2023).*
*Note:* *The EIB climate risk country scores range from 1 (lowest risk) to 5 (highest risk).*

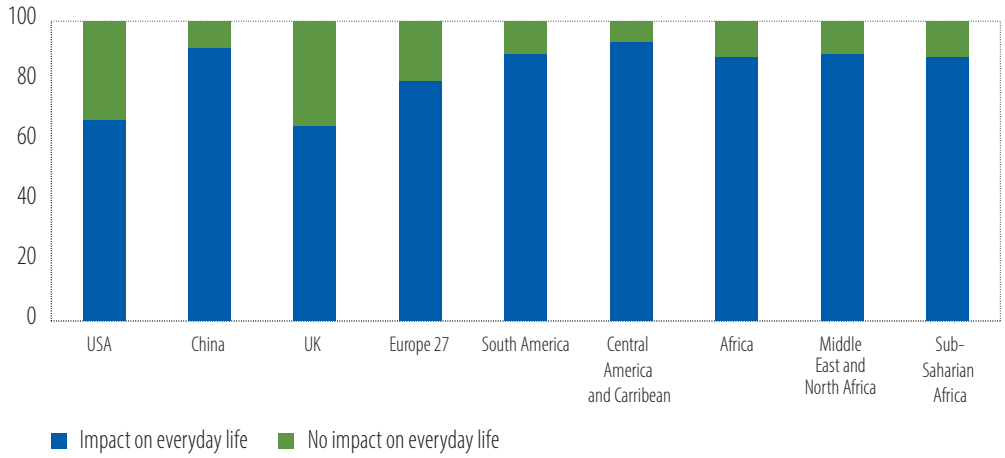
**Central and South America are also significantly affected, in line with the world average**. South American countries are more exposed to the impacts of climate change on agriculture. Countries such as Guyana, Bolivia, Paraguay and Ecuador have a high share of their economy devoted to agriculture (close to or exceeding 10% of GDP), and this share is non-negligible in the bigger states as well (between 5% and 10% of GDP in Brazil, Argentina and Colombia). Central American countries suffer more damage deriving from acute risks (storms, floods, etc.); this also has a negative impact on agriculture, which represents around 10% of their GDP. This is especially true for Nicaragua, Honduras and Guatemala.

**In addition, the costs related to chronic risk, connected with the gradual impact of global warming, are also relevant for the region**. In the 2024 EIB Climate Survey,[3] just over 90% of respondents in Latin America and the Caribbean mention that climate change has an impact on their everyday life (Figure 3). This is the highest share in the sample when compared to other regions of the world, echoing the results from the EIB country climate risk scores.

3 With regard to the sample for Latin America and the Caribbean, the survey covered 10 587 people (aged 15 and over) in 13 different countries.

Figure 3

**Share of respondents that say climate change has an impact on everyday life** (% of responses)

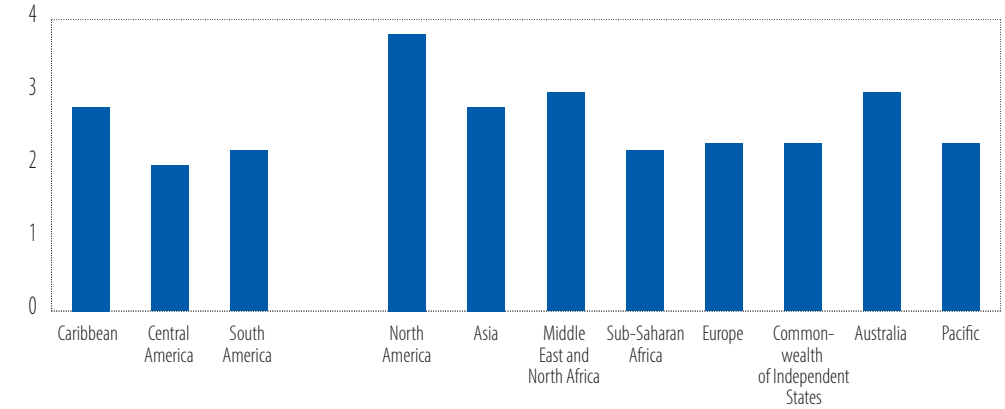



*Source:* *EIB (2023).*

**Latin American and Caribbean countries face significant transition risks, but they are less exposed relative to other regions of the world.** North America and Europe emerge as the most exposed regions to transition risk, but Caribbean countries also face high transition risk, according to the EIB climate risk country scores (Figure 2). As shown by Figure 4, Central America and South America have lower scores (meaning lower transition risk) due to their relatively low levels of emissions (compared to other countries) and relatively good mitigation, especially through renewable energy. Still, this lower transition risk, masks significant differences across sectors. The agricultural sector in Latin American and the Caribbean region contributes to 25% of total emissions, which is above the global average (13%). Land use, land use change and forestry contribute 19%, again well above the global average of just over 1%.

Figure 4

**Transition risk in the world**



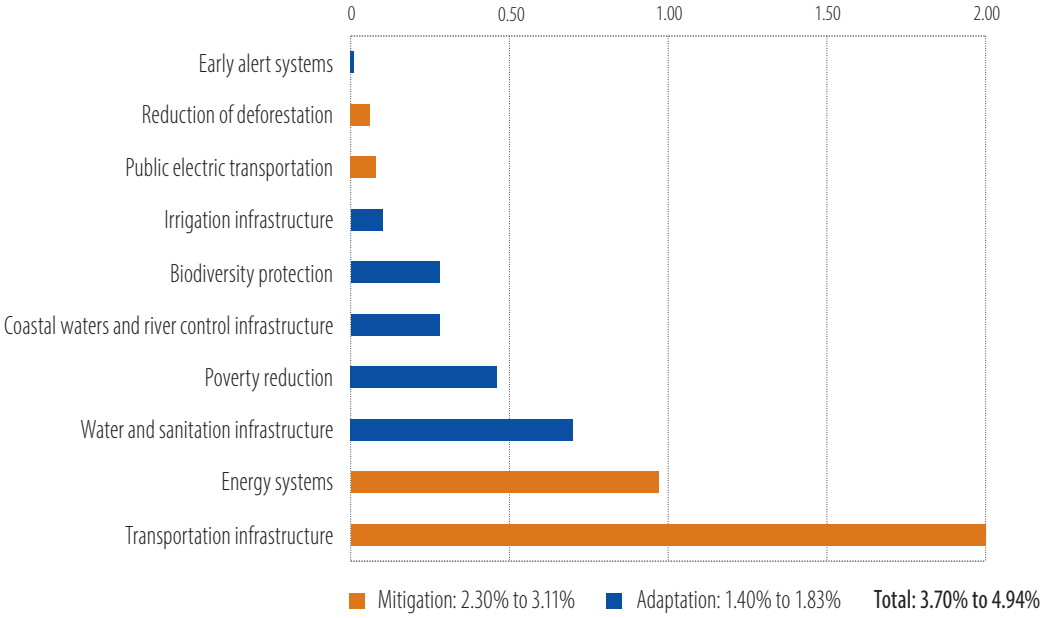

*Source:* *EIB climate risk country scores. Note: 1 = low transition risk, 5 = high transition risk*

## Climate investment needs and sources of financing

**Against this backdrop of mounting climate risks, reaching the regions' climate mitigation and adaptation goals will require sizeable investments, with the annual estimates ranging from $110 billion according to the IMF to $290 billion according to the Economic Commission for Latin America and the Caribbean**. According to estimates by the Economic Commission for Latin America and the Caribbean, the cost of inaction against climate change could imply a decline in per capita GDP ranging from 0.8% to 6.3% by 2030, and could even reach 23% in 2050. The commission also predicts that fulfilling climate change commitments will require a sizeable annual investment, estimated at between 3.7% and 4.9% of the region's GDP until 2030 (Figure 5). Estimates by the IMF are smaller, but still place investment needs at 1.9% per year. The largest needs concern mitigation efforts, specifically to improve energy systems and transportation infrastructure.

**Figure 5**

**Annual investment needed to fulfil Latin American and Caribbean climate action commitments up to 2030** (% of GDP)



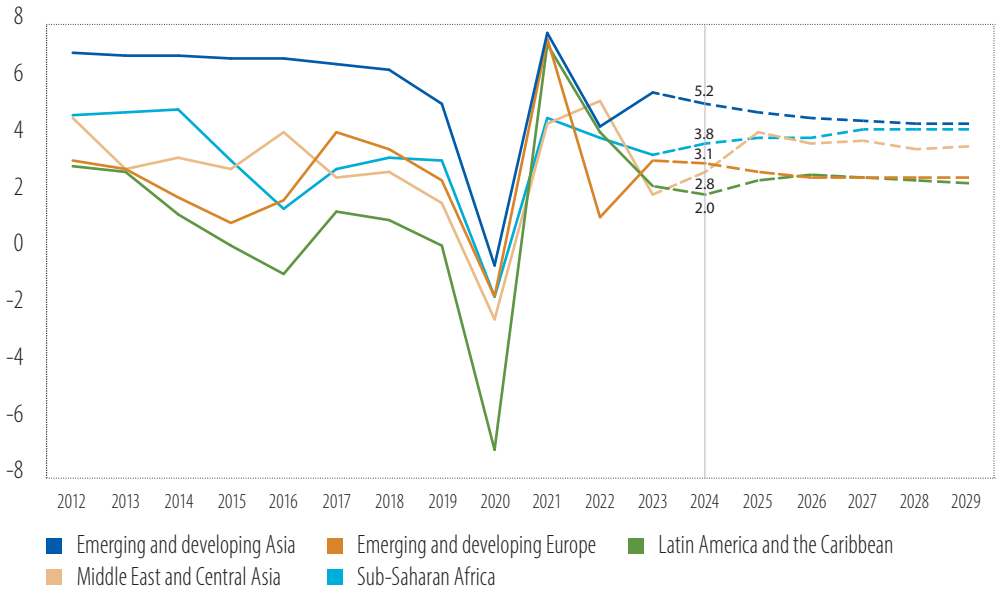

*Source:* *ECLAC (2023a).*

**This increased need for investment in climate transition comes against the backdrop of a challenging macroeconomic environment and significant structural bottlenecks**. Latin America and the Caribbean[4] are currently experiencing low growth and volatile raw materials prices, in a complex global context that severely restricts countries' ability to manage economic shocks. According to the IMF, the region is expected to grow around 2% in 2024, below the post-pandemic growth rates of 2.3% reached in 2023 and 4.2% in 2022, but aligned with the average growth rates recorded in the decade ahead of the COVID-19 pandemic. This means they are falling behind other emerging and developing regions (Figure 6).

4 In Figures 6 and 7, the average for Latin America and the Caribbean follows the IMF's (2024b) regional definition, which includes 33 countries: Antigua and Barbuda, Argentina, Aruba, The Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, and Venezuela.

Figure 6

**GDP growth by region** (2012-2023) **and projections** (2024-2029) (%)




*Source:* *IMF (2024b).*

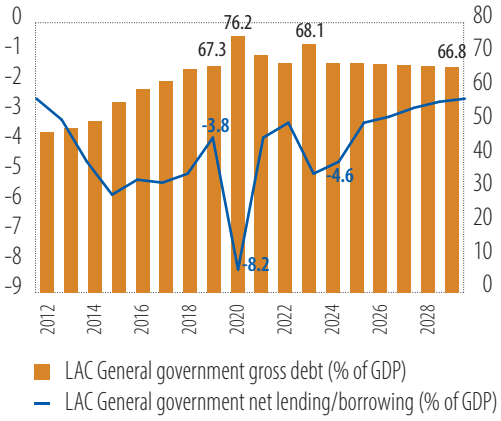
**The region of Latin America and the Caribbean has one of the lowest levels of total investment in the world**. According to OECD et al. (2023) the region's total investment was around 20% of GDP in 2022 (latest data) – well below that in emerging and developing Asia (40% of GDP), emerging and developing Europe (26%), the Middle East and Central Asia (25%), and sub-Saharan Africa (22%). This is due in turn to the low savings rate, with the private sector being the largest source of investment in almost all countries in the region (78% of total investment).

**The region's capacity to finance this energy transition is further constrained by limited fiscal space, which is likely to continue to narrow going forward**. The COVID-19 crisis left a mark on Latin American and Caribbean economies, particularly as greater spending meant larger debt burdens, which have reduced the sovereigns' fiscal room for manoeuvre (Figure 7, Panel A). Debt was already on a clear upward trend prior to COVID-19 and, on average, the region has not recovered from the rapid accumulation during the pandemic period. In addition, rising interest expenditure on the back of tightening financial conditions globally (Figure 7, Panel B) have also contributed to the governments' reduced capacity to invest in areas of crucial importance for economic and social development. In fact, interest payments as a share of GDP peaked in 2023 at 4.4%, and had not been that high in the previous two decades.

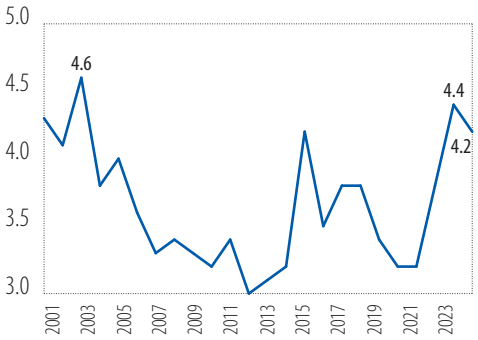
Figure 7

**Central government's fiscal space**

Panel A. Public debt and deficit (% of GDP)




Panel B. Interest expenditure (% of GDP)




*Source:* *ECLAC (2024) and authors' calculations.*

**Given the significant financing needs, the public sector will not have the capacity to finance the climate transition on its own. Strengthening climate mitigation and adaptation in Latin America and the Caribbean will also require significant private sector involvement**. To that end, governments and policymakers should improve the institutional setup to attract private investment, which should ultimately be the main source of financing in the long run. Given the urgency of these investments and the slow pace of private sector mobilisation, at least in the intermediate stage, the public sector will need to play a leading role. And with governments constrained, as we have seen above, public development banks will be even more relevant going forward.

**The issuance of sustainable and green bonds has been picking up globally, but it's still not enough to meet the financing needs in the region of Latin America and the Caribbean. This highlights the need for significant public financing in the medium term**. As is shown in greater detail in Box 1 below, the region has increased its share in global sustainable debt issuance, but climate financing flows represent only around half of this issuance, and have averaged less than $10 billion per year since 2015, significantly below the estimated needs of $100-290 billion.

Box 1.

**Climate and sustainable finance flows in Latin America and Caribbean countries**

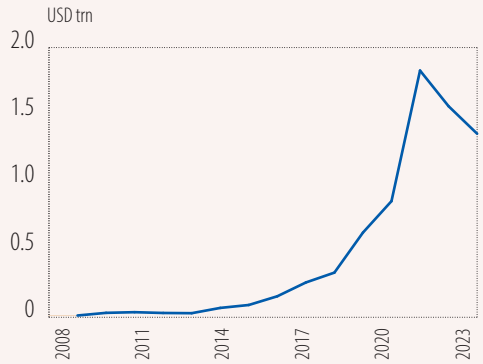
**Greater environmental awareness, policy initiatives to bring $CO_2$ emissions to net zero and regulatory policies for greening the financial system resulted in greater issuance of sustainable debt instruments post-2015**. Sustainable debt encompasses bonds or loans to projects or businesses that deliver social or environmental impact (more details on sustainable debt and its definitions can be found in Annex 1). Issuance has picked up since the Paris Agreement in 2015 (Figure 8, Panel A), which produced a common framework for this type of instrument.

**The share of Latin America and the Caribbean in global sustainable debt issuance has increased since 2015, but remains low**. The region has seen its share of sustainable debt issuance double, but it still remains very low at 3.7% of the world total in 2023, the fourth-smallest share (Figure 8, Panel B).

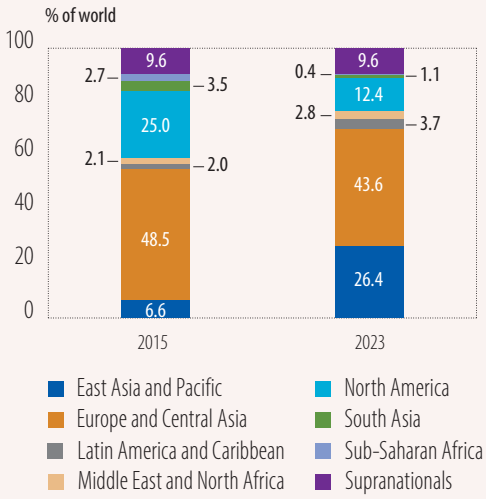
Figure 8

## Sustainable debt issuance

**Panel A. World sustainable debt issuance, $ trillion**




**Panel B. Sustainable debt issuance in % of world total by region**

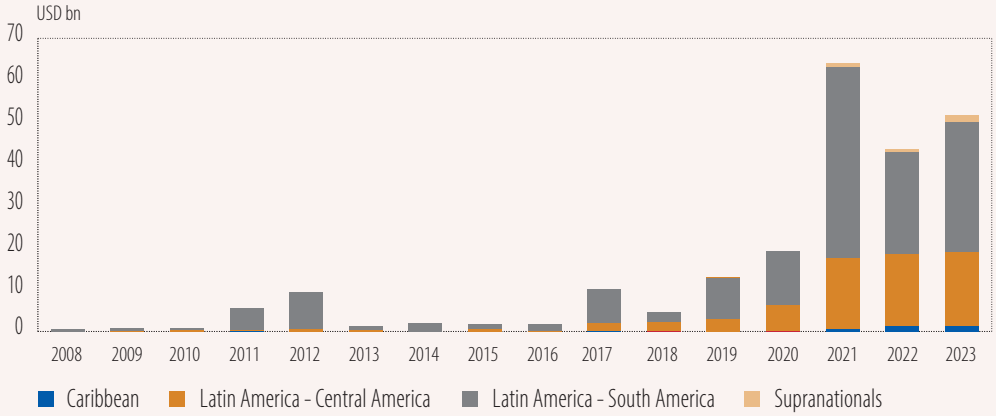



*Source:* *Bloomberg and authors' calculations.*

**South America stands out as the sub-region with the highest issuance of sustainable bonds**, with Chile, Brazil and Peru leading the efforts (Figure 9). Central America (especially Mexico and Guatemala) and then the Caribbean follow. Supranationals have become important issuers of sustainable bonds in the Latin American and Caribbean region over the past few years.

Figure 9

## Sustainable finance in Latin America and the Caribbean by region and supranationals



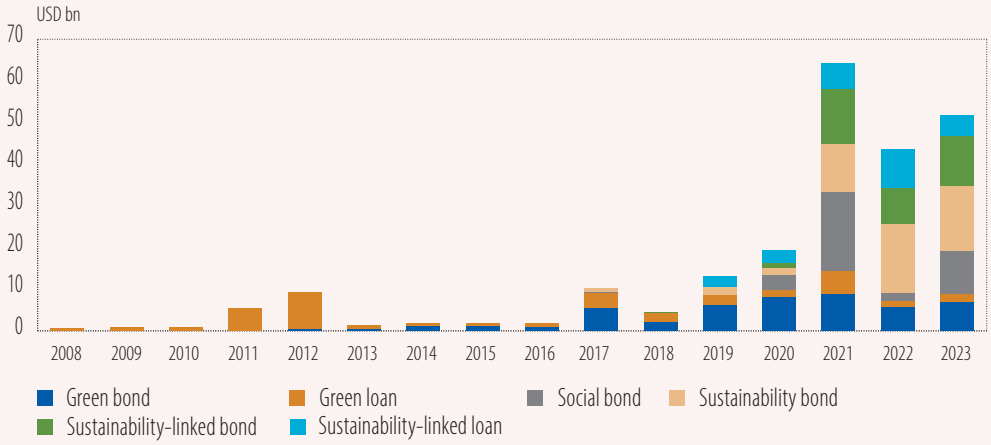

*Source:* *Bloomberg and authors' calculations.*

**Sustainable finance has grown rapidly since 2020, with green bonds and loans accounting for close to 50% of total issuance (Figure 10).** Before the pandemic, green loans and bonds dominated sustainable debt issuance in Latin American and Caribbean countries. But the pandemic increased the need for investment in health infrastructure, remote schooling and support for small businesses in order to strengthen the health system's capacity to withstand the pandemic, reduce scarring and stem economic activity.

The necessary financing of these policy initiatives was complemented by more sustainable debt issuance, evident in the significant pickup in social bonds and sustainability-linked debt after 2020. In South America, sustainable finance mostly used green bonds and loans and social bonds, while governments in Central America turned to sustainability bonds and sustainability-linked bonds and loans. In the Caribbean, finance was mostly concentrated in sustainability-linked loans, while supranationals issued green and social bonds.

**Figure 10**

**Issuance of sustainable debt in Latin America and the Caribbean, by debt instrument**

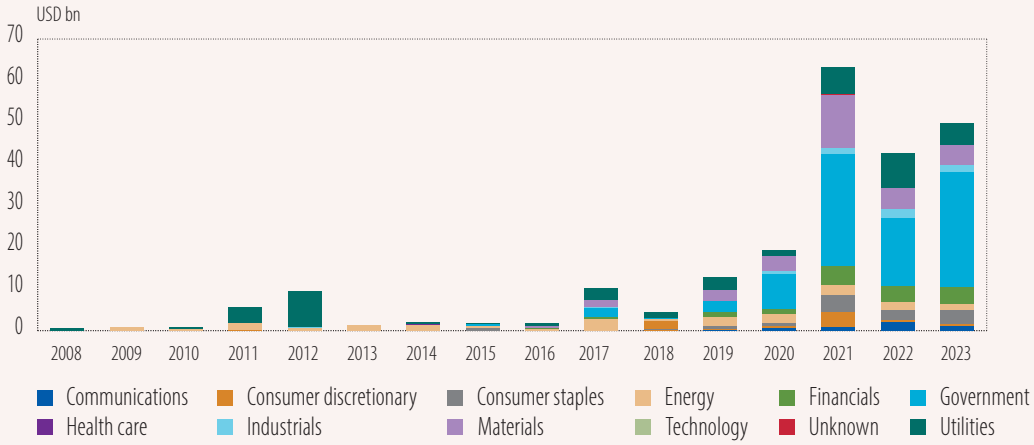



*Source: Bloomberg and authors' calculations.*

**The official sector (government and public development banks) dominates sustainable debt issuance in Latin America and the Caribbean, mostly via direct issuance by central governments.** After supranationals, it is the government sector that has dominated sustainable debt issuance in Latin American and Caribbean countries since 2008, with the current stock totalling $70 billion – that is, 38% of the total issuance. Utilities (non-energy) is the second most important sector over the same period (Figure 11). National public development banks represent only 2.8% of total issuance of sustainable debt ($5 billion), showing clear room for increase given the role these institutions play in this region.

**Figure 11**

**Issuance of sustainable debt in Latin America and the Caribbean by institutional sector**




*Source: Bloomberg and authors' calculations.*

# The role of public development banks

**Public development banks play an increasingly relevant role in leveraging public finance to address market failures and direct financial flows towards long-term sustainable investments. Public development banks also have a counter-cyclical role and act as enablers of institutional change**. Against the background of extensive climate financing needs, limited climate flows to the region and equally limited fiscal space on the sovereigns' side, public development banks are key in financing the green transition. These banks are known to be able to mobilise both public and private sector resources. On one hand, they are often used by governments to indirectly advance their reform agenda (for example, through public-private partnerships), although it is also important that they retain some level of independence. On the other hand, development banks also provide additionality to commercial banks, as they tend to step in through capacity-building, and through affordable financing and innovative financing tools that often target sectors that the private sector has not yet tapped into, or concern projects that it is unwilling or unable to finance. Although this must be done within the boundaries of market competition, public development banks have the potential to catalyse new investments and, given the mounting climate risks and financing needs in the region, the green sector could be a target.

**Public development banks are more relevant in Latin America and the Caribbean than in other regions of the world**. While the share of public development banks' total assets to GDP in this region is almost the same as the world average (23%), they represent a much higher share of the total credit in the region – close to 50%, compared with 25% for the world. In addition, as public development banks tend to be the leading financial institutions in the region not only in providing funding at longer maturities, but also in terms of financial innovation, they could play a similar role with regard to the climate transition, and help catalyse private investment.

**A previous EIB study focusing on the banking sector in Latin America and the Caribbean showed that, while commercial banks are well positioned to finance the green transition, financial depth remains shallow in most countries, limiting the prospects for green lending**. The same study also considered banks' exposure to climate risks and showed that it is driven by physical risks through loan portfolio composition (EIB, 2023b).[5] Commercial banks are most exposed by lending to corporates operating in economic sectors that are more prone to physical risks, such as agriculture, mining and tourism. At the country level, banks' exposure to physical risk is highest in the Caribbean, while for transition risk the distribution is more homogeneous.

**Box 2.**

### Methodology to compute climate risk in commercial banks and public development banks

**The approach we follow to assess climate risk in commercial banks and public development banks has two pillars: (1) banks' vulnerability to climate risks via their portfolio exposure to various sectors of the economy, and (2) the climate risks of the country where the banks operate**. In the first step, we look at banks' lending portfolios, which are underpinned by three components:

1. **Lending to non-financial corporations (NFCs) by sector of activity**. We first break down banks' lending exposure to eight sub-sectors of economic activity: (1) Agriculture; (2) Mining; (3) Tourism; (4) Manufacturing and industry; (5) Trade; (6) Services; (7) Real estate and construction; (8) Other.
2. **Lending to households**. In the second step, we add data on lending to households – which can encompass anything from consumption, to credit cards, to mortgages (depending on the country's definition). This component is not applicable to public development banks.
3. **Sovereign exposures**. We consider banks' sovereign debt holdings by country.

5 See Box 2 for a more detailed methodology of how the authors measured climate risk at the banking sector level in EIB (2023b) and how that was adapted to public development banks later in this study.

**As a second step, each sector of economic activity is assigned a level of climate risk for both physical and transition risk in line with the EIB internal sectoral risk scores** (Table 2). Each sector is attributed a level of risk by applying a reasonable threshold.*

**Table 1**

**Climate risk levels for the non-financial corporations loan book, by sector of activity and by risk type**

| | Agriculture | Mining | Tourism | Manufacturing & industry | Trade | Services | Real estate & construction | Other |
|---|---|---|---|---|---|---|---|---|
| **Physical** | High | High | Medium-Low | Medium-Low | Medium-Low | Medium-Low | Medium-Low | Medium-Low |
| **Transition** | Medium-Low | High | High | Medium-High | Medium-Low | Medium-Low | Medium-High | Medium-High |

*Source:* *European Investment Bank.*

* Low (very light green, not pictured in Table 2 and corresponding to scores < 1.5), Medium-Low (green, corresponding to 1.5 < Score < 2.5), Medium-High (yellow, corresponding to 2.5 < Score < 3.5) and High (red, corresponding to scores > 3.5).

**As a third step, exposures to the sovereign, households and non-financial corporations are weighted by their respective physical and transition risk scores**. To be concrete, the aggregate banking climate risk (BCR) score is calculated separately for physical and transition risk as:

$$BCR_i = \sum NFC_j w_{i,NFCj} + S_i w_{i,H} + S_i w_{iS},$$

Where $BCR_i$ is the EIB banking climate risk score for country i, $NFC_j$ is the EIB NFC climate risk score for sector of economic activity *j* and $S_i$ is the EIB climate country risk score for country *i*. The three weights – $w_{i,NFCj}$ per country *i* and NFC sector *j*, $w_{i,H}$ per country *i* for the household sector and $w_{iS}$ per country *i* for the sovereign sector – are calculated by adding up the total loans or bonds extended by the banking system or public development banks to each sector in local currency terms. The weights are the relative shares of the three exposures. Namely: $w_{i,NFCj}$ is the weight of the banking sector's exposure to non-financial corporations, $w_{i,H}$ is the weight of the banking sector's exposure to households and $w_{i,S}$ is the weight of the banking sector's exposure to the sovereign.

**Finally, after computing the aggregate climate risk scores, we take the country dimension into account** by notching them up or down depending on each country's level of physical or transition risk. If a country is classified as having high physical risk according to the EIB climate risk scores, the sectoral physical risk scores grow, making them riskier, and vice-versa. The same applies to industry transition risk.

**Table 2**

**EIB climate risk country score and corporate score adjustments**

| Country Score | Adjustment | Country Score | Adjustment |
|---|---|---|---|
| 1 | -1.00 | 3.25 | 0.00 |
| 1.25 | -0.75 | 3.75 | 0.25 |
| 1.75 | -0.50 | 4.25 | 0.75 |
| 2.25 | -0.25 | 4.75 | 0.75 |
| 2.75 | 0.00 | 5 | 1.00 |

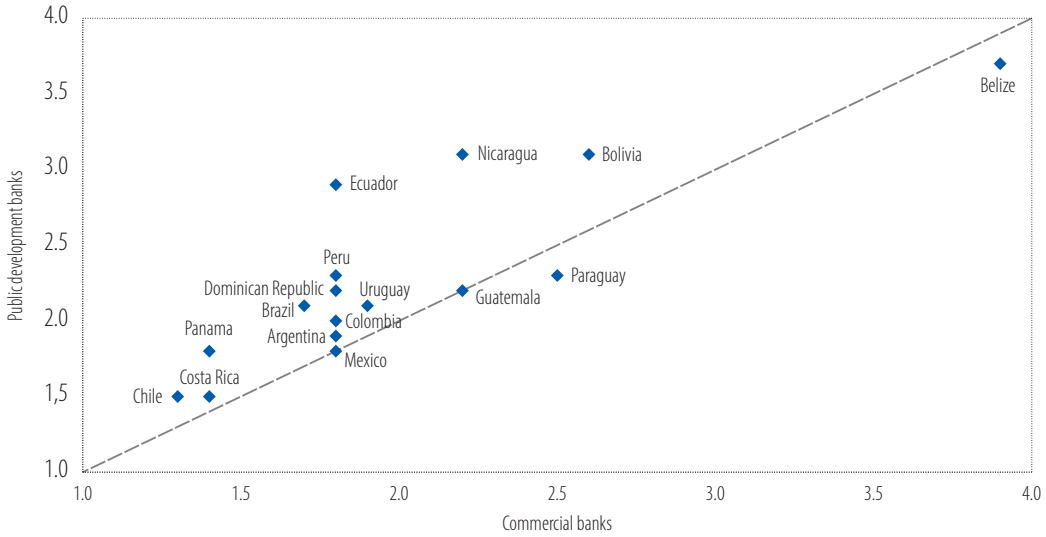
*Source:* *European Investment Bank.*

**By applying the same methodology we used for commercial banks to public development banks (Box 2), we computed the climate risk scores based on the loan book of development banks in 16 Latin American and Caribbean countries, and compared them with the same scores for commercial banks to assess the extent to which they are already accommodating a higher share of the climate risks.** The main conclusion is that public development banks lend in larger proportion than commercial banks to the sector of economic activity most exposed to physical risks (Figure 12, Panel A). The only exceptions are Belize and Paraguay, where commercial banks show a higher exposure to physical risk. This means that public development banks are more active in sectors where commercial banks are more reluctant to take physical risks, and suggests that in most countries, public development banks are fulfilling their role in mitigating physical risk.

**Public development banks are also taking more transition risk than commercial banks (Figure 12, Panel B).** These banks' share of lending to sectors highly exposed to transition risk tends to be higher than for commercial banks, with the exception of Colombia, Chile, Belize and the Dominican Republic. However, this is not necessarily the best outcome. The current market failure for climate transition is the existing bias towards lending to brown sectors (which have higher transition risk) when compared to green sectors. To address this failure, therefore, public development banks should lend more to green sectors (which have lower transition risk). By showing more exposure to transition risk, the public development banks in most countries are lending more to the brown sectors than the commercial banks (which are more exposed to "green"), meaning that they are not addressing the existing market failure.

Figure 12

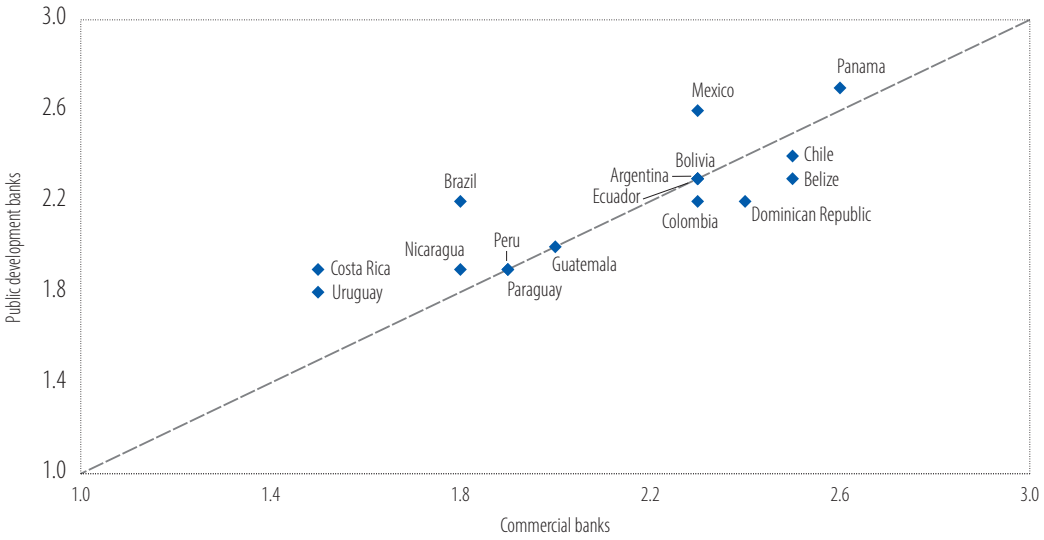
**Panel A. Public development banks' and commercial banks' exposure to physical risk**




*Source: EIB (2023b) and author's calculations.*

Figure 12

**Panel B. Public development banks' and commercial banks' exposure to transition risk**




*Source:* *EIB (2023b) and author's calculations.*

## The results of the EIB and ALIDE survey on public development banks

**To gain a deeper understanding of public development banks' engagement in green finance and how it can be improved, EIB and ALIDE have joined forces to launch a joint survey on the state of climate financing of public development banks in Latin America and the Caribbean.** The survey covers public development banks' green portfolio and what type of products they offer; their climate strategy (if any); which tools they may or may not have for climate risk management, monitoring and impact measurement; the role of the regulation; and what is holding them back from further scaling up green finance. The questions were selected following a literature review of the existing surveys on climate financing.

**The survey was run between January and February 2024 and included 28 public development banks from 15 Latin American and Caribbean countries,[6] representing close to 50% of the total assets of public development banks in the region.** The sample has a mixture of development banks at the national and regional levels with a wide range of mandates, some of which are rather broad while others focus on specific sectors or segments of borrowers or economic activity (small and medium companies, infrastructure, agriculture, etc.).

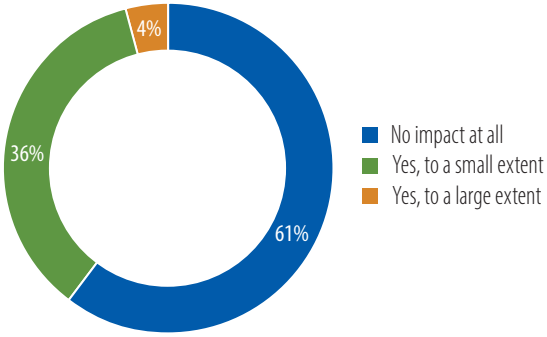
**The main take aways** are that, despite climate financing being seen as an opportunity for public development banks, the majority do not see themselves as trendsetters. Public development banks report limited prioritisation of climate investment by their clients, a lack of technical capacity – mostly from clients, but also on the banks' side – and, for some, a lack of long-term funding to match the longer-term profile of climate investments as the main factors constraining development banks from scaling up green lending.

6 Countries (number of replies): Brazil (4), Mexico (4), Colombia (3), Ecuador (2), Costa Rica (2), Paraguay (2), El Salvador (2), Uruguay (2), Dominican Republic (1), Argentina (1), Nicaragua (1), Belize (1), Chile (1), Bolivia (1) and Suriname (1).

## Public development banks' exposure to climate risks

**Figure 13**

**Share of public development banks experiencing damage of physical assets by extreme weather events** (% of responding public development banks)




*Source:* *EIB-ALIDE Climate Survey, 2024.*

**Much in line with the climate risks observed at the country level, public development banks have already experienced the damaging impacts of extreme weather events.** In fact, 40% of public development banks say that extreme weather events in 2023 damaged their physical assets (bank branches, headquarters, etc.) to some extent (Figure 13). Similarly, 59% of public development banks also reported that these same events contributed to a deterioration of their portfolio's asset quality in the same year (Figure 14). Out of those impacted, 46% identify micro-, small and medium-sized enterprises as the most affected borrowers, followed by intermediated lending (31%), infrastructure lending (15%) and corporate lending (8%).

**The deterioration in asset quality of public development banks due to extreme weather events is indeed proportionally higher for public development banks that are more exposed to physical climate risks through their loan portfolios (Figure 15).** Figure 15 takes each development bank's survey reply on the deterioration in asset quality and matches it with the EIB banking climate risk scores[4] for their loan portfolio computed individually for each of the public development banks in the survey sample. When grouping the replies by category of "extent of the deterioration of asset quality" we confirm that, indeed, public development banks that have higher risk scores on average (meaning that they lend more to the vulnerable sectors of economic activity described in Annex A) are precisely those that report deterioration in asset quality to a greater extent.

**Figure 14**

**Share of public development banks reporting asset quality deterioration due to extreme weather events** (% of responding banks)

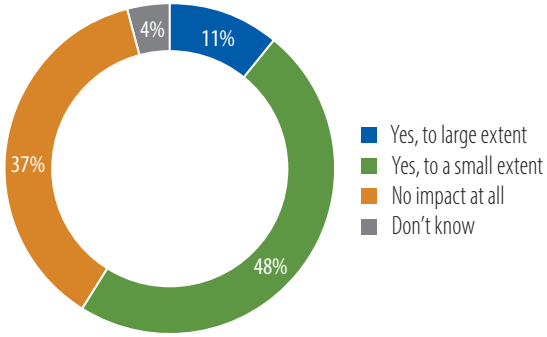
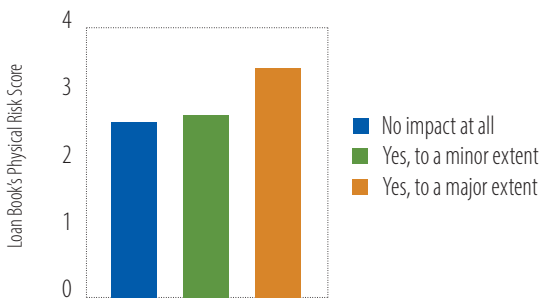



**Figure 15**

**Average EIB banking climate risk score for public development banks** (y axis) **that report no, minor or major deterioration in asset quality** (x axis)




*Source:* *EIB-ALIDE Climate Survey, 2024.*

## Public development banks' climate strategy and green lending

**An overwhelming majority of public development banks see climate transition as an opportunity, but they are more likely to be followers than leaders when it comes to defining a climate strategy.** 93% of responding public development banks see climate transition as an opportunity rather than a risk, and 77% say that they integrate climate-related international standards – like the UN Sustainable Development Goals or the Paris Accords – into their practices.

However, when asked what climate strategy they identify with,[7] over half of public development banks say they are sceptical about the needs of the green transition, or only follow the existing trends in the banking sector to remain competitive. Specifically, 7% of public development banks say that they are still sceptical of the need for the green transition, not acknowledging climate change as a significant risk and not implementing any specific policies beyond whatever minimum regulatory requirements already exist. They identify themselves as "sceptical" (Figure 16). Additionally, 46% are still only "followers" of trends in the field, and their motivation is mostly competition-based and not driven by the results of a risk assessment. Comparatively, 29% are "promoters" – meaning that they are trying to address climate change to some extent; and the final 18% are "leaders" – meaning that they have climate risks fully embedded in their frameworks and strategies.

**There is a clear relationship between public development banks' own climate labelling and the share of green lending in their portfolios.** As Figure 17 shows, as we go from the group of sceptical public development banks to that of leaders, more and more public development banks offer green loans, which represent progressively larger shares of the portfolio. This is aligned with the expectation that development banks that do not acknowledge climate change as a significant risk and only abide by minimum regulatory requirements (sceptical) would have less green lending as a share of the total loan portfolio when compared to other public development banks that have implemented some climate-related policies (followers). Still, the followers' share of green lending is less than for those that say that they have a comprehensive climate strategy (promoters), and even further away from those that say climate change is a central consideration in all their policies (leaders). Indeed, not a single bank in the sceptical group is currently offering green products to customers, whereas green loans take on 23% of the total loan book, on average. In addition, as the share of new green loans (flow) is also larger than that of the general portfolio (stock), this could show that, on average, green lending is becoming a more relevant segment as time goes by.

**Figure 16**
**Share of Public development banks that identify with a specific climate strategy**
(% of responding Public development banks)

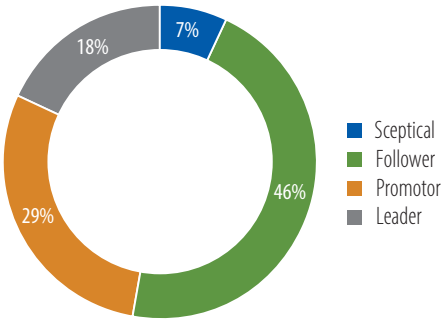
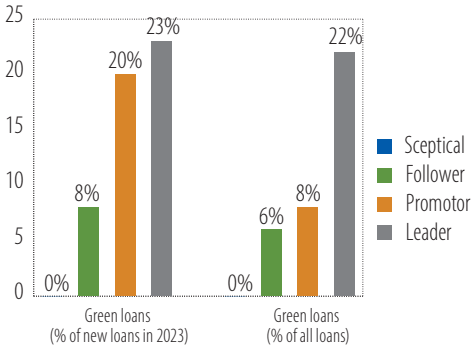



**Figure 17**
**Public development banks' self-identified climate strategy vs. green loans as a % of new loans in 2023 and green loans as a % of all loans**




*Source:* *EIB-ALIDE Climate Survey, 2024.*

7 *Sceptical:* We do not acknowledge climate change as a significant risk for our bank and have not yet implemented any specific policies beyond any minimum regulatory requirements.
*Follower:* We have implemented some climate-related policies (for example, limiting carbon footprint, climate stress, pricing in climate on loans) following what other public development banks did in order to remain competitive.
*Promoter:* We have a comprehensive strategy in place to address our impact on climate change and mitigate active risks on our portfolio.
*Leader:* Climate change is a central consideration in all our policies and operations and is embedded in all our internal processes.

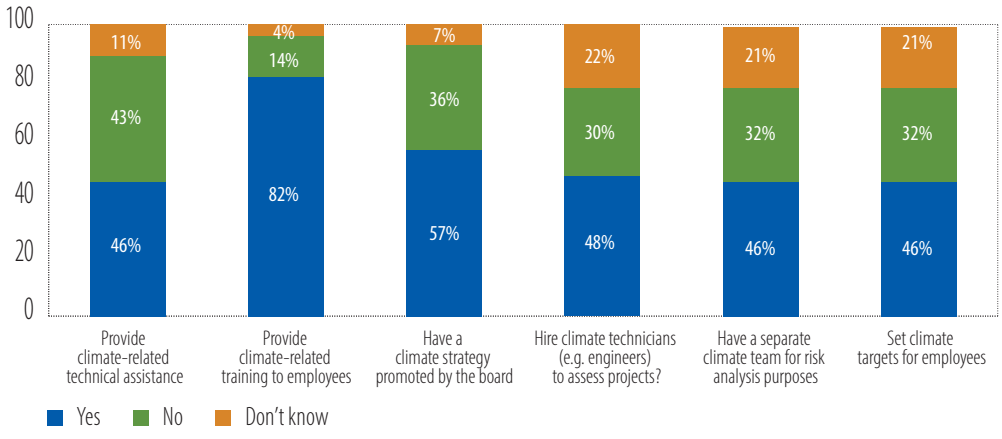
**Although on average, green loans still represent a small share of the total loan portfolio, the majority of public development banks already offer them or plan to do so soon.** Out of the 75% of public development banks that already offer green financial products, for the majority, they represent a relatively small part of the loan portfolio; for example, under 15% (Figure 18). Still, looking at the 25% of public development banks that do not offer such products, 21% plant to start.

Figure 18
**Offering of green products** (% of responding public development banks)


*Source: EIB-ALIDE Climate Survey, 2024.*

**Public development banks have made some progress in what can be considered "established"[8] best banking practices in the climate field, but still have a long way to go to fully tackle climate risks.** Indeed, public development banks seem more advanced in what are considered to be established best practices in the banking sector for climate – with 46% already providing technical assistance to clients, 82% training staff on climate topics and 57% having a board-endorsed climate strategy (Figure 19). However, when looking into more emerging trends in the sector, public development banks still seem to have clear action points that have yet to be put into practice – with only 48% hiring climate technicians (such as engineers), 46% having a team tasked with all things climate risk, and another 46% having included climate targets as a key performance indicator for staff.

Figure 19
**Share of public development banks that …** (% of responding banks)

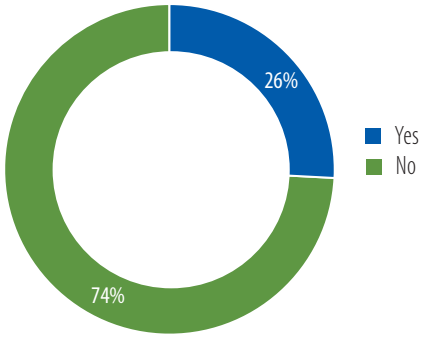



*Source: EIB-ALIDE Climate Survey, 2024.*

8 For ease of understanding, we split the set of actions taken by a bank to help with the climate transition into two groups: "established" – those that do not impose a structural change in banking practices and are commonly found in the banking sector, and "emerging" – those for which there are fewer examples in the industry and which may imply a modest modification of the ways of doing business.

**With regard to their strategy moving forward, a large share of public development banks (74%) plan to curtail lending to sectors of the economy that are exposed to climate risks, especially transition risk** (Figure 20). One could argue that this is because public development banks are already experiencing the direct consequences of climate change on the quality of their own loan portfolios (Figure 4) and are therefore more aware of the risks related to lending to certain sectors of economic activity – those which will be more and more impacted by transition risk. Still, it is likely that the remaining 26% of public development banks expect the structural economic shift that is needed to support the green transition in the region, which is heavily reliant on agriculture, mining and tourism, to be slow paced, and that shifting their sectoral priorities at this point may imply a loss of market share and competitiveness.

**Figure 20**
**Share of public development banks that plan to change their loan exposure to climate-sensitive industries** (% of responding public development banks)



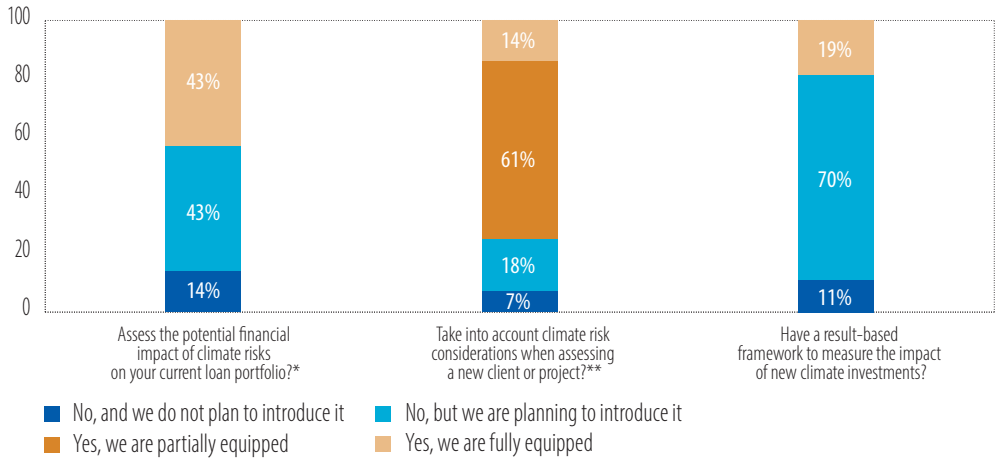

*Source: EIB-ALIDE Climate Survey, 2024.*

## Climate risks and tools for analysis

**Building up a green finance industry needs to be predicated on data, ideally with comparable frameworks for climate risk assessment and monitoring. However, gaps remain in public development banks' toolkits.** Currently, the lack of data and a guiding methodology to calibrate for and monitor climate risks are problems common to many banks across different countries, although public development banks seem to be making strides to change that. Public development banks seem to have the tools to assess risks at the inception of the operational cycle, but do not follow up with monitoring and impact measurement: 61% of public development banks report that they review the climate risks associated to a new project before origination, but only 14% will also monitor those risks through the projects' lifetime (Figure 21). Similarly, although 43% say they have the tools to monitor their evolving exposure to climate risks (like scenario analysis or stress testing), only 19% of public development banks in the region has a results-based approach to measure the wider impact of their climate investments.

**Regulatory incentives are important in terms of increasing climate disclosures**. In the context of the limited availability of climate-related data, the national regulator can play a role in slowly pushing to help increased climate disclosures become an important resource for the banking industry. In the region, although only 33% of public development banks say that they already make some form of climate disclosures – for example, in their annual report – the majority of banks (67%) say that, despite not reporting currently on a voluntary basis, they would be willing to make this information available if the regulator made it a requirement. This would likely also help them build the toolkits mentioned above, as large shares of development banks do not have, but are on track to develop, metrics to assess the financial impact of climate risks (43%), assess climate risks and monitor them (18%) and measure impact (70%). This would considerably enlarge the knowledge base available to public development banks, improve transparency in the sector and help public development banks (and, indirectly, also their clients) become familiar with the green taxonomy.

**Figure 21**
**Does your bank … ?** (% of responding public development banks)




*Source:* *EIB-ALIDE Climate Survey, 2024.*
*Notes:* ** Toolkit for this analysis includes scenario analysis and stress testing.*
*** Yes, we are partially equipped = reviews climate risks before origination, but does not monitor.*
*Yes, we are fully equipped = reviews climate risks before origination, and does monitor.*

## Obstacles to green lending

**Public development banks identify demand-side factors as the biggest barriers to further scaling up green lending.** 55% cite clients' lack of technical skills to make a bankable climate investment proposals, and climate adaptation having a low priority from clients' point of view, as two of their top three barriers to green lending (Figure 22). The latter comes as a surprise given the high share of people affected by climate change on a daily basis in Latin American and the Caribbean, but could be justified by the fact that clients still prioritise concerns about how the countries' macroeconomic or political circumstances affect their businesses, alongside climate risks in the region. After that, public development banks point to clients' unawareness of the green finance opportunities available to them (45%) as the third most important constraint.

**Although demand-related factors dominate the list of constraints on green lending, public development banks identify supply-side limitations too**. Beyond the results in the previous section concerning the level of development of established and emerging practices, public development banks also identify internal limitations related to the lack of standardised metrics for measuring climate risks in the industry (45%) and their own lack of technical capacity and tools (36%). Limited access to long-term capital to match the long-term horizon of climate investments is also a significant challenge for development banks (18%), pointing to the relevant role that international financial institutions can play in supporting public development banks' green ambitions.[9] Finally, other factors – such as the misalignment of climate strategy and commercial objectives and the fact that risks associated with climate lending are higher – also feature as constraints, but not to the same extent as demand-related factors.

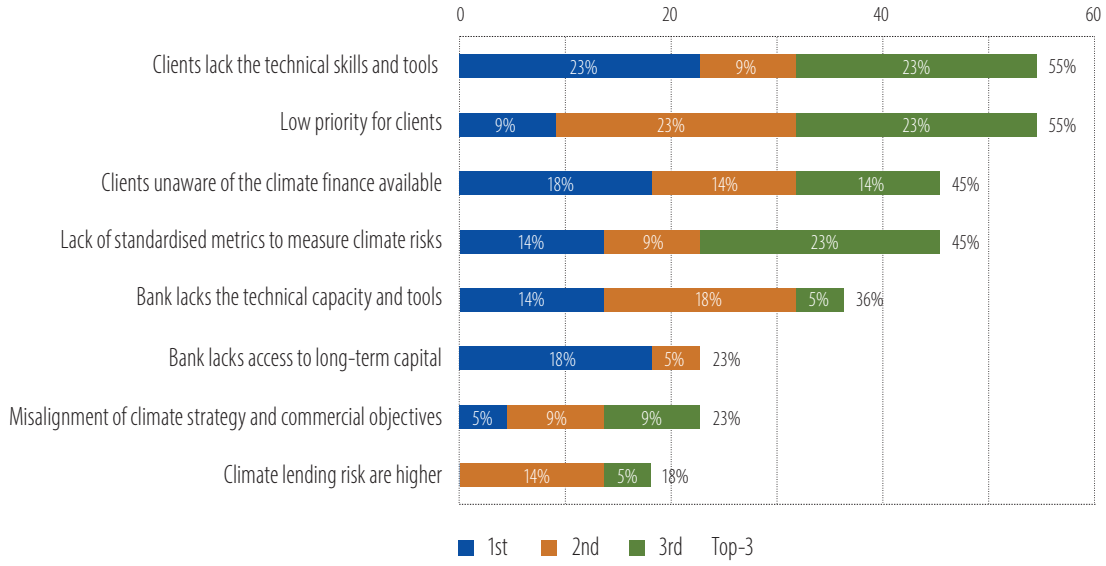
**It does seem, however, that the obstacles to climate finance that public development banks identify depend on how advanced they are in their climate strategy and whether they identify as sceptical, followers, promoters or leaders.** If we look deeper into the sample of public development banks that

9 It is important to note however that this factor is highly linked to the countries' own macroeconomic context and how it is perceived by the markets and not solely by the intrinsic characteristics of the public development bank itself (such as the perceived macroeconomic risk of the country as reflected by a credit rating or a countries' income status may affect the ease with which they access funding, a concern that is especially relevant for Caribbean small developing island states).

considered themselves to be sceptical or followers (the groups that are less engaged in climate finance), some differences emerge when compared to the sample of banks that identify as promoters or leaders. Compared to the average presented in Figure 22 and the sample composed only of leaders or promoters, the less engaged segment of public development banks attaches higher importance to internal constraints on green lending, such as the public development banks' own lack of technical capacity (as opposed to that of clients) and tools to manage and monitor climate risks through the project cycle. This reinforces the message of how engagement – on the side of both clients and public development banks – has a significant bearing on green lending volumes. It also highlights the importance for multilateral development banks and international financial institutions to support these banks, potentially through credit lines and technical assistance programmes, as they could disproportionately benefit from these initiatives (Box 3).

**Figure 22**

**Share of public development banks that cited each factor among the top three constraints**
(% of responding public development banks)




*Source:* *EIB-ALIDE Climate Survey, 2024.*

Box 3.

**EIB financing for public development banks in Latin America and the Caribbean:**
the Banco de Desarrollo del Ecuador Water and Sanitation project in Ecuador

**The Bank has long been present in the Latin America and the Caribbean, and in 2023 alone 68% of funds there were directed towards climate action**. The EIB has been active in Latin America since 1993, supporting over 150 projects and signing a total of over €14 billion in 15 countries. In the Caribbean, the presence of the Bank dates back to 1978, and it has lent over €2 billion through more than 220 projects there. In the period 2018-2023, roughly €1 billion worth of those projects were with partner public development banks in the region. In 2023, in line with the Global Gateway objectives, 68% of funds were directed towards climate action, with the goal of contributing to sustainable and inclusive development in the region. The cooperation between the EIB and the Banco de Desarrollo del Ecuador is only one example of an operation targeting climate action and including technical assistance with a public development bank in the region.

**In Ecuador, ensuring water security is a key priority for eradicating chronic child malnutrition, and it is shared among several stakeholders**. This is a common objective of the government, stated explicitly in their programme Agua y Saneamiento Para Todos (Water and Sanitation for All); of the EU's Global Gateway Investment Agenda in Ecuador and the NDICI Global Europe mandate (especially the objectives around water management, health and climate action); and of the UN Sustainable Development Goals (SDGs) – in particular, SDGs 3, 6, 11 and 13: Good Health and Wellbeing, Clean Water and Sanitation, Sustainable Cities and Communities, and Climate Action.

**With the ultimate goal of improving access to basic sanitation for rural populations and the infrastructure for treating their wastewater, the EIB, in cooperation with Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), is providing a $100 million framework loan, the Business Data Elements (BDE). As a Team Europe initiative, this loan also comes with project preparation support provided by GIZ to subnational project promoters, and technical assistance provided to BDE**. GIZ's participation in the operation was originally kick-started through its globally operating FELICITY Cities Advisory programme (Financing Energy for Low-carbon Investment – Cities Advisory Facility). Funded by the German government's International Climate Initiative (IKI), FELICITY helped the three cities of Jipijapa, Antonio Ante and Atacames in Ecuador build capacity to prepare and implement low-carbon infrastructure projects. This paved the way for subsequent financing by the Bank. The technical assistance support under Team Europe continues to be provided in Ecuador by the GIZ Sustainable Secondary Cities programme (CIS II).

**Coordination between multilateral development banks and international financial institutions is key in facilitating the signature of such framework loans**. In parallel, the EIB and GIZ offered their expertise (including through technical assistance to BDE) in identifying and appraising bankable projects, and the know-how needed to create a credible project pipeline. GIZ also helps to raise standards, including in project feasibility studies and in the environmental, social and procurement procedures of the final beneficiaries and BDE.

**Ultimately, by facilitating long-term investment with favourable terms and conditions, and by providing technical support, the project is set to deliver positive social, economic and environmental results**. The EIB loan provides competitive financial conditions and long tenors that are aligned with the economic life of the underlying investments. The loan term amounts to 20 years, significantly longer than domestic loan maturities. Thanks to this and to the technical support ensuring that these projects have a positive impact, the cooperation between the EIB, Team Europe and BDE has proven a successful example of financing the green transition in the region of Latin America and the Caribbean. The direct impact can be seen in data as of February 2023, which show that the project has the potential to offset 30% of the methane emissions in the three cities mentioned. The project is expected to help more than 130 000 residents by raising health and sanitation standards and creating 80 new jobs.

# Policy recommendations and conclusions

**Policy priorities to increase climate financing in Latin America and the Caribbean should be targeted both to attract private sector investment and to increase the capacity of the public sector, including public development banks**. Investment needs and the gap versus the current flows and capacity are sizeable, and will require a significant increase in both public and private investment. Financing needs for adaptation are mostly concentrated in agriculture, infrastructure, energy and transportation.

**Public development banks are already playing an important role in accommodating climate risks, but will need to step up their efforts: increasing climate lending, building technical capacity, raising awareness and catalysing private investment**. As shown by the EIB/ALIDE survey, both clients and public development banks report that a lack of technical capacity is the main obstacle to increasing green lending. Building this technical capacity will then be key, not only for boosting climate lending by public development banks, but also for catalysing much-needed private investments.

**International financial institutions and multilateral development banks have an important role to play – not only in providing long-term funding, but also in running technical assistance programmes, identifying market failures, and helping to create and shape new markets**. Multilateral development banks and international financial institutions can not only set up technical assistance programmes, but can also serve as a conduit for information on potential investment opportunities in different markets to governments and public development banks gathered through their lending activities. In addition, where markets for certain kinds of instruments or products are underdeveloped or absent, multilateral development banks can act to overcome information barriers, and lead other investors to help create those markets. The emergence of the global green bond market, kicked off by the EIB's inaugural Climate Awareness Bond in 2007, is a good example of this. Following the early issuance activity of the EIB and other multilateral development banks, total issuance has now surpassed $1 trillion.

**Strengthening climate mitigation and adaptation in Latin America and the Caribbean requires an enabling institutional setup to attract private and foreign investors, and this should be done under clearer sustainable finance regulation**. To that end, it is important to classify which economic activities are environmentally sustainable through the application of green taxonomies. As green taxonomies spread around the world, in order to become impactful in efficiently classifying environmentally sustainable economic activities, policymakers and regulators should work together to align taxonomies and require mandatory reporting. So far, the following countries have published green taxonomies: Costa Rica, Dominican Republic, Mexico, Colombia, Brazil and Panama. Argentina and Peru have taxonomies under discussion, and those of Chile, Ecuador and Paraguay are under development.

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# Annexes

## Sustainable debt instruments – Types and definitions

**Sustainable debt includes issuing bonds or loans to invest in projects or businesses that promote social or environmental causes**. Sustainable debt instruments include six main types of products that are classified depending on how the funding is raised (from the investor market through bonds or from banks through loans) and the use of the proceeds, namely:

- **Green bonds:** The funds from these bonds are earmarked for environmental or climate projects, such as investing in renewable energy.
- **Social bonds:** The proceeds are earmarked for social impact projects, such as investing in low-cost housing for people with restricted access to the housing market.
- **Sustainability bonds:** The funds are committed to a mix of social and green impact projects that may be aligned with the UN Sustainable Development Goals.
- **Green loans:** The proceeds will finance environmental or climate projects, such as investment in improving the energy efficiency of buildings.
- **Social loans:** The funds will finance social impact investments, like training people with disabilities to improve employability.
- **Sustainability-linked loans (or bonds):** The loan (bond) proceeds will be used to support a bundle of green and social impact projects.

Green bonds, social bonds, sustainability bonds and green loans are considered activity-based debt instruments: Their proceeds are used to finance new (or refinance existing) specific projects with strict reporting requirements where the use of the proceeds is recorded. Sustainability-linked loans and bonds are behaviour-based debt instruments: The proceeds are not expected to finance specific projects, but to finance the behavioural change of the debt issuer as the latter becomes more aware of the environment and climate change. However, behaviour-based debt instruments are more vulnerable to greenwashing, as there is no explicit and mandatory reporting on whether the proceeds were indeed used to finance the debt issuer's environmental behaviour. Under sharpening scrutiny, issuers must ensure their sustainability targets are ambitious enough to avoid greenwashing allegations. In the US, for example, the volume of sustainability-linked loans in 2023 was 77% smaller than in 2022, and 85% smaller than in 2021, amidst growing greenwashing concerns.

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