Authors:

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With inputs from the 15 Sustainable Finance hubs led by young people in Latin America and with the support of Vania Montalvo, from Transparencia Mexicana and member of the technical team of the Climate Finance Group for Latin America and the Caribbean.

For the elaboration of this index and as a follow-up to the national dialogues held to present the results by country, requests for information were sent to governments to gather information available at the national level. We are grateful to the government of Chile for having contributed with the provision of data. This exercise will be a yearly practice.
The Sustainable Finance Index (SFI) is a tool that allows monitoring of national and international revenues and expenditures on climate change and sustainable development, as well as identifying those resources that could be hindering the progress towards the transition to low-carbon and climate-resilient development, mainly those coming from activities related to the extraction and production of fossil fuels and mining, which cause the problem.

This report illustrates the results of the SFI, the second edition of which was applied in the 20 countries with the highest greenhouse gas emissions in Latin America and the Caribbean, taking 2020 as the base year for the study.

The SFI is calculated based on four variables composed of national and international public finance items [1]:

1. **Sustainable Revenues (SR):** integrates cooperation and financing disbursed to the region’s countries from bilateral and multilateral sources dedicated to climate change.

2. **Carbon Intensive Revenues (CIR):** includes revenues from tax and non-tax collection of hydrocarbons and minerals, and fuel taxes.

3. **Sustainable Budget (SB):** includes budget specifically labeled for climate change, energy efficiency, renewable energy, and natural disaster response.

4. **Carbon Intensive Budget (CIB):** includes the budget allocated to hydrocarbon exploitation, including industrial processes, and the budget for state-owned companies, where they exist.

For the calculation of the index, a value was assigned to each variable. In this case, each variable is worth one point and is scored according to the percentage obtained by each country in each variable. The SR and SB variables, being positive items, are assigned a higher value (from 0 to 1) to those countries that have better sustainable income and expenditures and therefore, these will tend towards a 1 rating. On the other hand, the CIR and CIB variables are classified oppositely, i.e., those countries that have higher income and carbon-intensive expenditures will tend toward a 0 rating. In this way, the points obtained in the four variables are weighted to obtain their position in the final ranking.

Seven categories are used to classify countries according to their levels of sustainable finance: **VERY HIGH, HIGH, MEDIUM HIGH, MEDIUM, MEDIUM LOW, LOW** and **VERY LOW**, the shade changes depending on whether the variable is positive or negative, as can be seen in the description of each variable.

[1] The selection of variables and the construction of the Sustainable Finance Index has its theoretical basis in the work of Guzmán, Sandra (2020), La incorporación del cambio climático en los presupuestos públicos de los países en desarrollo: un análisis de métodos mixtos aplicado a los países de América Latina y el Caribe. Department of Politics, University of York. United Kingdom.
The result of the SFI 2021, applied to the top 20 emitting countries in the Latin America and Caribbean region, indicates that no country has all 4 points, which would mean that it would have a balance between its revenues and expenditures, tending towards sustainable finances. The results show that there is no country in the “VERY HIGH” sustainable finance category. However, in the “HIGH” sustainable finance category we have Peru (with a score of 3.1 out of 4 points), followed by El Salvador (3.0), while in the “MEDIUM HIGH” sustainable finance category we have Guatemala (2.6), Jamaica (2.4), Nicaragua (2.2), Brazil (2.1), Cuba (2.1) and Dominican Republic (2.1).

Argentina (2.0) and Costa Rica (2.0), on the other hand, are in the “MEDIUM” sustainable finance category. As for the “MEDIUM LOW” sustainable finance category, we have Honduras (1.9), Paraguay (1.9), Colombia (1.8), Ecuador (1.8) and Bolivia (1.7).

In the “LOW” sustainable finance category we have Mexico (1.4), Chile (1.3) and Panama (1.2) and ultimately, in the “VERY LOW” sustainable finance category, we have Trinidad and Tobago (0.3) and Uruguay (0.2). It is important to mention that Venezuela was not included in this edition, as no information is available in the information sources used for this index.

This ranking, which summarizes the levels of sustainable finance in the countries, should be analyzed according to the context of each country considered and according to its performance in each of the variables that compose the index, since there may be countries that have a good performance in some variables and not in others, and therefore, their balance may not be favorable.

**Chart 1. Sustainable Finance Ranking for Latin America and the Caribbean**

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**Sustainable Finance Ranking (2020 Data)**

<table>
<thead>
<tr>
<th>No Country</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Country</td>
<td>4.0</td>
</tr>
<tr>
<td>Peru</td>
<td>3.1</td>
</tr>
<tr>
<td>El Salvador</td>
<td>3.0</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2.6</td>
</tr>
<tr>
<td>Jamaica</td>
<td>2.4</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>2.2</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.1</td>
</tr>
<tr>
<td>Cuba</td>
<td>2.1</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>2.1</td>
</tr>
<tr>
<td>Argentina</td>
<td>2.0</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2.0</td>
</tr>
<tr>
<td>Honduras</td>
<td>2.0</td>
</tr>
<tr>
<td>Paraguay</td>
<td>1.9</td>
</tr>
<tr>
<td>Colombia</td>
<td>1.9</td>
</tr>
<tr>
<td>Ecuador</td>
<td>1.8</td>
</tr>
<tr>
<td>Bolivia</td>
<td>1.8</td>
</tr>
<tr>
<td>Chile</td>
<td>1.7</td>
</tr>
<tr>
<td>Panama</td>
<td>1.3</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>1.2</td>
</tr>
<tr>
<td>Uruguay</td>
<td>0.2</td>
</tr>
<tr>
<td>Uruguay</td>
<td>0.3</td>
</tr>
</tbody>
</table>

**Score**
The results are presented below by variable, as this will allow us to know in greater detail the trends and progress made by each country concerning the availability of financial resources to address the problem of climate change and achieve a transition to sustainable, low-carbon and climate-resilient development.

1. Sustainable Revenues (SR)

The “Sustainable Revenues” (SR) variable was calculated based on the percentage of development financing received by the countries of the region dedicated to climate change (considering climate financing from DAC countries, Multilateral Development Banks and other multilateral sources) with respect to the total disbursed financing for 2020, based on two sources of information: Development financing related to climate change of the Organisation for Economic Co-operation and Development and the Creditor Reporting System of the OECD [2].

This indicates that not only the final amount of climate change financing is considered, but also what it represents in the total financing disbursed to the country in the year under study. The results obtained from the SR variable allow us to analyze the disparity in terms of the receiving of development financing dedicated to climate change in the region, with only two countries concentrating the greatest availability of sustainable revenues.

The results show that the country with the highest percentage of climate change financing of total development financing was Cuba with 42.30%, followed by Costa Rica with 40.21%, which according to the ranking has a “VERY HIGH” sustainable revenues level with respect to the 20 countries analyzed. No country was placed in the “HIGH” sustainable income category.

On the other side, Argentina (27.00%), Honduras (25.86%), Brazil (25.14%) and Ecuador (24.42%) have “MEDIUM HIGH” sustainable revenues level, while Peru (21.00%), Mexico (20.41%), Paraguay (20.36%), Panamá (19.98%), Nicaragua (19.97%) and Jamaica (19.79%) have a “MEDIUM” sustainable revenues level.

Concerning the “MEDIUM LOW” category, we find Colombia (17.66%) and Bolivia (11.93%). On the other side, in the “LOW” category, we find Guatemala (10.22%) and El Salvador (7.24%). Finally, in the “VERY LOW” category, we have the Dominican Republic (1.75%).

It is important to mention that some countries such as Chile, Trinidad y Tobago and Uruguay are not registered as recipients of climate finance dedicated to climate change in the year of study.

This may be related to the lack of data, but it may also be associated with the fact that the study was conducted in the context of a pandemic due to COVID-19, which may mean that the support to the above-mentioned countries was focused on activities associated with the pandemic and not on processes or activities associated with addressing climate change.

[2] The Sustainable Revenues variable was calculated with the following sources of information and procedure: Calculation of development finance: Based on the Creditor Report System of the OECD. The total of the Official Donors in all sectors, is considered. In Financing Flows, the Official Development Assistance Criteria are added (which contains ODA grants, ODA loans and Equity Investment), plus the sum of Other Official Flows and Private Development Finance. This information is consulted in current prices and commitment values to ensure compatibility with the sources of information consulted. To obtain data on development finance related to climate change received by the countries of the region, the Climate Change database was consulted: OECD DAC External Development Finance Statistics. Once the data was obtained, the percentage of climate finance with respect to total development finance per country was obtained. The higher the percentage, the better ranking the country obtains for the construction of this variable.
Chart 2. Sustainable Revenues Ranking for Latin America and the Caribbean (2021)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Sustainable Revenues Ranking (% of total) in 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cuba</td>
<td>42.30</td>
</tr>
<tr>
<td>2</td>
<td>Costa Rica</td>
<td>40.21</td>
</tr>
<tr>
<td>3</td>
<td>Argentina</td>
<td>30.10</td>
</tr>
<tr>
<td>4</td>
<td>Honduras</td>
<td>27.00</td>
</tr>
<tr>
<td>5</td>
<td>Brazil</td>
<td>25.86</td>
</tr>
<tr>
<td>6</td>
<td>Ecuador</td>
<td>25.14</td>
</tr>
<tr>
<td>7</td>
<td>Peru</td>
<td>24.42</td>
</tr>
<tr>
<td>8</td>
<td>Mexico</td>
<td>21.00</td>
</tr>
<tr>
<td>9</td>
<td>Paraguay</td>
<td>20.41</td>
</tr>
<tr>
<td>10</td>
<td>Panama</td>
<td>20.36</td>
</tr>
<tr>
<td>11</td>
<td>Nicaragua</td>
<td>19.97</td>
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<tr>
<td>12</td>
<td>Jamaica</td>
<td>19.79</td>
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<tr>
<td>13</td>
<td>Colombia</td>
<td>17.66</td>
</tr>
<tr>
<td>14</td>
<td>Bolivia</td>
<td>11.93</td>
</tr>
<tr>
<td>15</td>
<td>Guatemala</td>
<td>10.22</td>
</tr>
<tr>
<td>16</td>
<td>El Salvador</td>
<td>7.24</td>
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<td>17</td>
<td>Dominican Republic</td>
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<tr>
<td>18</td>
<td>Chile</td>
<td>0.00*</td>
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<tr>
<td>19</td>
<td>Trinidad and Tobago</td>
<td>0.00*</td>
</tr>
<tr>
<td>20</td>
<td>Uruguay</td>
<td>0.00*</td>
</tr>
</tbody>
</table>

(*) No data

2. Carbon Intensive Revenues (CIR)

The variable “Carbon Intensive Revenues” (CIR) analyzes the share of carbon-intensive activities (exploration and extraction of hydrocarbons and minerals; and commercialization of fuels) in the total revenues of the countries. The analysis was carried out on the revenues obtained from the information available for each country, for the year 2020.

The results show that the countries with a “VERY HIGH” CIR level were Ecuador (21.78%) and Trinidad y Tobago (20.78%). On the other hand, Mexico (17.41%) stands at a “HIGH” level.

Concerning the “MEDIUM HIGH” level, we find Colombia (11.23%), Chile (10.93%) and Perú (10.89%) while Uruguay (8.63%), Nicaragua (8.19%) and the Dominican Republic (6.74%) are at a “MEDIUM” level. Following the “MEDIUM LOW” level, we find Costa Rica (4.77%), Bolivia (4.33%), Guatemala (3.55%) and Paraguay (2.92%).

Finally, the countries at the bottom part of the ranking are Brazil (1.58%), Panama (1.26%) and Argentina (0.95%) with a “LOW” level, and El Salvador (0.28%) and Jamaica (0.07%) with a “VERY LOW” level.

It is important to mention that there is no information available for Cuba and Honduras.
### 3. Sustainable Budget (SB)

The “Sustainable Budget” (SB) variable analyzes the budget allocated and labeled by the countries for climate change in the environmental sector; renewable energy and energy efficiency in the energy sector; and natural disaster prevention and response in the sector in charge of this policy during 2020. The results show that the allocation of the sustainable budget is limited in the countries studied since it barely exceeded 1% of the total budget.

Thus, the countries that allocated the most resources to this category were Peru (1.90%) and Jamaica (1.42%), placing them at a “VERY HIGH” level, followed by Nicaragua (0.39%) and Cuba (0.35%) with a “HIGH” level.

On the other hand, in the “MEDIUM HIGH” level we have Bolivia (0.29%), El Salvador (0.29%) and Honduras (0.26%). At the “MEDIUM” level are Colombia (0.18%) and Ecuador (0.13%), while at the “MEDIUM LOW” level we have Guatemala (0.10%), México (0.08%), Paraguay (0.08%) and Chile (0.06%).

Finally, Argentina (0.05%), Costa Rica (0.04%), Dominican Republic (0.03%), Brazil (0.02%) and Panama (0.01%) are at the “LOW” level while Trinidad and Tobago (0.004%) and Uruguay (0.001%) stand at the “VERY LOW” level.
**Chart 4.** Sustainable Budget Ranking for Latin America and the Caribbean (2021)

**4. Carbon Intensive Budget (CIB)**

The “Carbon Intensive Budget” (CIB) variable, analyzes the budget allocated to hydrocarbon exploitation, including exploration and extraction, refining, petrochemicals and transportation, among others, within the energy sector, including state-owned companies, when they exist.

The results show that the country with the highest budget allocation in this area was Bolivia (21.80%) placed at the “VERY HIGH” level. This was followed by Mexico (11.72%) and Paraguay (7.04%) with a “HIGH” level.

At the “MEDIUM HIGH” level are Brazil (2.94%) and Trinidad and Tobago (2.27%). At the “MEDIUM” level are Argentina (0.80%) and Colombia (0.64%) and at the “MEDIUM LOW” level we have Ecuador (0.27%) and Chile (0.11%).

Finally, with a “LOW” level we have Cuba (0.04%), El Salvador (0.02%), Guatemala (0.02%) and Nicaragua (0.02%) while the Dominican Republic (0.005%), Costa Rica (0.004%), Honduras (0.003%) and Peru (0.003%) have a “VERY LOW” level.

It is important to mention that there is no information available for Jamaica, Panama and Uruguay.
Chart 5. Carbon Intensive Budget Ranking for Latin America and the Caribbean (2021)

Ranking of Carbon Intensive Budget (% of total) in 2020

1. Bolivia 21.80
2. Mexico 11.72
3. Paraguay 7.04
4. Brazil 2.94
5. Trinidad and Tobago 2.27
6. Argentina 0.80
7. Colombia 0.64
8. Ecuador 0.27
9. Chile 0.11
10. Cuba 0.04
11. El Salvador 0.02
12. Guatemala 0.02
13. Nicaragua 0.02
14. Dominican Republic 0.005
15. Costa Rica 0.004
16. Honduras 0.003
17. Peru 0.003
18. Jamaica 0.000*
19. Panama 0.000*
20. Uruguay 0.000*

(*) No data

Chart 6. Sustainable finance levels vs CO₂ emissions levels in the 20 countries analyzed.
Comparative analysis of SFI 2020 versus SFI 2021

Following, we will compare the performance of the SFI 2020 (which integrates data from 2019) and the SFI 2021 (which integrates data from 2020), in order to analyze the changes in the performance of the latter, as well as the variables that comprise it.

SFI 2020 versus SFI 2021

The results of the SFI in both the first and second editions indicate that no country scored 4 points. It can also be observed that none of the countries was placed in the “VERY HIGH”, sustainable finance category. In the case of the SFI 2020, Honduras (3.2) and Costa Rica (3.1) were the only countries with a better ranking, being placed in the “HIGH” category, while in the SFI 2021 we find Peru (3.1) and El Salvador (3.0), as the best-positioned countries in the ranking.

Now, in the “MEDIUM HIGH” category, for the SFI 2020 we find Jamaica (2.9), Guatemala (2.7), Nicaragua (2.7), and Peru (2.6), while for the SFI 2021 we find Guatemala (2.6), Jamaica (2.4), Nicaragua (2.2), Brazil (2.1), Cuba (2.1) and Dominican Republic (2.1).

On the other hand, in the “MEDIUM” category, for the SFI 2020 we find El Salvador (2.0), Panama (2.0), and Dominican Republic (2.0), and for the SFI 2021 we find Argentina (2.0) and Costa Rica (2.0). In the “MEDIUM LOW” category, for the SFI 2020 we find Brazil (1.9), Colombia (1.9), Venezuela (1.9), Cuba (1.7), Ecuador (1.7), Paraguay (1.7), Bolivia (1.6) and Uruguay (1.6), and for the SFI 2021 we find Honduras (1.9), Paraguay (1.9), Colombia (1.8), Ecuador (1.8) and Bolivia (1.7).

Following with the “LOW” category, for the SFI 2020 we find Mexico (1.5), Argentina (1.3) and Chile (1.2), while for the SFI 2021, Mexico (1.4), Chile (1.3) and Panama (1.2). And finally, in the “VERY LOW” category, for the SFI 2020 we find Trinidad and Tobago (0.7), and for the SFI 2021 we find Trinidad and Tobago (0.3) and Uruguay (0.2).
In general terms, we can conclude that there is a decrease in the 2021 SFI compared to the 2020 SFI, as the best-ranked country in the 2021 SFI was Peru with a score of 3.1, compared to Honduras, which obtained a score of 3.2 in the SFI 2021. It is also important to mention that Honduras went from being the best-ranked country in the SFI 2020 to place at the eleventh position in the SFI 2021.

On the other hand, it can be noticed that the rating in the “MEDIUM” category in both editions had an average of 2.0. Finally, it can be observed that the “VERY LOW” category decreased in the SFI 2021, as it dropped from a score of 0.7 (Trinidad and Tobago) in the SFI 2020 to a score of 0.2 (Uruguay) in the SFI 2021.

Lastly, the results are presented by variables of the two editions, as this will allow us to analyze the trends and progress made by each country concerning the availability of financial resources to address the problem of climate change.

1 Sustainable Revenues (SR)

The results of this variable show that the country with the highest percentage of SR in the first edition was Mexico with 71.2%, while in the second edition was Cuba with 42.30%. However, it is important to stress that for the second edition the methodology used to calculate the SR variable was updated.

2 Carbon Intensive Revenues (CIR)

The results of this variable show that in the first edition the countries with the highest CIR were Ecuador (28.54%), Mexico (23.51%) and Trinidad and Tobago (19.25%), while for the second edition, were Ecuador (21.78%), Trinidad and Tobago (20.78%) and Mexico (17.41%). On the other hand, the countries with the lowest CIR in the first edition were El Salvador (0.26%) and Jamaica (0.01%), and also in the second edition were El Salvador (0.28%) and Jamaica (0.07%).

3 Sustainable Budget (SB)

The results obtained for this variable show that in the first edition the countries with the highest SB were Jamaica (0.58%) and Colombia (0.54%), while for the second edition they were Peru (1.90%) and Jamaica (1.42%). On the other side, the countries with the lowest SB in the first edition were Panama (0.004%) and Uruguay (0.002%), and in the second edition they were Trinidad and Tobago (0.004%) and Uruguay (0.001%).

4 Carbon Intensive Budget (CIB)

Finally, the results for this variable show that the country with the highest CIB in the first edition was Bolivia (29.28%), and it remained Bolivia also for the second edition (21.80%). On the other hand, the countries with the lowest CIB for the first edition were Honduras (0.003%), Peru (0.003%) and Dominican Republic (0.001%), and in the second edition were Honduras (0.003%) and Peru (0.003%).

Conclusions

The SFI is a tool that aims to monitor progress towards compliance with Article 2.1.c of the Paris Agreement, that seeks to make finance flows consistent with low-emission and climate-resilient development. This means that it is important not only to monitor the outflows, but also the inflows of countries to ensure that at all levels there is such consistency.

The effective implementation of the SFI requires high levels of transparency of information and public access to it, since it is desired to analyze information that can be used by the public. Notwithstanding the above, in the preparation of the first and second editions of the SFI, there have been limitations in the disaggregation of data and timely publication for
public access. Although some countries have better quality of data, others have not been analyzed due to their limited levels of transparency, such as Venezuela, which was not included in the second edition of the SFI.

The SFI, on the other hand, seeks to identify the existing gaps between sustainable revenues and expenditures, so that citizens and their different sectors can identify opportunities to transform their public finance systems and their international financing schemes towards more sustainable ones.

Finally, the SFI reflects national and international realities, and the results of the 2021 SFI compared to the 2020 SFI reflect important changes in the composition of financing flows that may be associated with the reality that the world has experienced in the context of the COVID-19 pandemic, where priorities shifted away from addressing climate change in most countries.

It should be noted that the SFI will be estimated year by year, but the full report including qualitative indicators and country fact sheets will be published on a biannual basis. Future editions of the SFI will integrate data related with credits associated with sustainable development, and other sectors will be integrated as information becomes available.

Recommendations

In terms of revenues:

Definition of sustainable investment needs: The countries of the region must make a greater effort to identify climate change finance and cooperation needs, in order to understand the costs involved and guide international financing for development more accurately.

Effective sustainable revenues: Cooperating partners must increase synergies between developing countries’ needs at the national-level and their financing obligations, thus closing the gap, and increase the effectiveness of sustainable revenues.

National Strategies to Mobilize Sustainable Finance: The countries of the region should, to the extent of their possibilities, create National Sustainable Finance Strategies that allow them, on the one hand, to identify investment opportunities, but also areas that require a policy of diversification and disinvestment. If the role of carbon-intensive revenues continues to be a priority in the countries, there will be no international cooperation that will allow countries to face climate change.

Fiscal reforms: It is important to carry out fiscal reforms that allow countries to diversify their revenue sources and achieve decarbonization of their public finances, especially revenues from hydrocarbon exploration and extraction. Carbon intensity taxes: It is proposed to create taxes that penalize carbon-intensive activities, in order to make way for the expansion of new technologies in sectors such as energy and transportation.
In terms of budget:

Mainstreaming climate change in the budget: Carry out a review of budget policies so that through these, effective climate change and sustainability actions are prioritized and mainstreamed, which will increase the allocation of public resources in this area.

Re-directing budget: Implement actions to redirect carbon-intensive budget towards actions in favor of sustainability and that allow countries to mitigate emissions and adapt to the adverse effects of climate change.

Increase investments towards energy transition: Increase budget allocations to accelerate energy transition, including energy efficiency, which also means reducing resources directed towards hydrocarbon exploitation, important sources of greenhouse gas emissions in the region.

Increase sustainable budget: Increase public investments in actions for sustainability and attention to climate change to reach at least 2% of the country’s GDP, as a starting point towards compliance with the Paris Agreement.

Align public finances with sustainable development: Promote the alignment of the public financial system with the Paris Agreement’s Article 2.1.c, on making financial flows compatible with low-carbon and climate-resilient development.

In terms of transparency and access to information:

Increase transparency: Improve budgetary and fiscal transparency practices, ensuring that in all countries information is available every year and in a timely manner, with an adequate level of disaggregation and in open formats.

Tax transparency: For countries that have carbon taxes, increase transparency on these taxes and the destination of the resources collected, ensuring that they are invested in sustainable activities. Currently, only four of the 20 countries analyzed have carbon taxes.

Classifiers for climate change and sustainable development: Design, adopt or create classifiers that make it possible to clearly identify which resources are being directed to climate change and sustainability in all areas of the public sector.

Methodologies for integrating climate change: Create a robust methodology for integrating climate change and other sustainable development objectives into the planning and budgeting processes in the countries, in order to achieve their effective integration.

Measurement, reporting and verification systems: Create measurement, reporting and verification systems for climate and sustainable finance to identify needs and gaps in terms of climate change and sustainable development investment. Improving public information related to climate change and sustainable development will be crucial to comply with the “Escazú Agreement” on access to information, environmental justice and social participation in public processes in Latin America.
For more information related to the index consult the page
www.sustainablefinance4future.org

To learn more about the work of GFLAC, visit the page
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