COVID, climate change, and finance: Lessons from the Global Innovation Lab for Climate Finance

Ben Broché, Manager
Leigh Madeira, Manager
We are analysts and advisors with deep expertise in policy and finance.

We help governments, businesses, and financial institutions drive economic growth while addressing climate change.

We are unique in our focus on finance, our ability to get the right people to the table, and our analytical rigor.
1. The need for sustainable investment
2. Introduction to The Lab
3. COVID and climate change
4. Successes and impact
5. The Lab in 2020
6. Q&A
The Need for Sustainable Investment
Sustainable investment is critical to tackle the key global challenges of the 21st century, especially post-COVID

Climate Change
Meeting the Paris Agreement goals and ramping up ambition in emissions reductions

Sustainable Development
Meeting the Sustainable Development Goals

1. No poverty
2. Zero hunger
3. Good health and well-being
4. Quality education
5. Gender equality
6. Clean water and sanitation
7. Affordable and clean energy
8. Decent work and economic growth
9. Industry, innovation and infrastructure
10. Reduced inequalities
11. Sustainable cities and communities
12. Responsible consumption and production
13. Climate action
14. Life below water
15. Life on land
16. Peace, justice and strong institutions
17. Partnerships for the goals
$579 billion annually flowed towards climate change mitigation and adaptation in 2017 and 2018.

No single cohesive estimate of investment required for mitigation and adaptation in a 1.5°C scenario - it is in the trillions of dollars.

The IPCC estimates that a $1.6-3.8 trillion annual investment in energy systems alone is required to keep warming within a 1.5°C scenario.
Sustainable investment, particularly in developing countries, faces many barriers

Barriers to investment as identified by submissions to the Lab:

- High risk: 28%
- Non-financial barriers: 25%
- Inadequate access to capital: 40%
- High up-front costs: 3%
- Insufficient returns: 3%
Defining Sustainable Investment & Blended Finance

**Sustainable Investment**

**What:** Investment that produces returns that are attractive to commercial investors, while leading to clear and additional climate mitigation and/or adaptation as well as social benefits.

**Why:** Building a resilient, secure, prosperous, and equitable global future requires investment that mainstreams climate and social factors as paramount considerations.

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**Blended Finance**

**What:** Blended finance is the use of public/philanthropic funds, especially “concessional capital” to mobilize multiples of additional private capital investments.

**Why:** Blended finance utilizes limited public funding to help mainstream and mobilize private investment in high-impact sectors, scaling impact more sustainably than public finance alone.
The Lab
The Lab identifies, develops, and launches innovative finance instruments that can drive billions in private investment to action on climate change and sustainable development.

- **41** instruments launched
- **60+** public and private Lab Member institutions
- **300+** supporting experts, nearly half from developing regions
The Lab brings together over 60 institutions to address the sustainable investment gap
The Lab’s three ingredients to success

Public-Private Collaboration
Strengthened partnership between the public and private sectors builds capacity and knowledge to identify and deploy effective climate finance solutions.

Innovation & Transformative Solutions
Innovative, actionable, catalytic, and financially sustainable solutions reduce risks and barriers to investment in sustainable development.

Mobilizing Finance
Catalytic finance from Lab Members and the broader network enables piloting and implementation of transformative solutions.
The Lab process has five steps

1. **Call for Ideas**
The Lab publicizes an open call for innovative sustainable investment solutions.

2. **Selection**
Lab Members select the most promising ideas to take forward in each annual cycle.

3. **Development**
Selected ideas benefit from 7 months of analysis, stress-testing, and guidance from experts and investors.

4. **Endorsement & Launch**
Lab Members vote to endorse and launch the ideas for piloting.

5. **Implementation**
The ideas move into action and fundraising to launch pilots, with continued support from the Lab network.
COVID and Climate Change
Key linkages between COVID & climate change

Climate change and pandemics share several linkages including:

- Importance of early intervention and cooperation across borders
- Global crisis with significant physical & economic impacts
- Deforestation / factory farming contribute to climate / pandemics\(^1\)
- Climate change is impacting infectious disease spread\(^2\)
- Pollution contributes to infection and death rate from COVID-19\(^3\)

Sources:
2. [https://www.who.int/globalchange/publications/climatechangechap6.pdf](https://www.who.int/globalchange/publications/climatechangechap6.pdf)
Early impacts of COVID on climate change

Lockdowns causing major drop in CO2 emissions\(^1\) ...

...but may shift focus away from climate\(^2\)

Sources:
1. Sentinel-5P satellite data processed by Descartes Labs, courtesy of Financial Times
2. https://www.ft.com/content/052923d2-78c2-11ea-af44-da33de9a0e03
COVID-related priorities for climate finance

1. Climate friendly stimulus plans

2. Economic diversification¹

Sources:
COVID-related priorities for climate finance, cont’d

3 Realignment of incentives

4 Embracing the public sector as a leader

5 Investing in the health, poverty, and climate nexus
The Breathe Better Bond Initiative

2019 Lab Instrument

Idea
The Breathe Better Bond Initiative is a bond issued by local governments in developing nations, which is paired with technical assistance and uses proceeds to invest in projects that reduce both GHG emissions and air pollution.

Proponent
Climate Impact (based on a $130m bond issue)
- CO$_2$ reduction of 3.5 million tons, equivalent to removing 700,000 cars from roads

Health Impact
- PM$_{2.5}$ reduction of 220,000 tons per year, preventing an estimated 30,000 premature deaths per year associated with respiratory disease
- Citizens of high-pollution cities are likely to have compromised respiratory, cardiac and other systems, increasing vulnerability to COVID-19 and similar respiratory viruses
Successes & Impact to Date
Since 2014, the Lab has launched 41 solutions that tackle investment barriers in the **most critical sectors and regions for action on climate change**

Number of Lab instruments:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable Energy</td>
<td>19</td>
</tr>
<tr>
<td>Cities &amp; Transport</td>
<td>18</td>
</tr>
<tr>
<td>Water, Land use &amp; Agriculture</td>
<td>13</td>
</tr>
<tr>
<td>Climate Risk</td>
<td>12</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>8</td>
</tr>
<tr>
<td>Energy Access</td>
<td>7</td>
</tr>
</tbody>
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<table>
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<th>Region</th>
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</tr>
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<tbody>
<tr>
<td>Asia</td>
<td>20</td>
</tr>
<tr>
<td>Africa</td>
<td>16</td>
</tr>
<tr>
<td>Latin America</td>
<td>15</td>
</tr>
<tr>
<td>Global</td>
<td>6</td>
</tr>
</tbody>
</table>
Lab instruments support the Sustainable Development Goals

Number of Lab instruments by SDG:

- SDG 13: Climate Action - 41
- SDG 8: Decent Work and Economic Growth - 41
- SDG 17: Partnerships for the Goals - 41
- SDG 9: Industry, Innovation, and Infrastructure - 35
- SDG 7: Affordable and Clean Energy - 29
- SDG 11: Sustainable Cities and Communities - 22
- SDG 3: Good Health and Well-being - 19
- SDG 1: No Poverty - 15
- SDG 10: Reduced Inequalities - 11
- SDG 11: Sustainable Communities - 11
$2.07+ bn mobilized by 41 instruments for climate action in developing countries

$370+ mn invested by Lab Member institutions

$1.7+ bn catalyzed in additional investment

Lab instruments have mobilized 200x what funders have invested in the Lab Secretariat
Lab instruments have successfully mobilized over $800 million in investment from the private sector.

More than 90% of measured private finance has come from institutional investors and commercial banks. A small amount has also come from private equity investors.

Private investors also co-invest in projects on the ground, which is more difficult to measure.
In five years of managing the Lab, we’ve learned some key lessons...some of them are:

- There is demand for **new approaches** to climate investing
- **Effective public-private collaboration** is crucial and possible
- **Long runway** for financial innovations to reach scale and there is no time to lose
- Need for **seed / working capital**
The Lab in 2020
In 2020, the Lab is incubating mitigation and adaptation ideas in sectors and geographies critical for climate action...

**Nature-based solutions**
Supporting ideas to protect, sustainably manage, and restore natural or modified ecosystems

**Sustainable Cities**
Supporting sustainable urbanization ideas in partnership with cities networks

**Sustainable Agriculture**
Supporting ideas focused on addressing barriers to climate resilient, low emission agriculture, with a regional emphasis on sub-Saharan Africa

**Sustainable Energy Access**
Supporting ideas targeting deployment of renewable energy for productive use


![India](image1.png)
![Brazil](image2.png)
![Southern Africa](image3.png)
Getting involved

• Join a Lab instrument Working Group as a subject-matter expert
• Submit ideas as a proponent (2021 Lab cycle opens in September 2020)
• Share the 2020 Lab instruments with your networks
• Potential for adoption and/or replication of existing Lab solutions through UNDP channels
Appendix
## Selected Instruments 2020

### Sectoral Streams

<table>
<thead>
<tr>
<th>Name</th>
<th>Proponent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sustainable Agriculture for Smallholders in Sub-Saharan Africa</strong></td>
<td></td>
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<tr>
<td>The Land Accelerator: Rural Prosperity Bond</td>
<td>World Resources Institute (WRI)</td>
</tr>
<tr>
<td>A bond providing funding to SMEs that graduate from WRI’s Land Accelerator programme to sell inputs for land restoration to farmer groups on credit. Farmers repay in produce which is aggregated and sold by the cooperative to large-scale buyers.</td>
<td></td>
</tr>
<tr>
<td><strong>Nature-Based Solutions</strong></td>
<td></td>
</tr>
<tr>
<td>Monetizing Cost Savings for Water and Nature Based Solutions</td>
<td>World Resources Institute (WRI)</td>
</tr>
<tr>
<td>A SPV will implement water conservation practices, improvements in sustainable agriculture, &amp; nature-based solutions. Recuperates the costs through a pay-for-success/ pay-for-performance model with local water users &amp; utilities.</td>
<td></td>
</tr>
<tr>
<td><strong>Sustainable Energy Access</strong></td>
<td></td>
</tr>
<tr>
<td>GREENSTREETF AFRICA DEVELOPMENT COMPANY (GREENSTREET AFRICA DEVCO)</td>
<td>GreenMax Capital Advisors</td>
</tr>
<tr>
<td>Project preparation &amp; DEVCO focused on distributed solar generation in Nigerian public facilities, operated by private IPPs and financed through a local currency bond underwritten by InfraCredit.</td>
<td></td>
</tr>
<tr>
<td><strong>Sustainable Cities</strong></td>
<td></td>
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<tr>
<td>Global Subnational Climate Fund (SnCF Global)</td>
<td>R20 Regions of Climate Action</td>
</tr>
<tr>
<td>A global fund that pools sub-funds that specialize in sub-national climate projects focusing on various sectors and geographies. Features technical assistance and project preparation facilities supported by a first-loss investor.</td>
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</tbody>
</table>
## Selected Instruments 2020

### Regional streams

<table>
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<tr>
<td><strong>Global Mangrove Trust - GROVE - Forestry Smart Ledger</strong></td>
<td>A P2P funding platform building a land ledger, backed by blockchain technology - for verification of forest growth, contract management, and impact reporting. Target countries: India, South Asia, Nigeria, and US Gulf Coast</td>
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</tbody>
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<tr>
<td><strong>Climate Adaptation Benefit Units</strong></td>
<td>Institutional investors issue Debt Capital Market benefit units that are credit enhanced by providers of concessional finance. The units are offered to local banks as security for short-term construction loans and then refinanced by long term DCM notes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<tr>
<td><strong>Conexus Impact Fund - scaling a climate finance platform in Brazil</strong></td>
<td>A blended finance structured socio-environmental impact fund that will operate in a business platform offering tailored financial products to community enterprises across the country</td>
</tr>
</tbody>
</table>

| **Sustainable Agriculture Finance Facility**                        | A facility combining an agfintech and certification entity that will provide flexible loans, technical assistance, and sustainable practices’ certification to farmers as well as market access to their products |

| GFA Climate & Infrastructure & Ashburton Investments               |                                                                 |
| **Brazil**                                                          |                                                                 |

| The Brazilian Institute of Development and Sustainability (IABS) & Rede ILPF |                                                                 |