

GLOBAL FINTECH HACKCELERATOR 2021

Industry Problem Statements

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OVERVIEW

The 6th edition of the Global FinTech Hackcelerator seeks to apply innovative market-ready solutions to address real industry needs in Green Finance.

The Green Finance theme for this year is further categorized around three pillars as follows:

- **Mobilize capital:** Improve access to capital for green financial projects or solutions
- **Monitor commitment:** Enhance ease of monitoring commitments pledged to the development of green finance and sustainable projects
- **Measure impact:** Improve efficacy of impact measurements in every phase of green projects and developments

52 problem statements have been submitted by Global financial institutions and corporates this year. Up to 15 global finalists addressing these problem statements will be shortlisted through a global scouting programme, judged by thought leaders in Green Finance from government and industry.

The Global FinTech Hackcelerator 2021 will be hosted on APIX, a cloud-based prototyping platform.

The problem statements may have been edited for consistent reading. The edits do not substantially alter the intent of the original statements submitted.

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MOBILISE CAPITAL

Improve access to capital for green financial projects or solutions

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MOBILISE CAPITAL

- 01** Sustainability-linked instruments have recently surfaced as a popular way for businesses to tie Cost of Capital and specific sustainability Key Performance Indicators such as greenhouse gas emissions. How might market participants ensure that businesses continue to progress in their overall sustainability performance and not focused only on the agreed KPI?
- 02** How can we build a solution within the Green Real Estate industry that will ring-fence capital allocated to the project for further on-lend or matching to downstream sub-contractors and suppliers who will need funding throughout the course of the project? The solution may take advance payments into consideration.
- 03** Given the increased interest in passive investments, how might we build a robo-advisor that focuses on optimising a portfolio for superior risk-adjusted returns ESG-equities, bonds, and indices?
- 04** How might we utilise a platform that enables investors and retail consumers to make sustainability considerations either in their respective (i) personal consumption or (ii) investment decision- making process and/ SDG investment portfolio building?
- 05** With the limited supply of green finance products available in the market, coupled with much debate around green-washing in such products, how may we source for sufficient high quality green finance products for insurance investment portfolios?

MOBILISE CAPITAL

06 How might we enable a better understanding of the value and impact of green investments to private wealth clients by utilising new technology (e.g., AR and VR) in an intuitive manner?

07 How might we enable the spreading of loan default risks to borrowers, to encourage active participation from lenders in the green financing space?

08 A distributed generation business model involves portfolios of small projects which might be too small in size to secure standalone structured financing. How might we develop a securitisation market that allows banks or investors to take on risk of a portfolio of off-takers?

Context: Distributed generation refers to a variety of technologies that generate electricity at or near where it will be used, such as solar panels and combined heat and power. The decentralised nature is what sets it apart from traditional power generation models.

09 Renewable energy plays a key role in the road towards a carbon neutral world. We have seen exponential growth in this sector in past decades, many new and innovative technologies been adopted. However, these technologies also bring higher risk of failure and significant financial uncertainty to stakeholders, especially offshore renewable projects where large upfront CAPEX is required. How should the insurance industry step up to play a bigger role as the safeguard for the domain of renewable energy, providing safety and security to investors, while helping to advance the technology surrounding it to its maturity?

10 Green transitions change the need for insurance, e.g. using green construction materials may impact a building's resilience, electric vehicles have different risk factors compared to traditional vehicles etc. How may we build a solution to help incorporate transition risk into the insurance underwriting process?

MOBILISE CAPITAL

- 11** How can we incentivise traditional capital markets to promote green finance offerings to SMEs?
- 12** Renewable projects are going to be small scale compared to conventional power projects and the typical project finance approach applied to small-scale projects would be time-consuming and less cost effective. How may we automate the credit assessment process for small-scale renewable projects? Process should include steps such as due diligence, documentation and KYC.
- 13** How might we use an AI engine to summarise research reports from various sources, on either companies or themes like green and transition efforts, against a given set of accessible and quantifiable criteria, to overcome manual and tedious consolidation of research reports for assessment purposes?
- 14** Due to their smaller ticket size, shallow market and the buy and hold mentality of some investors, green bonds are perceived to be more illiquid compared to plain vanilla bonds. How might we create a solution that will support the deepening of the liquidity pool, and ultimately increase asset turnover amongst investors?
- 15** How might we incentivize the acceleration of mainstreaming and adoption of sustainable bonds for central banks and larger institutional investors?

MOBILISE CAPITAL

- 16** How do we make sustainability-linked financial instruments (e.g., bonds) a more attractive source of capital for companies that have a high ESG rating?
Context: Companies based in locations like Singapore might have a higher ESG rating due to factors such as strong governance.
- 17** How can we leverage technology to broaden and/or streamline the due diligence and risk assessment process for science-oriented ESG private markets such as deep technologies and nature based solutions?
- 18** How can we leverage technology to increase the distribution (primary) and liquidity (secondary) for ESG instruments (e.g. green bonds, deep technologies, nature based solutions)?
- 19** How can we leverage technology to more efficiently create, structure and service ESG-linked digital products (e.g., sustainability-linked bonds, sustainability-linked structured products)?
- 20** How might we leverage tech solutions to reward home insurance customers who are actively taking steps to adopt sustainable practices in their homes?

MOBILISE CAPITAL

21 How might we leverage technology to monitor agri-insurance customers' impact on the environment and better advise them on their farm management practices?

22 How may we better match the actions or purchase decisions made by consumers to the sustainability goals they wish to achieve?

Context: The solution should inform data that informs consumers of the environmental impact of their purchase decisions, to incentivise consumers to make more sustainable choices.

23 Currently, the focus of most green finance initiatives is to fund companies who have started their journey of adopting green practices. How might we incentivise companies and suppliers, who have not adopted green initiatives, to move in the direction of going green?

24 How may we reduce the search cost associated with sourcing for SME suppliers that adopt sustainable practices? The solution may take the form of a marketplace where corporates can connect with green suppliers.

25 How might we develop a true SDG measurement utility or measurement platform that banks can utilise to enable and promote SDG conscious investment and banking products?

26 How may we include green indicators as factors in a credit underwriting score at scale for varying organisations of different sizes and geographies, while maintaining the data verification & reliability standards of traditional financial credit underwriting?



MONITOR COMMITMENT

Enhance ease of monitoring commitments pledged to the development of green finance and sustainable projects

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MONITOR COMMITMENT

- 27** How might we bridge the gap and enable decision makers to access real-time environmental data from asset owners to enable effective tracking of environmental impact, progress towards achieving ESG targets and advance policy development areas such as green financing?
- 28** How might we assess or identify carbon offsetting efforts through the use of land or land reclamation, and use that information as a factor into investment decisions?
- 29** How might we create a standardised tool for companies to set their own SDG-related or other ESG impact targets and follow-up on their progress, where those targets and progress measures may also be accessed by asset managers or private equity funds interested in investing in those companies?
- 30** How might we design an open-source data platform that allows investors and lenders to gain access to relevant social and environmental information from corporate reporters (listed and unlisted) and other data sources (e.g., Euromonitor and Bloomberg)?
- 31** How might we extend ESG and green signals coverage in small cap companies through the volunteering and gathering of information on businesses or products and structuring data inputs while still including information that proves transparency, thereby allowing deeper analysis by investors?

MONITOR COMMITMENT

- 32** How might we overcome the lack of readily available data (e.g. clients' carbon emissions, geographical location of assets) to facilitate capital providers' climate risk assessment and portfolio target setting?
- 33** How might we better measure environmental risks on the properties that are underwritten by insurers to better inform pricing and claims practices?
- 34** How can we overcome the lack of readily available data to obtain borrowers' ESG-risk profile and ascertain if they are green and sustainable? The ideal state is an ESG risk bureau that includes information that has not been publicly disclosed and provides a 360-degree view across a large base of customers.
- 35** How might we enable suppliers across the entire value chain to post declarations and input data easily in a cost-effective manner to ensure end-to-end transparency and traceability? Can the same solution be used to independently verify claims from suppliers to ensure accuracy and reliability?
- 36** How might market participants leverage market benchmarks such as sustainability indices or risk ranking, to keep companies on track with their environmental commitments?

MONITOR COMMITMENT

- 37** How can we build a solution that can help conduct negative screens near real-time to monitor accumulation of sensitive exposures such as coal and tobacco for corporates, insurers and reinsurers?
- 38** How may we use technology to offer a solution that can help provide data based on commercial clients' payments and collections to assess how green their supply chain is? The solution should use ESG ratings of various companies that trade with the commercial client. The collected data can enable the client to continuously improve the sustainability within the supply chain and achieve corporate level targets. Presentation of the data may be through an analytics platform.
- 39** How can companies use technology like IoT sensors to enable timely tracking of carbon footprint across the supply chain & measure progress towards emission targets?
- 40** How can companies gain a reliable and cost-efficient data source outlining emissions from supply chain through the use of technologies?
- 41** The risk of green-washing in financial instruments such as green bonds or loans is managed by having an external review or a second-party opinion in a form of a report. These reports are generally qualitative in nature and comment on whether the instrument is aligned with market principles. In the era of data-driven analysis, how might market participants incorporate quantitative information in appraising green issuance?
- 42** How can we build a solution in the Green Real Estate space, to evidence that the use of Green financing, debt and working capital within the Project is green?



MEASURE IMPACT

Improve efficacy of impact measurements in every phase of green projects and developments

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MEASURE IMPACT

- 43** How can technology help SMEs estimate and credibly communicate their carbon footprint in a cost-efficient manner? This will enable them access to funding & monetization through carbon credits.
- 44** How might we source and streamline upstream carbon footprint data points, in order to increase the transparency of carbon footprint data and allow investors to better compare relevant carbon activity across companies, supply chain and products?
- 45** How can we simplify the costs involved in monitoring, collecting, and publishing ESG data?
- 46** How may we develop a rating tool or platform that uses credible methodologies that considers all types of ESG activities for corporates, insurers and reinsurers?
- 47** How may we leverage technology to create a universally accepted green or sustainability rating scale and build a repository of SMEs assessed on this scale?

MEASURE IMPACT

- 48** How may we leverage technology to create energy consumption benchmarks to rate companies on a green scale based on their size and type of business?
- 49** How may we build a solution that standardises sustainability reports across regions and industries to enable investors to benchmark Small to Medium Enterprises (SMEs)?
- 50** With sustainability policies and ESG scoring conducted mostly at a global level, there should be efforts to showcase a realistic ESG scoring for the local setup. How may we leverage technology to localise ESG performance benchmarking?
- 51** How might we consolidate an ESG portfolio score for Wealth Management clients, to enable them to better understand their investment decisions and for relationship managers to suggest greener alternatives?
- 52** How might we effectively attribute and analyse returns and volatility of investments driven by ESG or climate and environmental decisions that have been integrated into traditional investment processes? This solution should allow comparison of specific dimensions between ESG/ SDG and traditional investment factors across funds when ESG/ SDG inputs are not standardised across providers.

To register for the Hackcelerator, scan the QR code below or [click on this link](#)



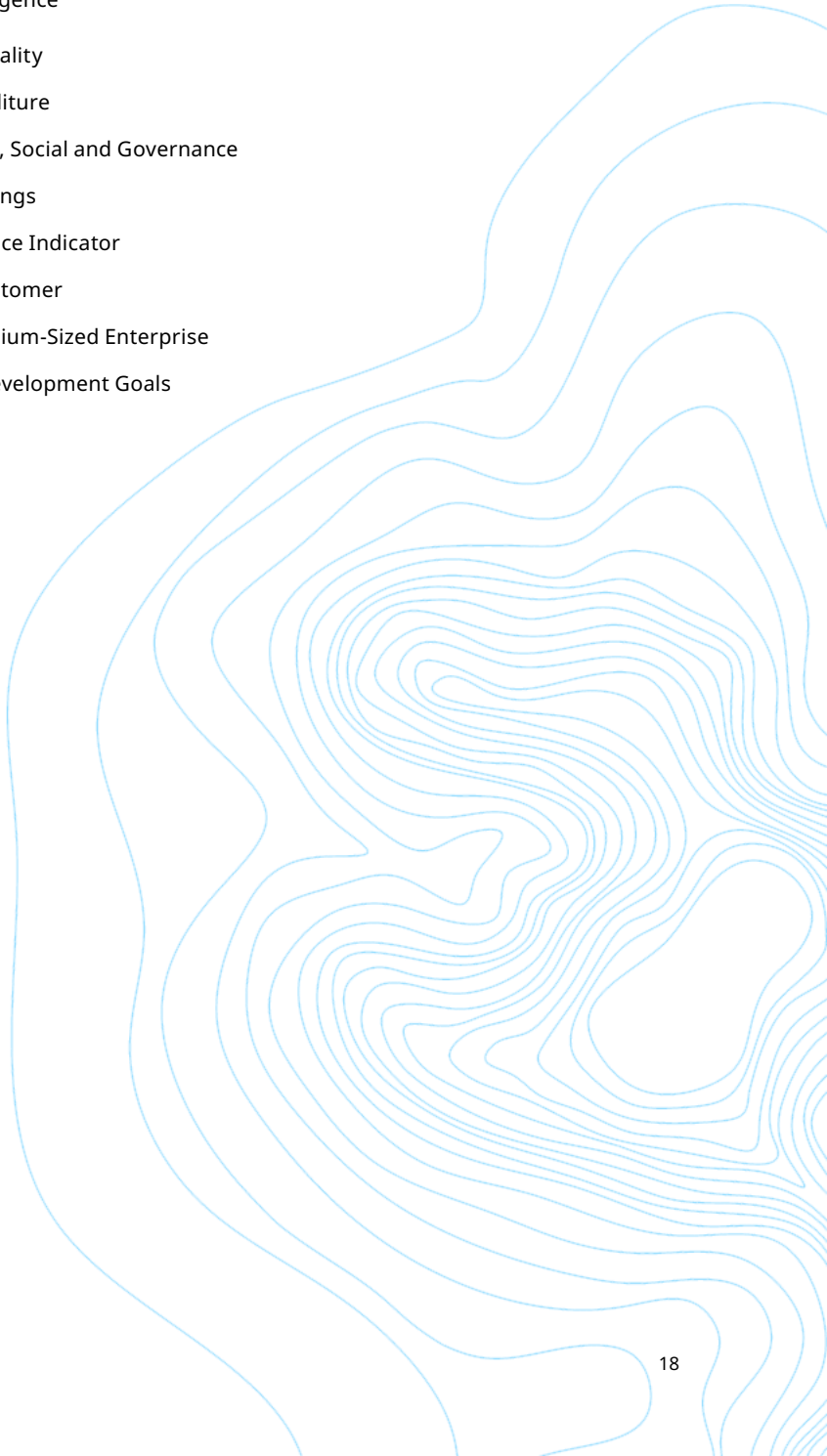
Applications open from 5 May to 11 June 2021

GLOSSARY

Abbreviation

Full form

AI	Artificial Intelligence
AR	Augmented Reality
CAPEX	Capital Expenditure
ESG	Environmental, Social and Governance
IoT	Internet Of Things
KPI	Key Performance Indicator
KYC	Know Your Customer
SME	Small And Medium-Sized Enterprise
SDG	Sustainable Development Goals
VR	Virtual Reality



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For more information, please contact the marketing department by phone at one of the following locations:

Americas
+1 212 541 8100

EMEA
+44 20 7333 8333

Asia Pacific
+65 6510 9700

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