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# ASSESSMENT PROGRAMME

Personalised Report  
2022-2023

Financial Innovation Laboratory



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## FC4S Disclaimer

All information used to compute the graphics and draw analyses was collected through the FC4S Assessment Programme survey between April and July 2023.

The answers provided by the 26 responding centres were corrected only when questions were misunderstood, and answers were not consistent with other parts of the survey. As such, this report is solely based on the information disclosed by FC4S members.

The evaluation proposed depends on the overall framework of the FC4S Assessment Programme survey. This survey aims at evaluating whether a financial centre's entire eco-system is aligned with the objectives of a sustainable financial system – in short, delivering capital to support the low-carbon transition and achievement of the SDGs. As such, the various analyses and conclusions developed in this report are limited by the scope of the Assessment Programme that itself needed to be applicable to all FC4S members.

## About FC4S

The United Nations Development Programme (UNDP) Financial Centres for Sustainability Network (FC4S) is a global network of 42 financial centres working together to achieve the objectives set by the 2030 Agenda and the Paris Agreement. Established in mid-2018, the UNDP FC4S is an initiative of the UNDP Sustainable Finance Hub, born out of Italy's G7 Presidency in 2017.




FC4S's core mission is to enable financial centres to exchange experiences, drive convergence and act on shared priorities to accelerate the expansion of sustainable finance.

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## Introduction

The Assessment Programme was established in 2018 by the Financial Centres for Sustainability Network (FC4S), as the first initiative of its kind to evaluate the state of sustainable finance in key international financial centres. It delves into three pillars:

|   |   |
|---|---|
| <p><b>Institutional Foundations</b></p>  | <p>It explores the <b>key institutions and objectives</b> that drive the growth of sustainable finance in financial centres.</p>                          |
| <p><b>Enabling Environment</b></p>       | <p>It maps the structures that support the scale-up of sustainable finance by providing <b>rules and incentives</b> and <b>building capabilities</b>.</p> |
| <p><b>Market Infrastructure</b></p>      | <p>It examines how Commitments, strategies, and incentives stimulate the <b>capital mobilization of market participants</b>.</p>                          |

The Assessment Programme Personalized Reports allow financial centres to:

- Track their progress in supporting the sustainable finance agenda
- Benchmark their relative position against best-in-class practices
- Identify potential actions pathways and visualize goals
- Set priorities when developing a sustainable finance strategy

In 2023, 26 members completed the survey, out of 42 members



## Comparative Analysis

To enhance comparability across financial centres, regional and economic groupings were identified. These clusters serve only to refine the analysis and provide additional information by assessment the performance of the members within of each group. This evaluation covers both aggregate pillars and individual categories, with a focus on ranking and positioning.

### 4 Regional Clusters

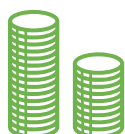


| REGIONAL CLUSTER             | FINANCIAL CENTRE      | FC4S MEMBER   |
|------------------------------|-----------------------|---|
| <b>Africa</b><br>3 centres   | <b>Casablanca</b>     | Casablanca Finance City (CFC)   |
|                              | <b>Lagos</b>          | The Financial Centre for Sustainability Lagos (FC4S Lagos)            |
|                              | <b>Rwanda</b>         | Kigali International Financial Centre (KIFC)                          |
| <b>Americas</b><br>3 centres | <b>Mexico City</b>    | Mexican Council of Sustainable Finance (CMFS)                         |
|                              | <b>Montreal</b>       | Finance Montreal  |
|                              | <b>Rio de Janeiro</b> | Financial Innovation Laboratory                                       |
| <b>Asia</b><br>8 centres     | <b>Astana</b>         | Astana International Financial Centre (AIFC)                          |
|                              | <b>Beijing</b>        | Institute of Finance and Sustainability (IFS)                         |
|                              | <b>Gujarat</b>        | International Financial Services Centres Authority (IFSCA)            |
|                              | <b>Hong Kong</b>      | Hong Kong Green Finance Association (HKGFA)                           |
|                              | <b>Kuala Lumpur</b>   | Capital Markets Malaysia (CMM)  |
|                              | <b>Mongolia</b>       | Mongolian Sustainable Finance Association (MSFA)                      |
|                              | <b>Shenzhen</b>       | Shenzhen Green Finance Committee (SZGFC)                              |
| <b>Europe</b><br>12 centres  | <b>Barcelona</b>      | Barcelona Centre Financer Europeu for Sustainability (BCFE 4S)        |
|                              | <b>Frankfurt</b>      | Green and Sustainable Finance Cluster Germany (GSFC-Germany)          |
|                              | <b>Geneva</b>         | Sustainable Finance Geneva (SFG)                                      |
|                              | <b>Guernsey</b>       | Guernsey Finance  |
|                              | <b>Jersey</b>         | Jersey Finance  |
|                              | <b>Liechtenstein</b>  | Liechtenstein Bankers Association (LBA)                               |
|                              | <b>Lisbon</b>         | Grupo de Reflexão para o Financiamento Sustentável (GRFS)             |
|                              | <b>Luxembourg</b>     | Luxembourg Sustainable Finance Initiative (LSFI)                      |
|                              | <b>Madrid</b>         | The Center for Responsible and Sustainable Finance (Finresp) in Spain |
|                              | <b>Milan</b>          | ESGeneration Italy  |
|                              | <b>Paris</b>          | Finance for Tomorrow  |
|                              | <b>Zurich</b>         | Swiss Sustainable Finance (SSF)                                       |


## 2 Economic Clusters\*



| ECONOMIC CLUSTER                             | FINANCIAL CENTRE                        | FC4S MEMBER   |
|--|---|---|
| <b>Low &amp; Middle Income</b><br>11 centres | <b>Astana</b>                           | Astana International Financial Centre (AIFC)                          |
|  | <b>Casablanca</b>                       | Casablanca Finance City (CFC)   |
|  | <b>Gujarat</b>                          | International Financial Services Centres Authority (IFSCA)            |
|  | <b>Rio de Janeiro</b>                   | Financial Innovation Laboratory                                       |
|  | <b>Lagos</b>                            | The Financial Centre for Sustainability Lagos (FC4S Lagos)            |
|  | <b>Mexico City</b>                      | Mexican Council of Sustainable Finance (CMFS)                         |
|  | <b>Mongolia</b>                         | Mongolian Sustainable Finance Association (MSFA)                      |
|  | <b>Rwanda</b>                           | Kigali International Financial Centre (KIFC)                          |
|  | <b>Beijing</b>                          | Institute of Finance and Sustainability (IFS)                         |
|  | <b>Shenzhen</b>                         | Shenzhen Green Finance Committee (SZGFC)                              |
|  | <b>Kuala Lumpur</b>                     | Capital Markets Malaysia (CMM)  |
| <b>High Income</b><br>15 centres             | <b>Barcelona</b>                        | Barcelona Centre Financer Europeu for Sustainability (BCFE 4S)        |
|  | <b>Madrid</b>                           | The Center for Responsible and Sustainable Finance (Finresp) in Spain |
|  | <b>Guernsey</b>                         | Guernsey Finance  |
|  | <b>Tokyo</b>                            | FinCity.Tokyo   |
|  | <b>Milan</b>                            | ESGeneration Italy  |
|  | <b>Luxembourg</b>                       | Luxembourg Sustainable Finance Initiative (LSFI)                      |
|  | <b>Montreal</b>                         | Finance Montreal  |
|  | <b>Paris</b>                            | Finance for Tomorrow  |
|  | <b>Hong Kong</b>                        | Hong Kong Green Finance Association (HKGFA)                           |
|  | <b>Lisbon</b>                           | Grupo de Reflexão para o Financiamento Sustentável (GRFS)             |
|  | <b>Jersey</b>                           | Jersey Finance  |
|  | <b>Zurich</b>                           | Swiss Sustainable Finance (SSF)                                       |
|  | <b>Geneva</b>                           | Sustainable Finance Geneva (SFG)                                      |
|  | <b>Frankfurt</b>                        | Green and Sustainable Finance Cluster Germany (GSFC-Germany)          |
| <b>Liechtenstein</b>                         | Liechtenstein Bankers Association (LBA) |   |



\*The classification between high-, middle- and low-income economies is determined by the World Bank classification. For more details, see [World Bank Country and Lending Groups](#).



# How to read and Methodology

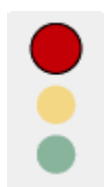
# 01



## How to read

The financial centre's performance on each question is benchmarked to the median of the FC4S Network within the corresponding categories. The median is defined as the value that separates the top half from the bottom half of a data sample.

The following signs are defined to illustrate the position with respect to the median of each sub-pillar:



**Red light**, below the median and capacity for improvement.



**Yellow light**, at the median and capacity for improvement.



**Green light**, above the median.

In Pillar 3, Table 3.1 provides a detailed analysis of the financial center's performance across the various categories within the three financial industries (Banks, Asset Management, and Insurance). The color-coded system adheres to the previously mentioned criteria: **Green** signifies a performance above the FC4S Network median, **Yellow** indicates performance equal to the median, and **Red** denotes performance below the median. The table also contains proposed recommendations for the finance centre to facilitate action and drive progress. These recommendations are applicable when the financial center's score is **at** or **below** the FC4S Network median.

# Sustainable Financial System Alignment Framework

| LEVEL          | TITLE  | DEFINITION – INSTITUTIONAL FOUNDATIONS AND ENABLING ENVIRONMENT ALIGNMENT  | DEFINITION – MARKET INFRASTRUCTURE ALIGNMENT  |
|----------------|--|--|---|
| <b>Level 0</b> | <b>Misalignment</b><br>Sustainable investment is inexistent  | <ul style="list-style-type: none"> <li>• <b>No strategy</b> has been defined</li> <li>• <b>No actions</b> are taken to develop sustainable finance</li> <li>• <b>No policy or regulatory frameworks</b> are available to support sustainable finance</li> </ul>  | <ul style="list-style-type: none"> <li>• The financial system is <b>unable to deliver capital</b> to support low-carbon transition or the achievement of the SDGs</li> <li>• There is <b>no evidence available</b> suggesting that the FC has begun a transition toward a sustainable financial system</li> </ul>   |
| <b>Level 1</b> | <b>Weak signals</b><br>Isolated sustainable investment options are emerging and nurtured by an initiative        | <ul style="list-style-type: none"> <li>• No strategy yet in place, but an <b>initiative exists at FC level</b></li> <li>• <b>Uncoordinated actions</b> emerge from local institutions</li> <li>• Several players and early adopters are <b>advocating for increased policy or regulatory frameworks</b> on sustainable finance</li> </ul>  | <ul style="list-style-type: none"> <li>• <b>Capital is not oriented toward low-carbon transition</b> and the achievement of the SDGs</li> <li>• The financial system provides only <b>scarce/limited sustainable investment options</b>; sustainable finance development remains slow</li> </ul>  |
| <b>Level 2</b> | <b>Awareness</b><br>A leading asset class, cooperation, and policy efforts are all driving growth                | <ul style="list-style-type: none"> <li>• A <b>strategy</b> has been defined <b>at initiative level</b></li> <li>• <b>Cooperation between public and private institutions</b> is getting organised</li> <li>• <b>Policy and regulatory frameworks</b> are being actively developed <b>on specific areas</b></li> </ul>  | <ul style="list-style-type: none"> <li>• A <b>limited amount</b> of capital is oriented toward low-carbon transition and the achievement of the SDGs</li> <li>• <b>Options</b> for sustainable investment available to professional investors <b>are expanding but remain limited in total volume</b></li> <li>• Sustainable products in at least <b>one asset class</b> are <b>scaling up</b></li> </ul>   |
| <b>Level 3</b> | <b>Expansion</b><br>Extended regulatory frameworks and scaled-up products are structuring a favourable ecosystem | <ul style="list-style-type: none"> <li>• A <b>strategy</b> has been defined <b>at FC and/or country level</b></li> <li>• <b>International level cooperation</b> is getting organised</li> <li>• <b>System-level policies</b> and regulatory frameworks are being implemented <b>on key asset classes</b></li> </ul>  | <ul style="list-style-type: none"> <li>• The amount of <b>capital oriented</b> toward low-carbon transition and the achievement of the SDGs is <b>growing fast</b> (at least <b>2 digits year on year growth rate</b> for primary &amp; secondary markets combined)</li> <li>• Options for <b>sustainable investment</b> are available <b>for professional and retail investors</b> on an increasing variety of asset classes</li> <li>• Sustainable <b>products are scaling up</b> in several asset classes</li> </ul> |
| <b>Level 4</b> | <b>Maturity</b><br>The ecosystem is ready to sustain high growth in the sustainable segments                     | <ul style="list-style-type: none"> <li>• <b>Dedicated strategies</b> are defined to overcome identified barriers and/or constraints</li> <li>• <b>Public and private cooperation</b> allows to <b>measure and monitor the development</b> of sustainable finance</li> <li>• Policy and regulatory frameworks are promoting <b>demanding standards and incentivising innovation</b> in sustainable finance</li> </ul> | <ul style="list-style-type: none"> <li>• <b>Capital allocation</b> toward low-carbon transition and the achievement of the SDGs is already <b>significant and still growing</b> strong</li> <li>• <b>Options</b> for sustainable investment <b>increasingly follow demanding standards</b> and are available for professional and retail investors on all asset classes</li> <li>• Sustainable <b>products are scaled up</b> and <b>growing on all asset classes</b></li> </ul>   |
| <b>Level 5</b> | <b>Alignment</b><br>The FC is aligned with the requirements of a sustainable financial system                    | <ul style="list-style-type: none"> <li>• An <b>impact measurement and sustainable finance monitoring infrastructure</b> is <b>operational</b> at FC and/or country level</li> <li>• Strategy, cooperation, policy and regulatory frameworks are periodically revised and updated using this infrastructure</li> </ul>  | <ul style="list-style-type: none"> <li>• The FC and/or country <b>channels more than 2 of its</b> geographical footprint <b>GDP</b> towards low-carbon transition and the achievement of the SDGs</li> <li>• <b>ESG assessment and impact measurement methodologies</b> are <b>converging</b> for mature products; <b>transparency is a key aspect</b> of available products</li> </ul>   |



## Scoring Methodology

The alignment levels for each pillar are determined from the alignment levels for each eligible question.

For the pillar "Institutional foundations" and "Enabling environment", the pillar levels are determined by the average level of each eligible question.

For the pillar "Market infrastructure", the pillar level is determined by the average level of the 5 sections composing it. The level of each section (except for debt markets) is determined by the minimum score obtained for each question, which are cumulative and some of which are blocking to move to a higher level (i.e., each level requires fulfilment of the prerequisites of the previous levels to continue advancing). On the other hand, the debt market category applies the average of the scores for each question.

### Institutional Foundations

5 questions eligible to alignment

Pillar level = average level

|       |                                  |               |
|-------|----------------------------------|---------------|
| 1.2.1 | Supporting Activities            | Level 0 ... 5 |
| 1.2.2 | Action Plan or Strategy          | Level 0 ... 5 |
| 1.3.4 | Stakeholders                     | Level 0 ... 5 |
| 1.5.1 | Low-Carbon Transition (FC Level) | Level 0 ... 5 |
| 1.6.1 | International Connectivity       | Level 0 ... 5 |

### Enabling Environment

5 questions eligible to alignment

Pillar level = average level

|       |   |               |
|-------|---|---------------|
| 2.1   | Financial Policy & Regulatory Environment | Level 0 ... 5 |
| 2.2   | Public Institutional Environment          | Level 0 ... 5 |
| 2.3   | Professional Development & Education      | Level 0 ... 5 |
| 2.4.1 | Carbon Pricing                            | Level 0 ... 5 |
| 2.4.2 | Low-Carbon Transition (Country Level)     | Level 0 ... 5 |

### Market Infrastructure

5 Sections eligible to alignment

Pillar level = average level

|     |                  |               |
|-----|------------------|---------------|
| 3.1 | Debt Markets     | Level 0 ... 5 |
| 3.2 | Capital Markets  | Level 0 ... 5 |
| 3.3 | Banking          | Level 0 ... 5 |
| 3.4 | Asset Management | Level 0 ... 5 |
| 3.5 | Insurance        | Level 0 ... 5 |



# Institutional Foundations

# 02

## Pillar 1 – Institutional Foundations



### General Overview

- In the Institutional Foundations Pillar, the Financial Innovation Laboratory achieved a score of 3.8 placing the Financial Centre (Financial Centre) **below the network median (4.1)**. This result situates the Financial Centre sharing the 7<sup>th</sup> position within the FC4S Network. Notably, the Financial Innovation Laboratory stands above the median in the section relating to *Stakeholders*. Meanwhile, the Financial Centre equals the median in *Activities, Action Plan, Low-Carbon Transition (Financial Centre Level)*. Nevertheless, with a score below the median, the Financial Innovation Laboratory demonstrates potential for enhancement in *International Connectivity*.
- A comparative analysis between the current edition of the AP and the previous one reveals that Financial Innovation Laboratory **has strengthened its institutional foundations**, as its score in 2021 was 3.4. The improvement in its score is mostly attributed to *Activities, Action Plan, Low-Carbon Transition (Financial Centre Level)*, areas in which the Financial Innovation Laboratory remarkably achieved a higher performance. It is important to acknowledge that methodological changes have been implemented between editions. Consequently, any comparisons should be approached with careful consideration to account for these methodological variations.\*
- The Financial Innovation Laboratory performs **below the median of its regional cluster**, achieving a score of 3.8 and securing the 3<sup>rd</sup> position. A comparative analysis with regional peers underscores areas of potential improvement for Financial Centre, particularly in *International Connectivity* where it falls below the median.
- Financial Innovation Laboratory scored **below the economic cluster's median (4.2)**. Currently holding the 5<sup>th</sup> position, the Financial Centre could strengthen its standing within this cluster by enhancing the performance in *International Connectivity*, where it falls below the median.

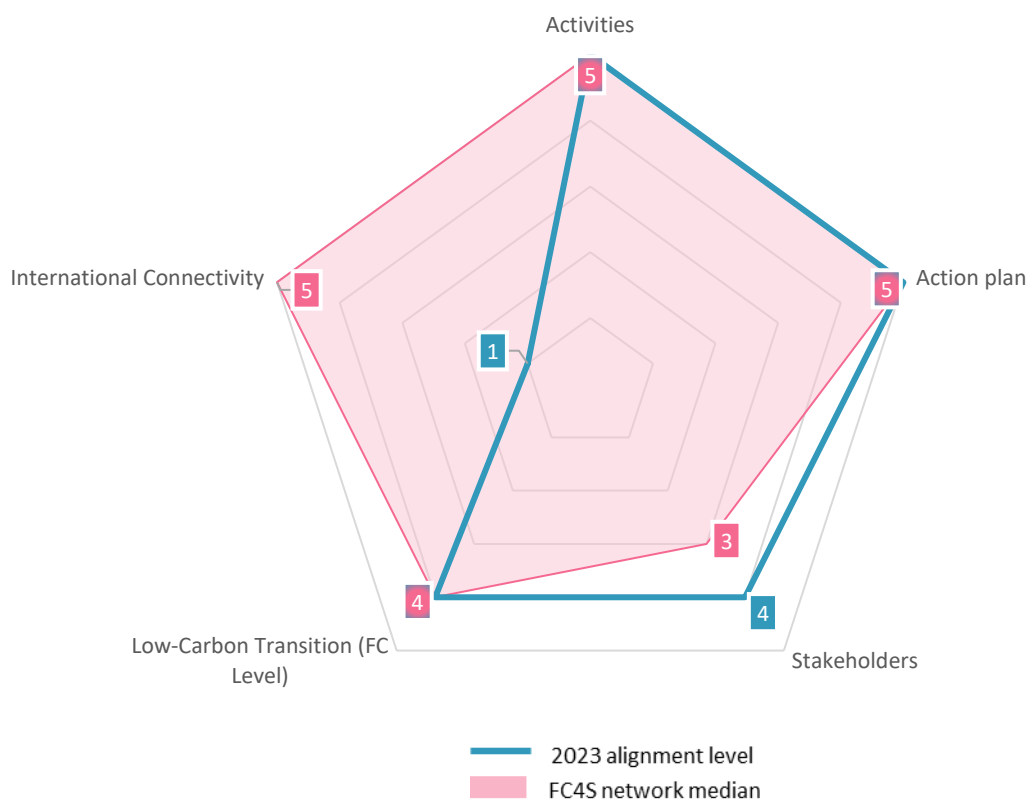
\*The calculation for the 2021 score was redefined by considering only the common variables present in both AP editions. This adjustment was made to align with the changes introduced in the current edition (2023), with the aim of enhancing comparability.

## Pillar 1 – Institutional Foundations

**Table 1:** Pillar 1 Summary.

| Pillar 1<br>Score:<br><b>3.8</b> | Financial Innovation Laboratory                | Score 2023 | Score 2021 | Median FC4S | American Median | Low-middle income Median |
|----------------------------------|--|------------|------------|-------------|-----------------|--------------------------|
|                                  | Activities                                     | 5          | 4          | 5           | 4               | 5                        |
|                                  | Action Plan                                    | 5          | 4          | 5           | 5               | 5                        |
|                                  | Stakeholders                                   | 4          | 4          | 3           | 4               | 4                        |
|                                  | Low-Carbon Transition (Financial Centre Level) | 4          | 1          | 4           | 4               | 4                        |
|                                  | International Connectivity                     | 1          | 4          | 5           | 5               | 5                        |
|                                  |  |            |            |             |                 |                          |

**Figure 1:** FC's score in each assessed category of Pillar 1 compared to the median score of the FC4S Network.



# Pillar 1 – Institutional Foundations

## Areas of Strength

### Activities



- Financial Innovation Laboratory has effectively implemented almost all the range of activities related to sustainable finance surveyed. This substantial portfolio of sustainable finance activities undertaken by the financial center reinforces its pivotal role as a catalyst for addressing the SDGs within the financial sector.

### Action Plan



- Financial Innovation Laboratory's robust strategy encompass a multifaceted approach, including reinforcing regulatory framework, industry guidelines and policies on sustainable financial instruments, increasing cooperation at Financial Centre level (between local market players, public authorities, civil society bodies, etc.), increasing cooperation at international level (with other Financial Centres, countries, global financial institutions, etc.), fostering the development of SDG-related financial products and fostering the development of sustainable financial products.

### Stakeholders

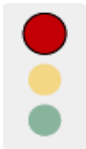


- Financial Innovation Laboratory retains a large diversity of stakeholders within its dedicated initiative, with at least one member or observer in 16 of the 17 proposed categories. Dedicated initiatives serve as a signal of collective dedication in advancing sustainable finance practices by convening diverse types of stakeholders and addressing the challenges they face. The Financial Innovation Laboratory's current adoption of an inclusive multistakeholder approach has the potential to foster strategic relationships, enrich collaborative efforts, facilitate the design of holistic solutions and serve as a basis for implementing comprehensive, multi-sectoral strategies crucial for the effective development of sustainable finance. Furthermore, by reuniting and considering the diverse perspectives, experiences, and challenges of all involved parties, this approach can greatly enrich Financial Centre's work on sustainable finance, further strengthening the quality of its activities.

# Pillar 1 – Institutional Foundations

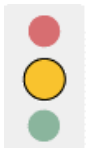
## Areas of Improvements

### International Connectivity




- Similar to the previous edition, the Financial Centre identifies 'international connectivity' as a key area for improvement. The Financial Innovation Laboratory has cooperated internationally on sustainable finance topics through informal practices and bilateral dialogues with other Financial Centres. However, to further strengthening its ecosystem and fostering collaborative, specific recommendations for enhancement include formal cooperation with other Financial Centres regarding sustainable finance issues, such as workshops, conferences, seminars, academic partnerships, or co-organization of educational events. Moreover, active participation in consultations or formal engagements with international organizations on sustainable finance topics, for instance, engaging in discussions regarding IFRS consultations or the utilization of SDG impact standards, remains an area for development.

### Low Carbon Transition (Financial Centre Level)



- Although the Financial Innovation Laboratory performs positively in the low carbon transition, aligning with the FC4S network median (4), the Financial Centre could further strengthen its institutional basis by focusing its efforts on the next level, which would be to incentivize its members to measure and disclose the targets set for the transition to a low-carbon economy. In a context of urgent need for deep, rapid and sustained measures to limit GHG emissions, the financial sector plays a vital role in scaling the investments and bridging the finance gap that challenges the achievement of common climate goals and the whole-of-economy transition. In this regard, the proactive measurement and transparent disclosure of progress towards established objectives serve to monitor both local and global initiatives. This, in turn, enables stakeholders to enhance decision-making, fortify their efforts, bolster actions, and increase the funding required to achieve climate targets. Such an approach not only aligns with the contribution to and achievement of sustainability objectives but also underscores the Financial Centre's dedication to accountability and transparency in its operations, thereby setting a benchmark for others to emulate.

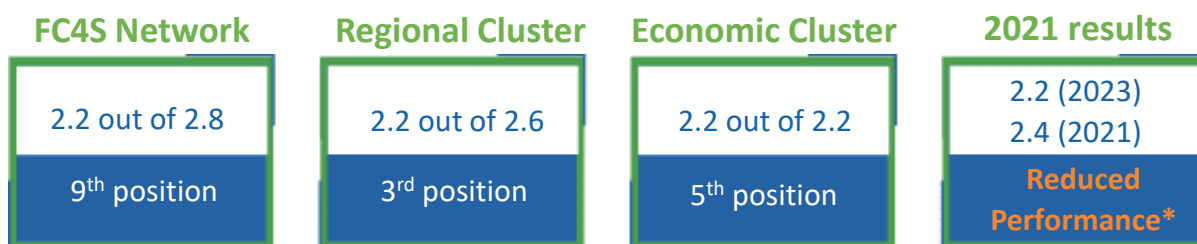




# Enabling Environment

# 03

## Pillar 2 – Enabling Environment



### General Overview

- In the Enabling Environment Pillar, the Financial Innovation Laboratory's overall performance (2.2) **places it below the FC4S Network median (2.8)** and sharing the 9th position within the Network. This underscores areas for improvement, specifically *Financial Policy & Regulatory Environment*, *Professional Development & Education*, *Carbon Pricing* and *Low Carbon Transition (Country Level)*. Noteworthy, the Financial Innovation Laboratory surpasses the FC4S Network median in *Public Institutional Environment*.
- Compared to 2021, the Financial Innovation Laboratory **scored lower in its enabling environment**, as its score in the previous edition was 2.4. This is due to the lower scores in *Financial Policy & Regulatory Environment* and *Public Institutional Environment*. However, it is important to acknowledge that methodological changes have been implemented between editions. Therefore, any comparative analysis should be approached with meticulous consideration to account for these methodological variations.\*
- Compared with its regional cluster, **the Financial Innovation Laboratory is below the cluster's median (2.6)**, holding 3rd position. Strengthening *Professional Development & Education* and *Carbon Pricing*, would lead to an enhancement of its regional standing.
- The Financial Innovation Laboratory **matches the median of its economic cluster (2.2)**, ranking in the 5th position. The Financial Innovation Laboratory surpassed the cluster's median in *Public Institutional Environment*, aligns with it in *Financial Policy & Regulatory Environment*, *Professional Development & Education* and *Carbon Pricing*, and falls short in *Low Carbon Transition (Country Level)*.

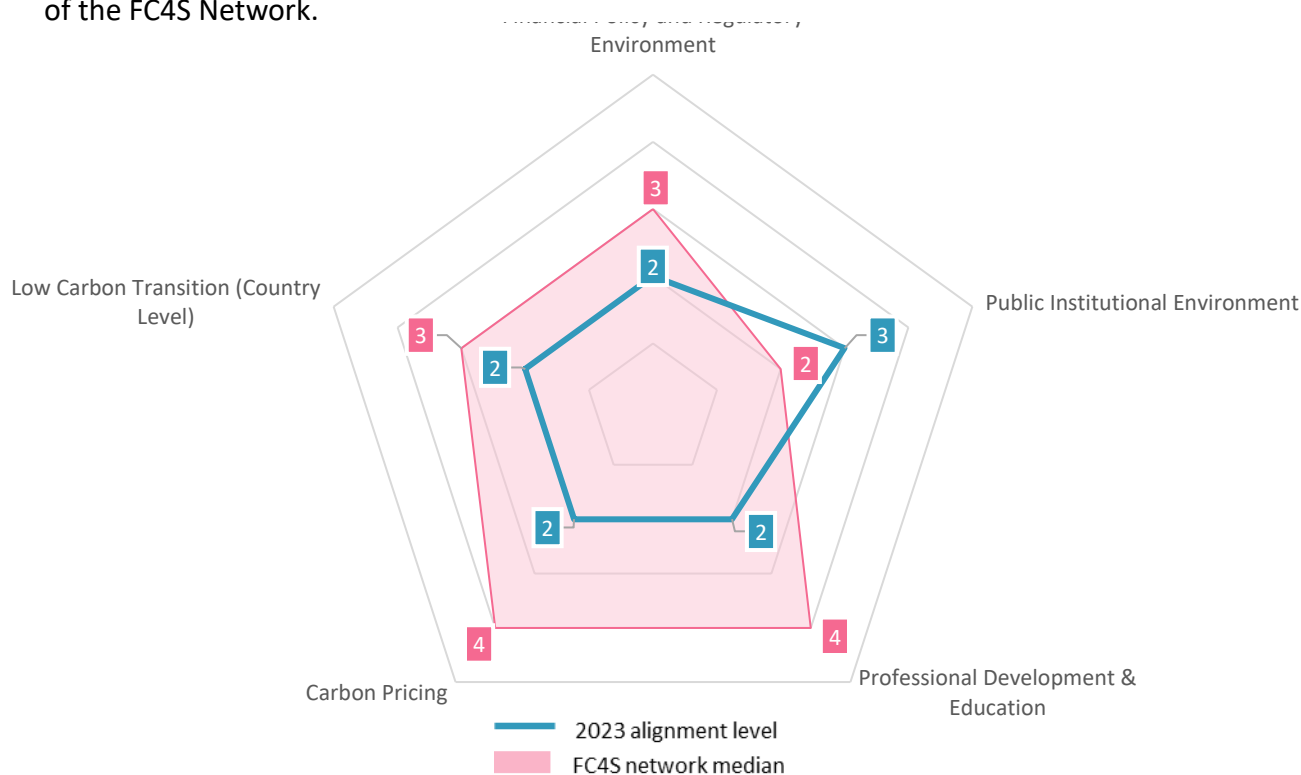
\*The calculation for the 2021 score was redefined by considering only the common variables present in both AP editions. This adjustment was made to align with the changes introduced in the current edition (2023), with the aim of enhancing comparability.

## Pillar 2 – Enabling Environment

**Table 2:** Pillar 2 Summary.

| Pillar 2<br>Score:<br>2.2 | Financial Innovation Laboratory             | Score 2023 | Score 2021 | Median FC4S | American Median | Low-middle income Median |
|---------------------------|---|------------|------------|-------------|-----------------|--------------------------|
|                           | Financial Policy and Regulatory Environment | 2          | 3          | 3           | 1               | 2                        |
|                           | Public Institutional Environment            | 3          | 4          | 2           | 2               | 2                        |
|                           | Professional Development and Education      | 2          | 2          | 4           | 3               | 2                        |
|                           | Carbon Pricing                              | 2          | 2          | 4           | 5               | 2                        |
|                           | Low Carbon Transition (Country Level)       | 2          | 1          | 3           | 2               | 3                        |

**Figure 2:** FC's score in each assessed category of Pillar 2 compared to the median score of the FC4S Network.



## Pillar 2 – Enabling Environment

### Areas of Strength

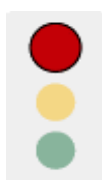
#### Public Institutional Environment



- The Financial Innovation Laboratory demonstrates robust strengths in its Public Institutional Environment, with almost all surveyed fiscal and monetary policy measures being implemented, except for Green Asset Purchase Programme and Green Collateral Frameworks. Furthermore, the awareness of these instruments is rated as medium or high, which may facilitate and incentivize, where feasible, their use by financial institutions and, consequently, the mobilization of private capital for sustainable initiatives and the mitigation of sustainability-related risks.

### Areas of Improvement

#### Financial Policy & Regulatory Environment



- Recognizing that the Financial Centre currently address eleven out of thirteen policies surveyed, the development of specific requirements across several measures and, in addition the development and/or adoption of a taxonomy related to sustainable investments are useful starting points. Establishing a formal regulatory framework with specific requirements is instrumental in providing clarity for market participants and consistency, instilling market confidence and the mobilization of capital, mitigating risks, fostering market development, and ensuring accountability in the realm of sustainable finance. Leveraging its public-private institutional structure and aligning with the Financial Innovation Laboratory's prioritization for the coming years ("Engaging local policymakers and regulators"), the Financial Centre could convene the private sector, and facilitate dialogues with public authorities, including government bodies, central banks, and regulators, in the extension of the formal regulatory framework. Financial Innovation Laboratory is currently on a favourable trajectory, demonstrated by its current collaborative efforts to enhance the regulatory framework—a path it could further consolidate and potentially replicate. Remarkably, Financial Innovation Laboratory has a specific sub-group that actively contributes with the Ministry of Finance to the Brazilian Sustainable Taxonomy included in the Federal Government's Ecological Transformation Plan, with the support of GIZ.

## Pillar 2 – Enabling Environment

### Areas of Improvement

#### Professional Development and Education



- While offering a wide range of educational activities on sustainable finance, Rio de Janeiro's offer focuses predominantly on entry-level education, specifically workshops and conferences. Sustainable finance professional development is key for expanding the field as it ensures a skilled workforce capable of navigating the evolving landscape -including a growing regulatory framework-, integrating sustainable factors into businesses' decision-making governance, strategies and risk management, and meeting the rising demand for sustainable financial products and services. Acknowledging the “Lack of professional capacity and skills on sustainable finance” as one of the challenges in scaling up sustainable finance in its Financial Centre, Rio de Janeiro could upgrade the extracurricular activities to mid-level offerings, such as undergraduate courses and executive courses. The Financial Innovation Laboratory could collaborate with educational institutes or universities capable of providing mid- level education. Together, they could explore the feasibility of integrating sustainable finance modules into mid-level offerings, such as undergraduate and executive courses, thereby upgrading current entry-level offerings. This integration can benefit from the Financial Innovation Laboratory's expertise, nurtured from dialogues and/or cooperation with more advanced Financial Centres that have these academic offerings.

#### Carbon Pricing



- Carbon pricing plays a crucial role in mitigating carbon emissions by translating GHG emissions into a tangible financial cost, therefore creating financial incentives for aligning with climate goals. Beyond reducing emissions, it fosters innovation and investments in low-carbon technologies. Moreover, it generates revenue for governments, contributing to climate action or social initiatives. Acknowledging this, Brazil can strengthen and expand its carbon pricing system by the development of an ETS and the establishment of a national/subnational market for carbon credits. Additionally, the integration of MRV, in place in 19 members' jurisdictions, could be considered as a means to enhance trust in the carbon pricing system by ensuring the accuracy and integrity of data associated with emissions reductions. The Financial Innovation Laboratory could contribute to this undertaking by analysing and raising awareness of the advantages associated with carbon pricing mechanisms and their complementary instruments. Furthermore, the Financial Innovation Laboratory can engage with pertinent public authorities, and local and international stakeholders, to address the expansion of the carbon pricing system and support Brazil's ETS currently under consideration, to scale up efforts towards achieving climate goals.

## Pillar 2 – Enabling Environment

### Areas of Improvement

#### Low-carbon Transition Country Level



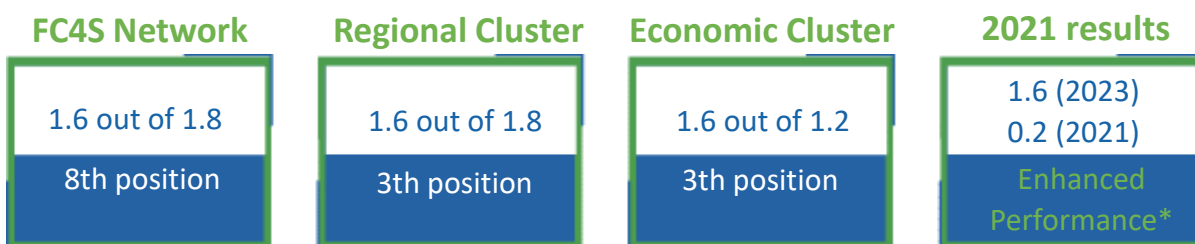
- In terms of Low-Carbon Transition at Country level, Brazil performs under the Network's median (3), scoring 2. Elevating climate ambition is crucial in light of the emissions gap identified by the Intergovernmental Panel on Climate Change (IPCC) between current NDCs and the mitigation pathways essential for limiting global warming to 1.5°C or 2°C, raising concerns about the current trajectory surpassing the global climate targets. To address this challenge and align with common climate objectives, it becomes imperative to scale both mid and long-term climate ambition. As for the former, the development of financial requirements for both mitigation and adaptation is essential. Regarding long term commitments, strengthening Brazil's net-zero policy document with clear delineation of greenhouse gas (GHG) coverage and Governance mechanisms would strengthen credibility and aid effective carbon neutrality strategies. Additionally, submitting a Long-Term Climate Strategy to the UNFCCC would underscore Rio de Janeiro's commitment to a sustainable, low-carbon future, aligning its efforts with global climate objectives. The Financial Innovation Laboratory could play a crucial role by raising awareness and contributing to discussions on the importance of medium term and long-term commitments to achieve local and collective climate targets, with a particular emphasis on how the financial sector can contribute to these endeavors. This could be complemented by a support to national authorities in the submission of a Long-Term Climate Strategy.



# Market Infrastructure

# 04

## Pillar 3 – Market Infrastructure



### General Overview

- In the Market Infrastructure Pillar, the Financial Innovation Laboratory's overall performance (1.6) places it below the FC4S Network median (1.8) and sharing the 8th position within the Network. This highlights areas for improvement, especially *Capital Markets*. Notably, the Financial Innovation Laboratory aligns FC4S Network's median in *Banks, Asset Management, Insurance* and *Debt Markets*.
- Compared to the last edition of the AP, the Financial Innovation Laboratory has notably enhanced its performance in this Pillar, progressing from 0.2 to the current score of 1.6. This was achieved mainly by improvements in *Banks, Asset Management, Insurance* and *Debt Markets*. It is important to acknowledge that methodological changes have been implemented between editions. Consequently, any comparisons should be approached with careful consideration to account for these methodological variations.\*
- When benchmarked against regional peers, Financial Innovation Laboratory ranks 3rd, below the cluster's median (1.8).\*\*
- For its part, in the comparison with its economic peers, the Financial Innovation Laboratory ranks 3rd, positioning above the cluster's median (1.2). This can be attributed to its performance *Bank, Asset Management* and *Debt Market* that equals the economic peers median.
- An analysis of the three financial industries indicates that efforts could be strengthened across the evaluated dimensions. Please refer to *Table 3.1* for proposed recommendations for the Financial Innovation Laboratory to facilitate action and drive progress.

\*The calculation for the 2021 score was redefined by considering only the common variables present in both AP editions. This adjustment was made to align with the changes introduced in the current edition (2023), with the aim of enhancing comparability.

\*\*It is important to clarify that the FC's score in each category is equal to the regional median. However, the FC's overall score in this pillar is different from the cluster's median. This is because two different methods are used. The aggregated method averages the FC's scores in all categories within this pillar, and then compares it to the regional median of all FCs. The disaggregated method compares the FC's score in each category to the regional median of that category.

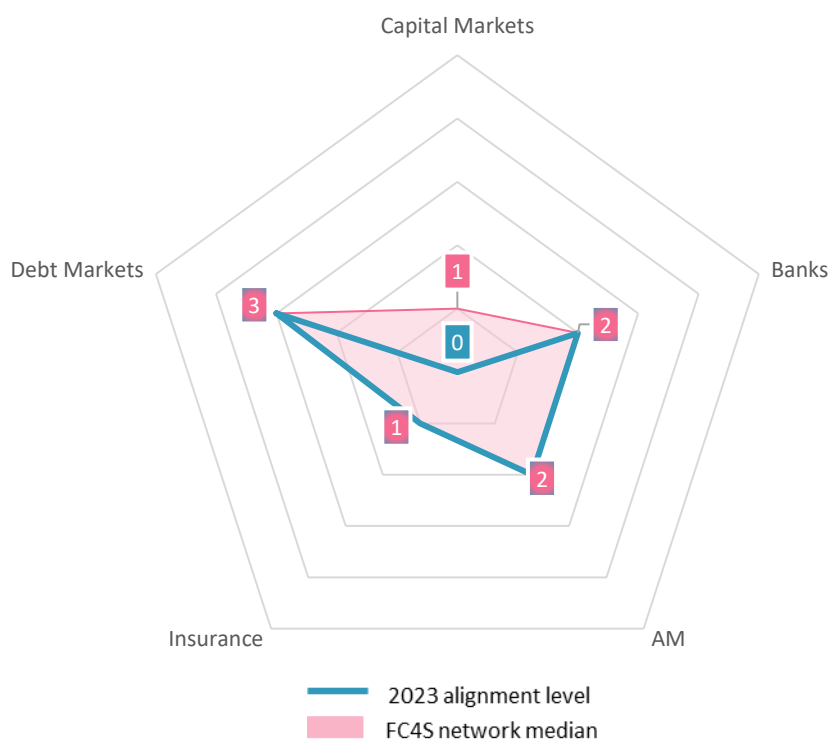


## Pillar 3 – Market Infrastructure

**Table 3:** Pillar 3 Summary.

| Pillar 2<br>Score:<br>1.6 | Financial Innovation Laboratory | Score 2023 | Score 2021 | Median FC4S | American Median | Low-middle income Median |
|---------------------------|---------------------------------|------------|------------|-------------|-----------------|--------------------------|
|                           | Capital Markets                 | 0          | 0          | 1           | 0               | 1                        |
|                           | Banks                           | 2          | 1          | 2           | 2               | 1                        |
|                           | Asset Management                | 2          | 0          | 2           | 2               | 1                        |
|                           | Insurance                       | 1          | 0          | 1           | 1               | 1                        |
|                           | Debt Markets                    | 3          | 0          | 3           | 3               | 2                        |

**Figure 4:** FC's score in each assessed category of Pillar 3 compared to the median score of the FC4S Network.



## Pillar 3 – Market Infrastructure

### Areas of Improvement

#### Capital Markets



- In Capital Markets, the Financial Innovation Laboratory falls below the network's median (1), with a score of 0, indicating there are possible areas for improvement. Passage to level 1 is impeded by the lack of Indices to target Sustainable equity. Nevertheless, sustainability-related labels for investment fund and ESG, sustainability and green-labeled investment funds are available in the jurisdiction. As for the lack of specific indices targeting sustainable equity could be addressed shortly as a quick win, by developing at least one specific index. The Financial Centre could encourage the relevant stock exchange (where applicable) to have the market covered by a sustainability-related index or it could also consider the creation of an independent sustainability-related index in specific/relevant markets for the FC. This will help investors identify companies that are committed to sustainable practices, incentivize sustainable investments, and promote transparency and accountability in the financial sector.

#### Debt Markets

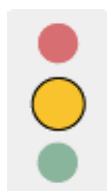


- While in Debt Market the Financial Innovation Laboratory aligns with the Network's median (3), there are areas where enhancements can be made. The Financial Innovation Laboratory has a good performance in the Stock exchange category. B3 (Brasil, Bolsa, Balcão), by being SSE Partner Exchange, annually publishes a comprehensive sustainability report and provides written guidance on ESG reporting. Additionally, B3 offers specialized ESG training and ensures market coverage through sustainability-related indices. B3 further enhances its commitment by featuring a sustainability bond listing segment and a dedicated SME listing platform. Nevertheless, the score is negatively impacted by the percentage of sustainable debt outstanding. The Financial Centre could advance the growth of the sustainable debt market through the advocacy for supportive regulatory frameworks that promote transparency and standardization. Additionally, they can help address supply constraints by collaborating with partners to develop a pipeline of projects, providing technical guidance for issuers, and facilitating investors gatherings.

## Pillar 3 – Market Infrastructure

### Areas of Strength

#### Banks



- the Financial Innovation Laboratory is positioned at the median in all the dimensions considered under Banks: Capital Allocation, Sectorial Exclusion, Best Practices and Climate Alignment.

#### Asset Management



- the Financial Innovation Laboratory outperformed on one the dimension considered under Asset Management: Climate Alignment. The FC is positioned at the median in Best Practices and Capital Allocation, while it performs below it in Sectorial Exclusion.

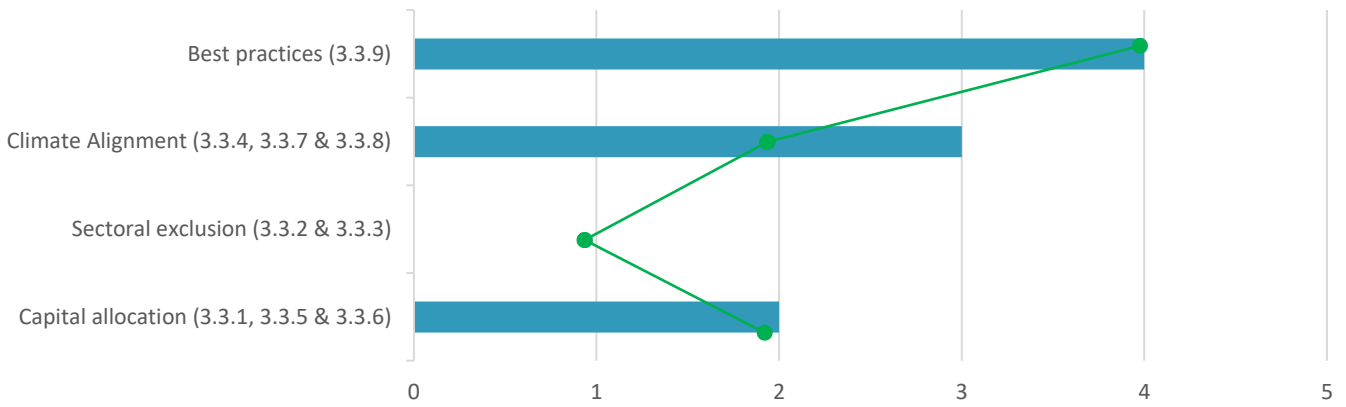
#### Insurance



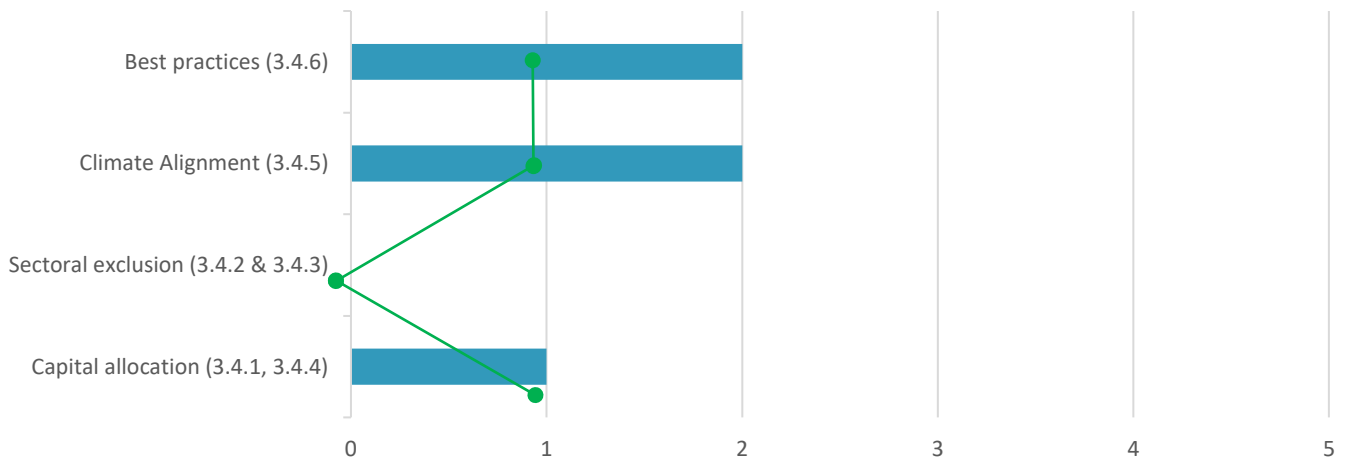
- the Financial Innovation Laboratory outperformed on two the dimension considered under Insurance: Capital Allocation and Sectorial Exclusion. The FC is positioned at the median in Best Practices and Climate Alignment.

## Pillar 3 – Market Infrastructure

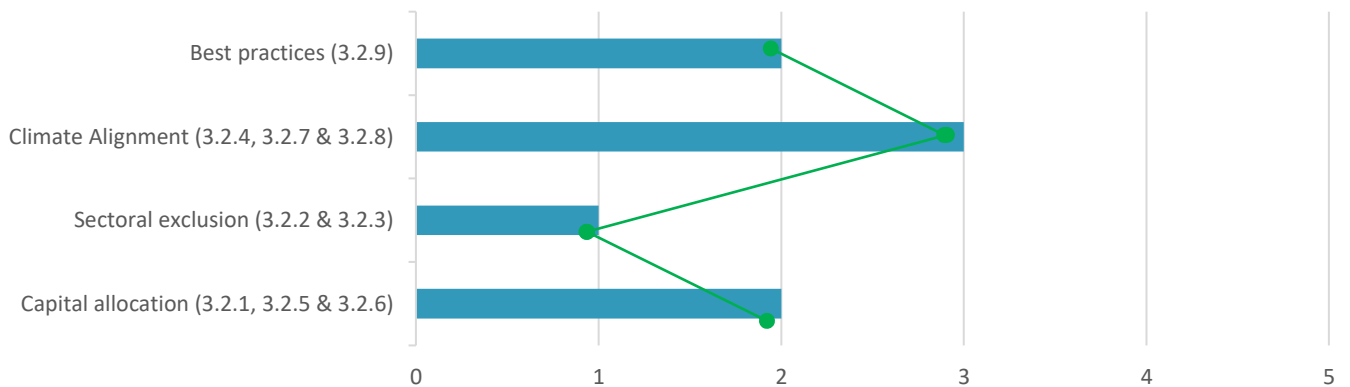
**Figure 3.1: Asset Management**



**Figure 3.2: Insurance**



**Figure 3.3: Banks**



## Pillar 3 – Market Infrastructure

**Table 3.1:** Analysis of the three financial industries and proposed recommendations to facilitate action and drive progress.

| Dimensions         | Sub-dimensions                       | Banks   | AM   | Insurance   | Recommendation  |
|--------------------|--------------------------------------|---|--|---|---|
| Best Practices     | Principles                           | 40% of the top 10 banks signed the Principles for Responsible Banking   | 80% of top 5 AM signed the Principles for Responsible Investment   | 40% of the top 5 insurance companies signed the Principles for Sustainable Insurance  | Financial Innovation Laboratory can encourage banks, asset managers and insurance companies to sign the Principles for Responsible Banking (PRB), Principles for Responsible Investing (PRI), and Principles for Responsible Insurance (PSI), respectively, by providing guidance, resources and facilitating collaborative engagements with current signatories. These frameworks, created by the United Nations in partnership with founding institutions, are designed to embed ESG issues into financial institutions' decision-making, strategies, risk management and across their portfolio of financial activities, bringing purpose, vision, and ambition on the SDGs, the Paris Agreement and sustainable finance to the core of the organization.  |
| Sectoral Exclusion | Firms                                | 40% of the top 10 banks exclude investment in firms engaging in coal extraction/ coal-fired electricity generation and/or other fossil fuel extraction/ development (oil, natural gas)                                | 20% of the top 5 AM exclude investment in firms engaging in coal extraction/ coal-fired electricity generation and/or other fossil fuel extraction/ development (oil, natural gas)                                 | 20% of the top 5 insurance companies ceased underwriting insurance policies to firms engaging in coal extraction/ coal-fired electricity generation and/or other fossil fuel extraction/ development (oil, natural gas)                                 | In the pursuit of aligning financial practices with global climate goals and shaping a resilient and sustainable economic future, it is recommended that Financial Innovation Laboratory proactively encourages its financial institutions to adopt exclusionary policies. By assuming a leadership role in promoting environmentally responsible banking, investing, and insurance practices, Financial Innovation Laboratory can instigate transformative changes in industry norms, catalyzing a collective effort toward sustainable financial practices. This strategic initiative not only underscores a commitment to mitigating climate change risks but also positions the financial centre as a leader in responsible finance, attracting investors and fortifying its global standing as a sustainability-conscious financial hub. This agenda should seamlessly integrate with Financial Innovation Laboratory's assistance to financial institutions in addressing the challenges of transition finance and supporting high-emitting firms in their journey toward lower GHG emissions. The financial centre may consider facilitating collaborative platforms among financial institutions, industry leaders, and environmental experts, with the aim to foster engagement, facilitate knowledge-sharing, and stimulate the development of innovative solutions that actively contribute to sustainable finance during the transition, ultimately promoting a shift away from reliance on fossil fuels. |
|                    | Financial institutions backing firms | 10% of the top 10 banks exclude investment in financial institutions backing firms engaging in coal extraction/ coal-fired electricity generation and/or other fossil fuel extraction/ development (oil, natural gas) | None of the top 5 AM exclude investment of financial institutions backing firms engaging in coal extraction/ coal-fired electricity generation and/or other fossil fuel extraction/ development (oil, natural gas) | None of the top 5 insurance companies ceased underwriting insurance policies to financial institutions backing firms engaging in coal extraction/ coal-fired electricity generation and/or other fossil fuel extraction/ development (oil, natural gas) |   |

## Pillar 3 – Market Infrastructure

**Table 3.1 (continuation):** Analysis of the three financial industries and proposed recommendations to facilitate action and drive progress.

| Dimensions         | Sub-dimensions       | Banks  | AM  | Insurance   | Recommendation  |
|--------------------|----------------------|--|---|---|---|
| Capital Allocation | Formal Commitments   | 70 % of the top 10 banks have formal commitments to increase the volume of sustainable credits and loans. In addition, 40% have set quantitative targets for those commitments   | 40% of the top 5 AM have formal commitments to increase the volume of capital directed towards sustainable and SDG aligned financial products. In addition, 40% have set quantitative targets for those commitments | 20% of top 5 insurance companies have formal commitment to increase the availability of impact insurance policies and targeted green, social and sustainability-linked insurance solutions. However, none of them have set quantitative targets for those commitments | Specific efforts could focus on capacity-building activities aimed at equipping financial actors with knowledge of existing international standards, guidance and recommendations on the formulation of credible and robust commitments, quantitative targets and transition plans. A strategic approach can be adopted, focusing on one financial industry at a time, building on the existing policy and regulatory framework.  |
|                    | Capital Mobilization | <p>22,55% of the total volume of loans and credits provided by the top 10 banks in the last 12 months are categorized as green, social and sustainability-linked</p> <p>16,17% of the total volume of bonds underwritten by the top 10 banks in the last 12 months are categorized as green, social, and sustainability-linked</p> | None of the AuM of the top 5 AM benefit from a negative screening policy  | None of the top 5 insurance companies have marketed targeted sustainable insurance policies   | To bolster both its local and global standing, financial centers possess the capacity to proactively encourage banks, asset managers, and insurance companies to elevate their action to sustainable finance. This can be accomplished through targeted outreach to these entities or pertinent industry associations, cultivating an awareness of their pivotal role in addressing the funding gap for the Paris Agreement and 2030 Agenda goals. Moreover, Financial Innovation Laboratory can play a pivotal role in advocating for regulatory and policy changes that market participants deem beneficial for strengthening their financial activities in alignment with shared objectives. |

## Pillar 3 – Market Infrastructure

**Table 3.1 (continuation):** Analysis of the three financial industries and proposed recommendations to facilitate action and drive progress.

| Dimensions        | Sub-dimensions   | Banks  | AM  | Insurance   | Recommendation  |
|-------------------|--|--|---|---|---|
| Climate Alignment | Climate Scenario Analysis                                  | 60% of the top 10 banks apply climate scenario analysis methodology on the corporate lending portfolio. In addition, 40% apply the methodology on more than 50% of their portfolio | 60% of the top 5 AM apply climate scenario analysis methodology on the AuM. However, none of them apply the methodology on more than 50% of their AuM |   | Climate scenario analysis serves as a valuable tool for banks and asset managers, aiding in the identification and assessment of potential climate-related risks within their portfolios. Through the application of this analysis, financial institutions can effectively mitigate climate-related risks and align their lending and investment activities with the objectives outlined in the Paris Agreement, actively contributing to the transition toward a low-carbon economy. In this regard, Financial Innovation Laboratory can support banks and asset managers in developing and implementing climate scenario analysis methodologies by providing guidance, sharing best practices, and facilitating knowledge exchange. This collaborative approach not only benefits the involved institutions but also contributes to the broader goal of creating a financial system that positively impacts society as a whole.   |
|                   | Carbon Neutrality Targets for 2050                         | None of the top 10 banks align with carbon neutrality targets for 2050 (e.g. applying the PACTA methodology, company/portfolio warming potential below 2°C, etc.)                  | None of the top 5 institutional investors are aligned with carbon neutrality targets for 2050   |   | Financial Innovation Laboratory could encourage the voluntary adoption of climate alignment methodologies by organizing workshops or webinars. These sessions would serve to raise awareness of the whole array of available tools designed to assess the climate alignment of financial portfolios, emphasizing the advantages of employing these methodologies, including improved risk management, regulatory compliance, alignment with stakeholder expectations, enhanced competitiveness, long-term value creation, and contributing to the creation of a more sustainable and resilient financial system. Additionally, Financial Innovation Laboratory could offer technical support and resources to assist financial institutions in building capacity for the effective implementation of these methodologies. Collaboration with financial entities for the initiation of pilot projects is another avenue, allowing for the demonstration of successful cases and the provision of tangible examples.  |
|                   | Task Force on Climate-related Financial Disclosures (TCFD) | 50% of the top 10 banks apply TCFD recommendations   | 60% of the top 5 AM apply TCFD recommendations  | 40% of the top 5 insurance companies apply TCFD recommendations | As key players in the global financial ecosystem, the alignment of financial institutions with reporting standards is crucial to strengthen the stability of the financial system. The IFRS ISSB, drawing on TCFD, has introduced global sustainability reporting standards with the aim of universal adoption, crucial to enhance consistency and comparability of information, support investor decision-making and therefore facilitate the global mobilization of capital towards common sustainable goals. Entities implementing TCFD recommendations are better positioned for ISSB compliance. However, joint efforts will be crucial for global adoption. Financial Innovation Laboratory could play a key role in this endeavor, through capacity building initiatives, convening stakeholders and supporting relevant stakeholders. Consortiums, led by financial centers, could be considered as an approach instrumental for scaling sustainability reporting as they facilitate industry-policymaker collaboration, fostering an enabling environment for the adoption of IFRS sustainability disclosures standards. |



# Stepping Up Further Action

# 05



## Pillar 3 – Market Infrastructure

The Assessment Programme offers FC4S members a baseline of where they stand in terms of sustainability, enabling strategic priority setting. In 2024, the delivery of the Global and Personalised Reports will be complemented with a strong local support to members, aiding their progress in sustainable finance. This will include the implementation of FC4S and wider UNDP Sustainable Finance Hub (SFH) tools and services from a team of sustainable finance experts.



For more information, please visit [FC4S](#) and [SFH](#) web pages.



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# Annex

# 06

## Pillar 1 – Institutional Foundations

**Table 4.1:** FC4S overall ranking.

| General Ranking                 | Rank | Score | 1.2.1 Activities | 1.2.2 Action Plan | 1.3.4 Stakeholders | 1.5.1 Low-Carbon Transition (Financial Centre Level) | 1.6.1 International Connectivity |
|---------------------------------|------|-------|------------------|-------------------|--------------------|--|----------------------------------|
| xxx                             | 1    | 5.0   | 5                | 5                 | 5                  | 5  | 5                                |
| xxx                             | 2    | 4.8   | 5                | 5                 | 4                  | 5  | 5                                |
| xxx                             | 2    | 4.8   | 5                | 5                 | 4                  | 5  | 5                                |
| xxx                             | 3    | 4.6   | 5                | 5                 | 4                  | 4  | 5                                |
| xxx                             | 3    | 4.6   | 5                | 5                 | 4                  | 4  | 5                                |
| xxx                             | 3    | 4.6   | 5                | 5                 | 4                  | 4  | 5                                |
| xxx                             | 4    | 4.4   | 5                | 5                 | 3                  | 4  | 5                                |
| xxx                             | 4    | 4.4   | 5                | 5                 | 3                  | 4  | 5                                |
| xxx                             | 4    | 4.4   | 5                | 5                 | 3                  | 5  | 4                                |
| xxx                             | 4    | 4.4   | 4                | 5                 | 5                  | 3  | 5                                |
| xxx                             | 4    | 4.4   | 5                | 5                 | 2                  | 5  | 5                                |
| xxx                             | 5    | 4.2   | 5                | 5                 | 3                  | 3  | 5                                |
| xxx                             | 5    | 4.2   | 5                | 5                 | 3                  | 3  | 5                                |
| xxx                             | 6    | 4.0   | 4                | 4                 | 5                  | 2  | 5                                |
| xxx                             | 6    | 4.0   | 5                | 5                 | 3                  | 2  | 5                                |
| xxx                             | 6    | 4.0   | 5                | 4                 | 4                  | 2  | 5                                |
| xxx                             | 7    | 3.8   | 5                | 1                 | 4                  | 5  | 4                                |
| Financial Innovation Laboratory | 7    | 3.8   | 5                | 5                 | 4                  | 4  | 1                                |
| xxx                             | 8    | 3.6   | 3                | 4                 | 3                  | 4  | 4                                |
| xxx                             | 8    | 3.6   | 4                | 5                 | 3                  | 1  | 5                                |
| xxx                             | 8    | 3.6   | 4                | 5                 | 1                  | 4  | 4                                |
| xxx                             | 9    | 3.4   | 4                | 5                 | 0                  | 3  | 5                                |
| xxx                             | 9    | 3.4   | 5                | 5                 | 1                  | 2  | 4                                |
| xxx                             | 10   | 3.2   | 4                | 5                 | 0                  | 3  | 4                                |
| xxx                             | 11   | 3.0   | 4                | 3                 | 4                  | 0  | 4                                |
| xxx                             | 12   | 2.4   | 4                | 3                 | 3                  | 1  | 1                                |

## Pillar 1 – Institutional Foundations

**Table 4.2:** Classification by economic group and income level..

| America Ranking                 | Rank | Score | 1.2.1 Activities | 1.2.2 Action Plan | 1.3.4 Stakeholders | 1.5.1 Low-Carbon Transition (Financial Centre Level) | 1.6.1 International Connectivity |
|---------------------------------|------|-------|------------------|-------------------|--------------------|--|----------------------------------|
| xxx                             | 1    | 4.6   | 5                | 5                 | 4                  | 4  | 5                                |
| xxx                             | 2    | 4     | 4                | 4                 | 5                  | 2  | 5                                |
| Financial Innovation Laboratory | 3    | 3.8   | 5                | 5                 | 4                  | 4  | 1                                |
| Middle- and Low-Income Ranking  | Rank | Score | 1.2.1 Activities | 1.2.2 Action Plan | 1.3.4 Stakeholders | 1.5.1 Low-Carbon Transition (Financial Centre Level) | 1.6.1 International Connectivity |
| xxx                             | 1    | 4.8   | 5                | 5                 | 4                  | 5  | 5                                |
| xxx                             | 1    | 4.8   | 5                | 5                 | 4                  | 5  | 5                                |
| xxx                             | 2    | 4.6   | 5                | 5                 | 4                  | 4  | 5                                |
| xxx                             | 3    | 4.4   | 5                | 5                 | 3                  | 4  | 5                                |
| xxx                             | 3    | 4.4   | 4                | 5                 | 5                  | 3  | 5                                |
| xxx                             | 4    | 4.2   | 5                | 5                 | 3                  | 3  | 5                                |
| xxx                             | 5    | 3.8   | 5                | 1                 | 4                  | 5  | 4                                |
| Financial Innovation Laboratory | 5    | 3.8   | 5                | 5                 | 4                  | 4  | 1                                |
| xxx                             | 6    | 3.6   | 4                | 5                 | 1                  | 4  | 4                                |
| xxx                             | 7    | 3.4   | 4                | 5                 | 0                  | 3  | 5                                |
| xxx                             | 8    | 3.2   | 4                | 5                 | 0                  | 3  | 4                                |

## Pillar 2 – Enabling Environment

**Table 5.1:** FC4S overall ranking.

| General Ranking                       | Rank | Score | 2.1<br>Financial Policy<br>and Regulatory<br>Environment | 2.2<br>Public<br>Institutional<br>Environment | 2.3<br>Professional<br>Development<br>and Education | 2.4<br>Carbon<br>Pricing | 2.5<br>Low Carbon<br>Transition<br>(Country<br>Level) |
|---------------------------------------|------|-------|--|---|---|--------------------------|---|
| xxx                                   | 1    | 4.0   | 4  | 3   | 5   | 4                        | 4   |
| xxx                                   | 2    | 3.6   | 4  | 2   | 5   | 3                        | 4   |
| xxx                                   | 3    | 3.4   | 3  | 2   | 4   | 4                        | 4   |
| xxx                                   | 3    | 3.4   | 3  | 2   | 4   | 4                        | 4   |
| xxx                                   | 3    | 3.4   | 4  | 4   | 2   | 4                        | 3   |
| xxx                                   | 4    | 3.2   | 2  | 3   | 4   | 4                        | 3   |
| xxx                                   | 4    | 3.2   | 3  | 3   | 4   | 3                        | 3   |
| xxx                                   | 4    | 3.2   | 3  | 2   | 3   | 4                        | 4   |
| xxx                                   | 4    | 3.2   | 1  | 2   | 3   | 5                        | 5   |
| xxx                                   | 4    | 3.2   | 5  | 0   | 4   | 4                        | 3   |
| xxx                                   | 5    | 3.0   | 1  | 2   | 5   | 4                        | 3   |
| xxx                                   | 5    | 3.0   | 1  | 2   | 5   | 4                        | 3   |
| xxx                                   | 6    | 2.8   | 2  | 2   | 2   | 4                        | 4   |
| xxx                                   | 6    | 2.8   | 3  | 2   | 4   | 1                        | 4   |
| xxx                                   | 6    | 2.8   | 3  | 2   | 2   | 4                        | 3   |
| xxx                                   | 7    | 2.6   | 2  | 2   | 5   | 1                        | 3   |
| xxx                                   | 7    | 2.6   | 0  | 2   | 4   | 5                        | 2   |
| xxx                                   | 8    | 2.4   | 2  | 2   | 2   | 1                        | 5   |
| xxx                                   | 9    | 2.2   | 1  | 3   | 1   | 4                        | 2   |
| xxx                                   | 9    | 2.2   | 1  | 2   | 3   | 2                        | 3   |
| Financial<br>Innovation<br>Laboratory | 9    | 2.2   | 2  | 3   | 2   | 2                        | 2   |
| xxx                                   | 9    | 2.2   | 3  | 2   | 2   | 1                        | 3   |
| xxx                                   | 9    | 2.2   | 3  | 3   | 2   | 1                        | 2   |
| xxx                                   | 9    | 2.2   | 3  | 2   | 2   | 1                        | 3   |
| xxx                                   | 10   | 1.6   | 1  | 0   | 4   | 1                        | 2   |
| xxx                                   | 11   | 1.0   | 0  | 1   | 0   | 1                        | 3   |

## Pillar 2 – Enabling Environment

**Table 5.2:** Classification by economic group and income level.

| America Ranking                 | Rank | Score | 2.1 Financial Policy and Regulatory Environment | 2.2 Public Institutional Environment | 2.3 Professional Development and Education | 2.4.2 Carbon Pricing | 2.4.3 Low Carbon Transition (Country Level) |
|---------------------------------|------|-------|---|--------------------------------------|--|----------------------|---|
| xxx                             | 1    | 3.2   | 1   | 2                                    | 3  | 5                    | 5   |
| xxx                             | 2    | 2.6   | 0   | 2                                    | 4  | 5                    | 2   |
| Financial Innovation Laboratory | 3    | 2.2   | 2   | 3                                    | 2  | 2                    | 2   |
| Middle- and Low-Income Ranking  | Rank | Score | 2.1 Financial Policy and Regulatory Environment | 2.2 Public Institutional Environment | 2.3 Professional Development and Education | 2.4.2 Carbon Pricing | 2.4.3 Low Carbon Transition (Country Level) |
| xxx                             | 1    | 3.4   | 4   | 4                                    | 2  | 4                    | 3   |
| xxx                             | 2    | 2.8   | 3   | 2                                    | 2  | 4                    | 3   |
| xxx                             | 3    | 2.6   | 0   | 2                                    | 4  | 5                    | 2   |
| xxx                             | 4    | 2.4   | 2   | 2                                    | 2  | 1                    | 5   |
| xxx                             | 5    | 2.2   | 3   | 2                                    | 2  | 1                    | 3   |
| Financial Innovation Laboratory | 5    | 2.2   | 2   | 3                                    | 2  | 2                    | 2   |
| xxx                             | 5    | 2.2   | 3   | 3                                    | 2  | 1                    | 2   |
| xxx                             | 5    | 2.2   | 3   | 2                                    | 2  | 1                    | 3   |
| xxx                             | 5    | 2.2   | 1   | 2                                    | 3  | 2                    | 3   |
| xxx                             | 5    | 2.2   | 1   | 3                                    | 1  | 4                    | 2   |
| xxx                             | 6    | 1     | 0   | 1                                    | 0  | 1                    | 3   |



## Pillar 3 – Market Infrastructure

**Table 6.1:** FC4S overall ranking.

| General Ranking                 | Rank | Score | 3.1 Capital Markets | 3.2 Banks | 3.3 Asset Management | 3.4 Insurance | 3.5 Debt Markets |
|---------------------------------|------|-------|---------------------|-----------|----------------------|---------------|------------------|
| xxx                             | 1    | 3.4   | 4                   | 2         | 3                    | 4             | 4                |
| xxx                             | 2    | 3.2   | 4                   | 2         | 3                    | 3             | 4                |
| xxx                             | 2    | 3.2   | 4                   | 2         | 3                    | 3             | 4                |
| xxx                             | 3    | 3     | 1                   | 3         | 4                    | 4             | 3                |
| xxx                             | 4    | 2.6   | 1                   | 3         | 3                    | 3             | 3                |
| xxx                             | 5    | 2.2   | 0                   | 2         | 3                    | 3             | 3                |
| xxx                             | 5    | 2.2   | 1                   | 2         | 3                    | 1             | 4                |
| xxx                             | 5    | 2.2   | 1                   | 2         | 3                    | 1             | 4                |
| xxx                             | 6    | 2     | 1                   | 2         | 2                    | 1             | 4                |
| xxx                             | 6    | 2     | 1                   | 2         | 1                    | 3             | 3                |
| xxx                             | 7    | 1.8   | 1                   | 2         | 2                    | 1             | 3                |
| xxx                             | 7    | 1.8   | 1                   | 2         | 2                    | 2             | 2                |
| xxx                             | 7    | 1.8   | 3                   | 1         | 2                    | 0             | 3                |
| xxx                             | 7    | 1.8   | 1                   | 3         | 2                    | 0             | 3                |
| xxx                             | 8    | 1.6   | 0                   | 0         | 3                    | 2             | 3                |
| Financial Innovation Laboratory | 8    | 1.6   | 0                   | 2         | 2                    | 1             | 3                |
| xxx                             | 8    | 1.6   | 1                   | 3         | 0                    | 0             | 4                |
| xxx                             | 9    | 1.2   | 1                   | 1         | 1                    | 1             | 2                |
| xxx                             | 9    | 1.2   | 0                   | 2         | 1                    | 0             | 3                |
| xxx                             | 9    | 1.2   | 1                   | 1         | 1                    | 1             | 2                |
| xxx                             | 9    | 1.2   | 0                   | 2         | 2                    | 0             | 2                |
| xxx                             | 9    | 1.2   | 0                   | 2         | 3                    | 1             | 0                |
| xxx                             | 10   | 1     | 0                   | 1         | 2                    | 1             | 1                |
| xxx                             | 11   | 0.8   | 0                   | 1         | 1                    | 0             | 2                |
| xxx                             | 12   | 0.6   | 0                   | 1         | 0                    | 1             | 1                |
| xxx                             | 12   | 0.6   | 1                   | 0         | 0                    | 0             | 2                |

## Pillar 3 – Market Infrastructure

**Table 6.2:** Classification by economic group and income level.

| America Ranking                 | Rank | Score | 3.1 Capital Markets | 3.2 Banks | 3.3 Asset Management | 3.4 Insurance | 3.5 Debt Markets |
|---------------------------------|------|-------|---------------------|-----------|----------------------|---------------|------------------|
| xxx                             | 1    | 2.2   | 0                   | 2         | 3                    | 3             | 3                |
| xxx                             | 2    | 1.8   | 1                   | 2         | 2                    | 1             | 3                |
| Financial Innovation Laboratory | 3    | 1.6   | 0                   | 2         | 2                    | 1             | 3                |
| Middle- and Low-Income Ranking  | Rank | Score | 3.1 Capital Markets | 3.2 Banks | 3.3 Asset Management | 3.4 Insurance | 3.5 Debt Markets |
| xxx                             | 1    | 2     | 1                   | 2         | 1                    | 3             | 3                |
| xxx                             | 2    | 1.8   | 1                   | 2         | 2                    | 2             | 2                |
| xxx                             | 2    | 1.8   | 1                   | 2         | 2                    | 1             | 3                |
| Financial Innovation Laboratory | 3    | 1.6   | 0                   | 2         | 2                    | 1             | 3                |
| xxx                             | 4    | 1.2   | 1                   | 1         | 1                    | 1             | 2                |
| xxx                             | 4    | 1.2   | 1                   | 1         | 1                    | 1             | 2                |
| xxx                             | 4    | 1.2   | 0                   | 2         | 1                    | 0             | 3                |
| xxx                             | 5    | 1     | 0                   | 1         | 2                    | 1             | 1                |
| xxx                             | 6    | 0.8   | 0                   | 1         | 1                    | 0             | 2                |
| xxx                             | 7    | 0.6   | 1                   | 0         | 0                    | 0             | 2                |
| xxx                             | 7    | 0.6   | 0                   | 1         | 0                    | 1             | 1                |

## FC4S Internal Data Collection

In an ongoing commitment to refine the survey methodology, certain modifications have been introduced to the questionnaire to bolster the overall robustness of the data collected. By enhancing the precision and reliability of responses, these adaptations contribute to the overall validity and effectiveness of the survey instrument, laying the groundwork for a more insightful analysis of the collected data. This section provides a clear overview of the specific changes made and the reasons behind them, setting the stage for a more insightful analysis of the gathered data.

### Pillar 2

#### Low-carbon Transition Country Level

The Low-Carbon Transition at Country Level question has undergone a significant revision from the previous edition due to disparities revealed in the 2021 data. This prompted the need for a more refined inquiry, focusing on specific and quantifiable dimensions to reduce arbitrariness in responses. To achieve this, we utilized reputable public databases.

The AP 2023 question now functions as a metric for evaluating each country's commitments over the medium and long term toward achieving the goals of the Paris Agreement. Unlike measuring progress, this question assesses the robustness of targets, providing a baseline for initiatives and actions promoting sustainable finance at both national and financial levels. While crucial, it's important to note that this question does not evaluate performance in terms of proximity to the 1.5-degree alignment.



The question is framed around two timelines: medium-term commitments (by 2030) and long-term commitments (by mid-century).

- **Medium-term commitments:** Two sub-dimensions are measured from the NDCs: the target ambition and the identification of a climate finance requirements within NDC. On the one hand, the target ambition covers whether the country has updated or submitted a second NDC. The Paris Agreement requires that countries update their NDCs every five years and develop more ambitious objectives through steeper emissions cuts and more expansive adaptation measures. If the country has updated its NDC, in the second place six further questions are covered: if the country has, first, strengthened mitigation (reduced total GHG emissions in 2030); second, strengthened or added GHG target; third, strengthened or added sectoral target; fourth, strengthened or added policies and actions; fifth, strengthened adaptation; lastly, provided additional information for clarity, transparency and understanding. On the other hand, the dimension measures whether the country has identified, within any of the documents related to the Paris Agreement/NDC, financial needs for mitigation and/or adaptation. The second dimension of this AP question, the long-term commitments, assesses whether the country has submitted a Long-Term Climate Strategy to the UNFCCC and the characteristics of the net-zero target, should one be in place. (continue on the next page)

## FC4S Internal Data Collection

- **Long-term commitments:** Regarding the net-zero targets, four dimensions are covered: target ambition, legislative framework and accountability, sectoral and GHG coverage and governance mechanisms. The target ambition only considers if the country has set a net-zero target. The second-dimension captures, in order of institutional robustness and therefore score, whether the net zero target is enshrined in a law, stated in a document or announced in a political pledge. The third dimension assesses both coverage of the domestic sectors and of GHG emissions. Lastly, the fourth dimension measures the existence of governance mechanisms, more in particular, the translation of the net-zero targets in a detailed plan, with formal accountability and annual reporting mechanisms.

### Low-carbon Transition Country Level - 2023 Question details

| 2021 Question and Sources  | 2023 Question and Sources   |
|--|---|
| <p>At which level is the financial centre currently considering the low carbon transition?</p> <ul style="list-style-type: none"> <li>a) Vision and Goals</li> <li>b) Commitments with objectives and targets</li> <li>c) Strategy</li> <li>d) Action Plan</li> <li>e) Measurement and Disclosure</li> </ul> | <p>Medium term commitments:</p> <ol style="list-style-type: none"> <li>1. Has the country submitted a second NDC / updated NDC? Yes/No. If yes,               <ol style="list-style-type: none"> <li>1. Strengthened mitigation (reduced total GHG emissions in 2030)? Yes/No</li> <li>2. Strengthened or added GHG target? Yes/No</li> <li>3. Strengthened or added sectoral target? Yes/No</li> <li>4. Strengthened or added policies and actions? Yes/No</li> <li>5. Strengthened adaptation? Yes/No</li> <li>6. Provided additional information for clarity, transparency and understanding? Yes/No</li> </ol> </li> <li>2. Financial Requirements Identified:               <ol style="list-style-type: none"> <li>1. Mitigation: Yes/No</li> <li>2. Adaptation: Yes/No</li> </ol> </li> </ol> <p>Long-term commitments:</p> <ol style="list-style-type: none"> <li>1. Has the country set a net zero target? Yes/No. If yes:               <ol style="list-style-type: none"> <li>1. Is the net zero target enshrined in a national framework climate law? Law / Policy Document / Political Pledge.</li> <li>2. Coverage of all domestic sectors: Yes/No</li> <li>3. Coverage of all GHG: Yes/No</li> <li>4. Detailed Plan: Yes/No</li> <li>5. Formal accountability: Yes/No</li> <li>6. Reporting mechanism: Yes/No</li> </ol> </li> <li>2. Has the country submitted a Long-Term Climate Strategy to the UNFCCC? Yes/No</li> </ol> |
| <p>Self-reported data</p>  | <div style="display: flex; justify-content: space-around; align-items: center;">   </div>  |

# FC4S Internal Data Collection

## Pillar 2

### Carbon Pricing

To ensure a more comprehensive and robust view of carbon markets and carbon pricing instruments, two changes have been modified from the previous edition:

- Carbon crediting mechanisms: two dimensions have changed between editions. Firstly, the question "Is there a carbon crediting mechanism in the jurisdiction of your financial centre?" has been broken down into the three crediting sections: compliance market - international and national/subnational markets- and voluntary market. Secondly, the question "Are there voluntary offsetting service providers based in your financial centre?" has been removed. These changes ensure a holistic view of carbon markets as the question not only encompasses national or sub-national compliance markets but also considers all types of available credits, including credits issued within the Paris Agreement framework as well as those issued in voluntary markets. The latter, which has emerged as one of the most mature and rapidly expanding markets in recent years, enables a more comprehensive evaluation as it assesses private sector engagement, extending beyond government actions and decisions. Furthermore, focusing on the existence and financing of projects, rather than on service providers, offers a significantly more nuanced and insightful perspective of voluntary markets, including the insights into credit growth within the real economy.
- The type of instrument that discourages low-carbon investments, from shadow price to carbon taxes. One of the most effective mechanisms to guarantee a price that integrates the costs of greenhouse gas (GHG) emissions, particularly carbon dioxide (CO<sub>2</sub>), is the implementation of carbon taxes. This instrument ensures a generalised and mandatory price, thereby serving as a disincentive for emission-intensive industries. Furthermore, it facilitates enhanced comparability across financial centres in terms of coverage and the sectors subject to regulation.

# FC4S Internal Data Collection

## Carbon Pricing - 2023 Question details

| 2021 Question and Sources  | 2023 Question and Sources   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Is there an Emissions Trading System (ETS) in place in the jurisdiction of your financial centre?</li> <li>2. Is there a carbon crediting mechanism in the jurisdiction of your financial centre?</li> <li>3. Is there a Measurement, Reporting, and Verification (MRV) system in place to assess carbon emission reductions?</li> <li>4. Are there voluntary offsetting service providers based in your financial centre?</li> <li>5. Is carbon pricing voluntarily reflected within financial practice (e.g. application of 'shadow' carbon price) by financial institutions?</li> </ol> | <ol style="list-style-type: none"> <li>1. Is there an Emissions Trading System (ETS) in place in the jurisdiction of your financial centre? Yes/No.</li> <li>2. If there is an ETS in place, what is its coverage percentage?</li> <li>3. Carbon Crediting Mechanisms               <ul style="list-style-type: none"> <li>o International Market: Has the financial centre's national jurisdiction been host party or developer of CERs' issuances (based on CDM)? Yes/No</li> <li>o Voluntary Market : Are there carbon offset projects from the financial centre's national jurisdiction listed globally by four major voluntary offset project registries: Carbon Registry (ACR), Climate Action Reserve (CAR), Gold Standard, and Verra (VCS)? Yes/Under Validation/No</li> <li>o National &amp; Subnational Market: Are there national and/or subnational mechanisms that have issued carbon credits that can be used under mandatory carbon pricing initiatives? Yes (Crediting mechanisms have issued credits -or have frameworks in place to allow credits to be used domestically-) / Under Development (Crediting mechanisms' framework is in place but the carbon credit system is not yet operational) / No.</li> </ul> </li> <li>4. Is there a Measurement, Reporting, and Verification (MRV) system in place to assess carbon emission reductions? Yes/No</li> <li>5. Is there a Carbon Tax in place in the jurisdiction of your financial centre? Yes/No</li> </ol> |
| <p>Self-reported data</p>  | <div style="text-align: center;">     </div>  |


# FC4S Internal Data Collection

## Pillar 3

### Debt Market - Sustainable Debt Instruments

This edition distinguishes itself from its predecessor in a singular aspect: the data collection process was collaboratively conducted by FC4S and the Climate Bonds Initiative (CBI). This collaborative effort to acquire information pertaining to sustainable bonds serves to standardize the database, thereby facilitating more robust analysis and comparisons across various dimensions and financial centres.

#### Sustainable Debt Instruments- 2023 Question details

| 2021 Question and Source  | 2023 Question and Source  |
|---|---|
| <p>Sustainable listed debt instruments market size: total volume of green, social, sustainability-linked and sustainability debt instruments listed in the FC – market size (USD).</p> <p>Sustainable debt issuance market dynamism: total volume of green, social, sustainability-linked and sustainability debt instruments (bonds) issued in the last 12 months in the FC – market size (USD).</p> | <p>Sustainable listed debt instruments market size: total volume of green, social, sustainability-linked, sustainability and transition debt instruments listed in the FC – market size (USD) as of June 2023.</p> <p>Sustainable debt issuance market dynamism: total volume of green, social, sustainability-linked, sustainability and transition debt instruments (bonds) issued in the last 12 months in the FC – market size (USD). (June 2022-June 2023)</p> |
| <p>Self-reported data</p>   |   |


# FC4S Internal Data Collection

## Pillar 3

### Debt Market - Sustainable Stock Exchanges

The Sustainable Stock Exchanges (SSE) initiative provides a global platform for exploring how exchanges, in collaboration with investors, companies, regulators, policymakers and relevant international organizations, can enhance performance on ESG issues and encourage sustainable investment, including the financing of the UN Sustainable Development Goals. The utilization of their database was instrumental in acquiring a comprehensive and accurate comprehension of the contributions made by stock exchanges to sustainable development. This extends beyond the scope of the 2021 edition's evaluation, which concentrated solely on the existence of a dedicated exchange segment for sustainable debt instruments. The more extensive assessment of how stock exchanges are performing in evaluated areas facilitates the identification of specific dimensions necessitating improvement, serving as a valuable resource for stakeholders in the formulation of informed decisions to promote sustainable development

### Sustainable Stock Exchanges - 2023 Question details

| 2021 Question and Source  | 2023 Question and Source   |
|---|--|
| <p>Is there a dedicated exchange segment for sustainable debt instruments? Yes/No</p> | <ol style="list-style-type: none"> <li>1. Signature of SSE Commitment Letter to be considered an SSE Partner Exchange (Yes/No)</li> <li>2. Annual sustainability report (Yes/No)</li> <li>3. ESG reporting required as a listing rule for some or all listed companies (Yes/No)</li> <li>4. Offers written guidance on ESG reporting (Yes/No)</li> <li>5. Offers ESG related training (Yes/No)</li> <li>6. Exchange's specific market covered by sustainability-related index (Yes/No)</li> <li>7. Has an SME listing platform (Yes/No)</li> <li>8. Women on boards mandatory minimum rule (Yes/No)</li> </ol> |
| <p>Self-reported data</p>   |    |



# FC4S Internal Data Collection

## Sustainable Stock Exchanges - 2023 Question details (continuation)

### Details of the indicator

- **SSE Commitment Letter:** To be considered an SSE Partner Exchange, the CEO or Chairperson of the exchange must sign an SSE commitment letter. Contact the SSE for more information if your exchange would like to join.
- **Annual sustainability report:** For a yes, stock exchanges must report, either in a standalone report or integrated into their financial report, on their environmental and social impact and corporate governance.
- **ESG reporting required as a listing rule:** For a yes, all three factors have been considered (environmental, social and governance) within the listing rules for some or all listed companies. This requirement may come from the regulatory authority or the exchange, depending on the market.
- **Offers written guidance on ESG reporting:** For a yes, all three factors have been considered (environmental, social and governance) and offered.
- **Offers ESG related training:** For a yes, training must have taken place in the previous 12 months, and must be interactive. The topic of the training must be on some area of sustainability.
- **Market covered by sustainability-related index:** Sustainability-related indices may include environmental or social indices, or ESG indices. This could include specific themes, such as low carbon indices, or general sustainability indices. The index must be specific to the market the exchange operates in (a region or world index is not included).
- **Has sustainability bond listing segment:** For a yes, the exchange has developed the rules and regulations allowing for sustainability bonds to be listed, and provides a separate segment for listing making the bonds easy to find and identify.
- **Has an SME listing platform:** For yes, the exchange offers a listing platform specifically for Small-and-Medium sized enterprises.
- **Women on boards mandatory minimum rule:** From yes, the exchange has a mandatory minimum rule for the percentage of women on their boards.