

Focal theme for the TechSprint: Use of data to improve the quality of green & sustainable loan and investment decisions through data and technology.

2021 is set to be a critical year in acting on urgent environmental challenges from climate change to biodiversity. With the COP 26 international climate negotiations hosted jointly by Italy and the United Kingdom in Glasgow, a unique window of opportunity exists in building momentum to solve these global challenges. It is in this context that the Italian G20 2021 Presidency, Banca d'Italia, and the Bank of International Settlements are convening the G20 TechSprint 2021 to foster global innovation for sustainable financial markets.

The TechSprint is focused on how financial institutions and large investors can better **collect, verify and analyse data** to understand whether their loan decisions and investments improve (or worsen) environment outcomes. The TechSprint asks private sector firms to develop technology solutions and techniques that enable financial institutions and investors to conduct environmental risk analysis (ERA) and (a) identify and measure the exposure of their current loans and investments to climate and transition risks, (b) make informed decisions about new green loans and investments, and (c) verify the impact of those new loans and investments using trusted and verifiable data and potentially also guide market assessment of ERA-adjusted asset and portfolio value. It is hoped this cycle of data collection, verification and analysis will improve the quality and impact of loan and investment decisions across the sector.

To raise the kinds of loans and investments that green finance requires, financial institutions and investment managers need to:

- Understand how their existing portfolios are exposed to climate risks;
- Make informed decisions about new green loans and investments;
- Measure the impact of those new loans

Problem Statement 3:

Better connecting projects and investors: New technologies can support project promoters such as small and medium size businesses, start-ups or even local authorities to raise funds for sustainable projects, while at the same time enhancing transparency and opportunities for investors to finance a bigger pool of sustainable projects. Additionally, smallholder (e.g. individual farmers) and small commercial businesses and households may be marginalized financially and fail to benefit from green financing opportunities.

Can technological solutions (e.g., digital identity verification, demand aggregation platforms, large scale, and easily accessible trading platforms) help connect projects and investors to scale up their impact in a secure way while respecting data privacy policies in individual countries? Can technological solutions also be used to effectively track platform performance and outcomes in terms of volume and quality of credit allocation and environmental impact and be deployable across geographies and states of development?

Landscape

Improving access to the financing needs of marginalised communities has become increasingly critical in the transition towards a sustainable economy and society. The brunt of environmental and climate-related risks will largely be borne by the communities with the least financial capacity to adapt.

Innovative financial solutions from mobile payments systems to peer-to-peer lending platforms have been instrumental in securing sustainable livelihoods for millions across the globe. Similar solutions will be required to direct capital to those most in need to build resilience in the face of changing climate and global economy, as well as to capitalise on emerging opportunities. Key user requirements include ease of use, tailoring to specific user groups (particularly with different levels of financial literacy), as well as an understanding of user and community-specific contexts.

Suggested reading

- **Nassiry, Darius, (2018), 'The Role of Fintech in Unlocking Green Finance: Policy Insights for Developing Countries', Asian Development Bank Institute, <https://www.adb.org/sites/default/files/publication/464821/adbi-wp883.pdf>** – The paper provides a framework for thinking about the application of fintech unlocking new and innovative avenues of green finance with a set of real world case studies. Participants can use the paper for inspiration and example of current applications of blockchain, peer-to-peer platforms, facial recognition and other emerging technologies in addressing the problem statement.
- **Mondato, (2021), 'Can Climate Fintech Lift Emerging Economies?', <https://blog.mondato.com/climate-change-fintech/>** - As Fintech platforms have dramatically grown in importance in developing economies in recent years, sustainability is increasingly entering platforms such as Alipay. The article provides a brief overview of emerging fintech applications, trends, and ideas for new approaches from micro-grid payments to micro-insurance. Applicants should use the paper for a discussion on vast opportunities in the new sustainable fintech space in emerging economies and traditionally marginalised communities.
- **Louman, Bastiaan & Meybeck, Alexandre & G., Mulder & Brady, Michael & L., Frey & H., Savenije & Gitz, Vincent & Trines, Eveline. (2020). Innovative finance for sustainable landscapes. 10.17528/cifor/007852. [https://www.researchgate.net/publication/347136628 Innovative finance for sustainable landscapes](https://www.researchgate.net/publication/347136628_Innovative_finance_for_sustainable_landscapes)** - A range of innovative solutions are emerging to increase access to sustainable finance solutions for traditionally marginalised communities. These solutions range from blended finance to crowdsourcing platforms and mobile payments. Applicants should use this paper for an overview of a range of existing practical solutions for expanding access to sustainable finance for underserved communities as well as a discussion of their challenges and successes.