

FAST-Infra - Finance to Accelerate the Sustainable Transition Infrastructure

Technology-Enabled Platform Workshop

11 Feb' 2021



Workshop Agenda

	<u>Time</u>	<u>Page #</u>	<u>Speaker(s)</u>
1. <u>FAST-Infra Recap</u> <ul style="list-style-type: none">- Solution approach and overview	10'	3	Christian Deseglise Michael Ridley
2. <u>Technology Solutions Overview</u> <ul style="list-style-type: none">- 2 x 15 mins slots for IBM and Infraclear	30'	7	IBM & Infraclear
3. <u>Market Participants Q&A</u> <ul style="list-style-type: none">- Market participants discussion and conclusion	40'	29	Achaiah Thimmaiah (Ash)
4. <u>Next Steps</u> <ul style="list-style-type: none">- Recap today's agreements to propose next steps- Plan for next workshop, business case and implementation approach	10'	31	Achaiah Thimmaiah (Ash)

Appendix

- Today's Participants



1. FAST-Infra Recap

- *About Fast-Infra*
- *Infrastructure: Landscape, challenges and concept*

Finance to Accelerate the Sustainable Transition: 'FAST-Infra'



Goals

- ◆ Develop sustainable infrastructure into a deep and liquid asset class
- ◆ Scale-up private investment in sustainable infrastructure in emerging and developing countries



Two key components

- ◆ Develop a sustainable infrastructure label
- ◆ Develop platforms for targeted financial interventions

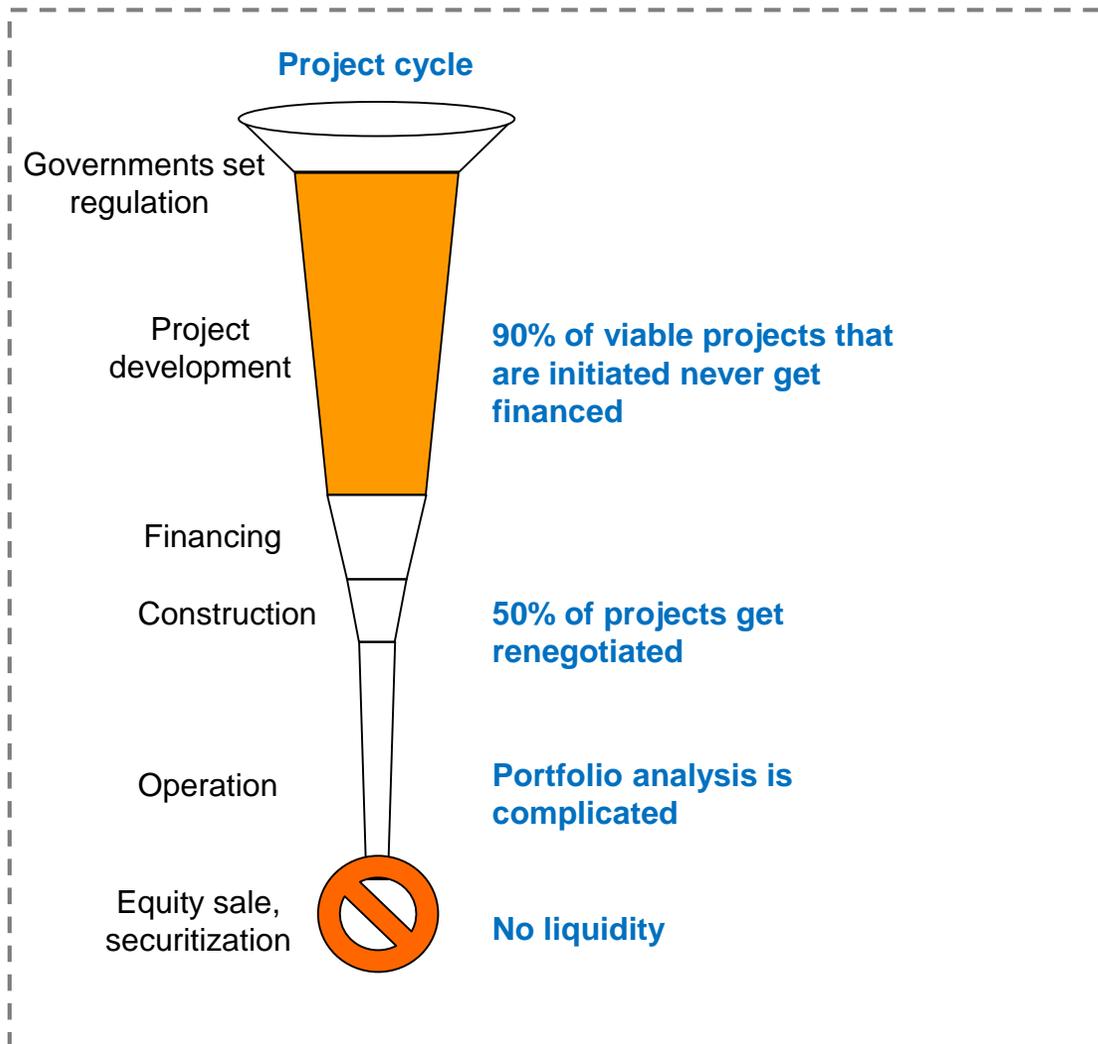


Broad participation

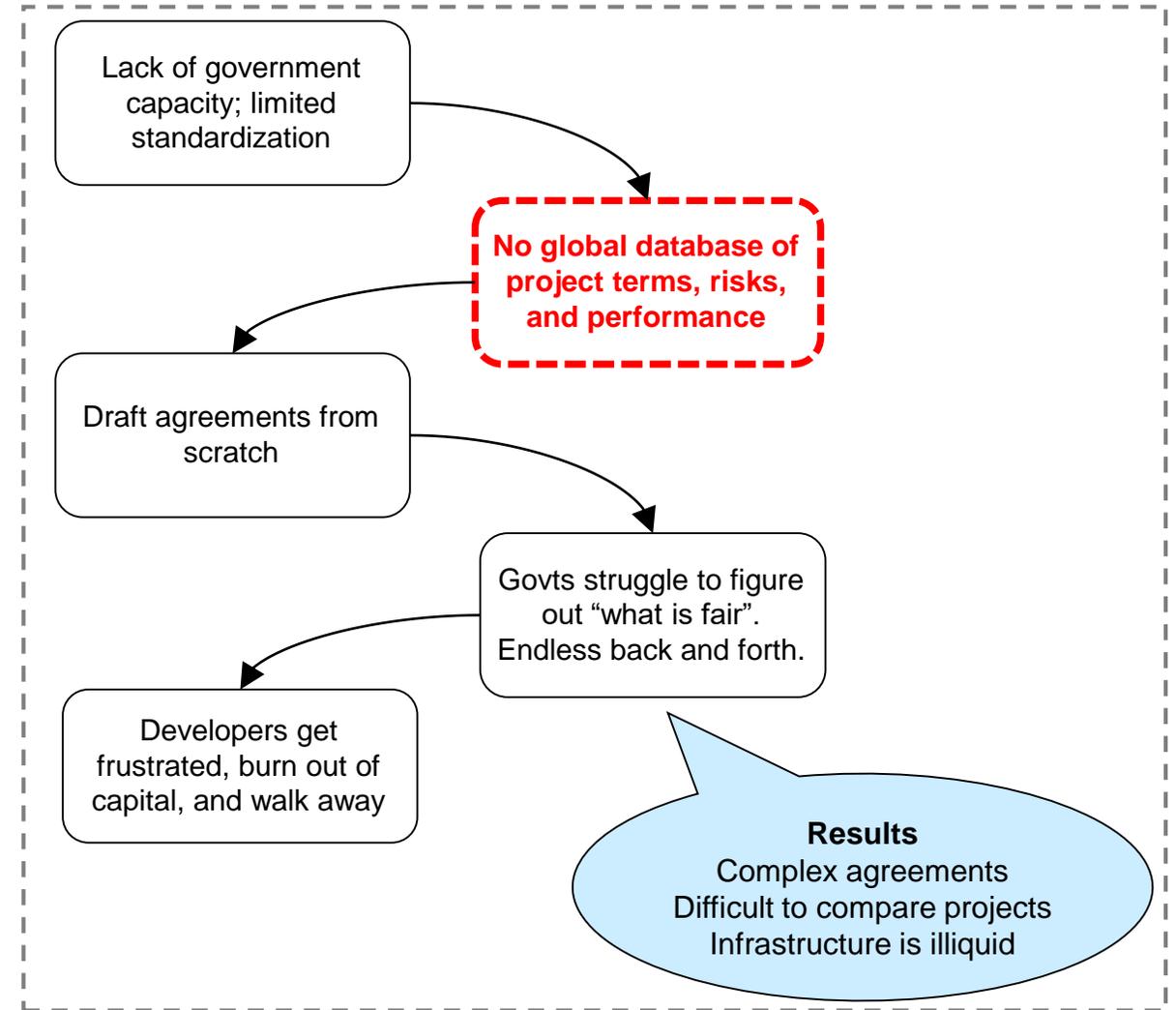
- ◆ Founding partners: CPI, GIF, HSBC, IFC, OECD
- ◆ Finance industry-led, private-public partnership – broad-based, open and inclusive

Lack of data causes pain at every step of the project cycle

Not enough bankable projects; no liquidity

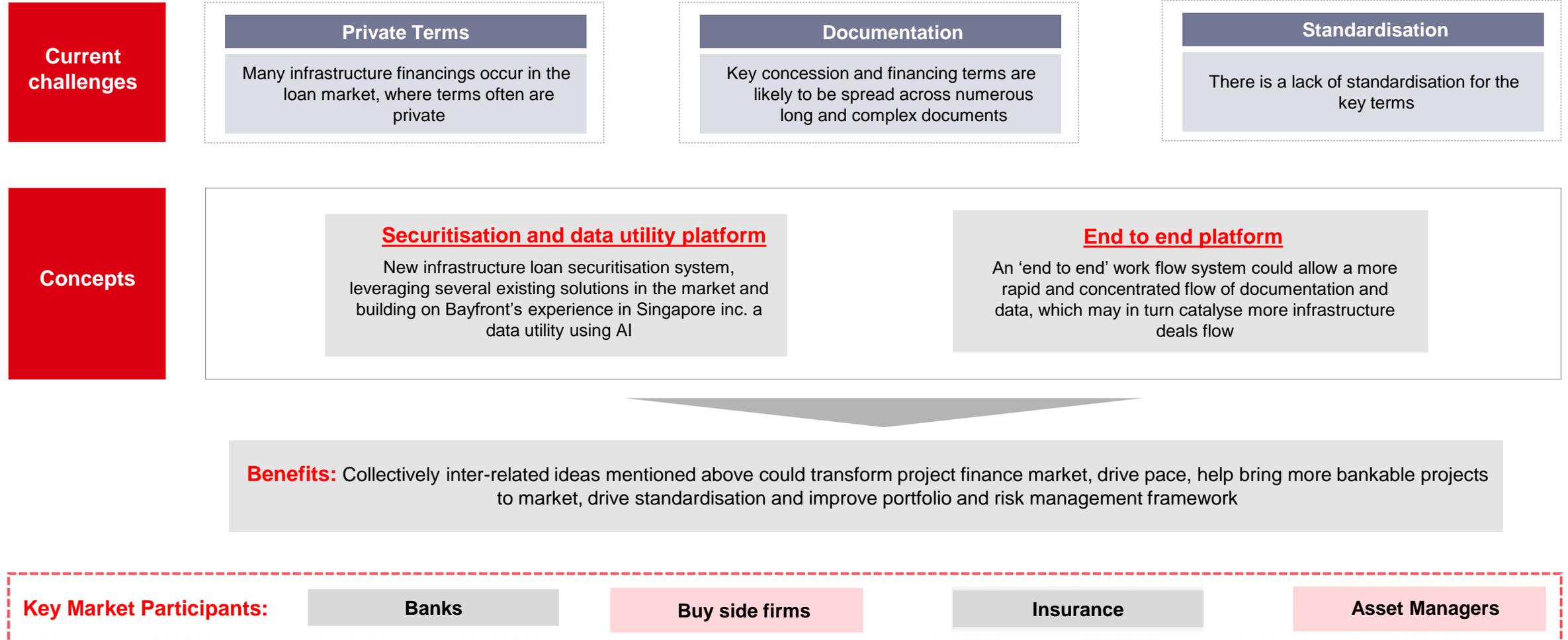


Anatomy of failure



FAST-Infra technology enabled platform and concept

High level overview of FAST-Infra initiative which centres on the development of a technology enabled platform, taking the opportunity to socialize the concept with Market Participants and seek their commitment to take this initiative forward





2. Technology solutions overview

- *End to End Platform Presentation, IBM*
- *Securitisation and Data Utility Platform, Infraclear*



FAST-Infra Technology Platform

End to End Platform

Dr Murray Simpson
Global Lead - Sustainability,
Climate & Transition

Lutamyo Mtawali
Sustainable Finance Lead

Robert Steedman
Partner, Banking Cluster Leader

Søren F. Mortensen
Director, Global Financial Markets

Polly Stewart
Strategic Analytics Consultant

Executive Summary

Case for End-to-End solution: Essential , Effective, Achievable and Secure

CURRENT CHALLENGES



- ❑ Lack of secure and robust marketplace to facilitate and address ~ **\$6.9 trillion** annual funding gap
- ❑ Inconsistent methods and practices across different geos
- ❑ Lack of standard documentation and highly manual processes
- ❑ Investors: limited transparency and access to well-structured and de-risked bankable projects and strong deal flow
- ❑ Project developers: access to investors + funding, and project preparation guidance (per investor requirements)

ACCELERATORS



- ❑ Capabilities, expertise and delivery experience of FAST-Infra partners (eppf, IBM, InfraClear, Liquidnet, Scale, SIF-Source)
- ❑ Leverage and integrate partner technology components
- ❑ Collaborate on design, development and deployment

END TO END SOLUTION APPROACH



- ❑ Iterative, incremental and phased development:
 - ✓ Design: Tech strategy and solution design
 - ✓ MVP: Enable dynamic data capture, create secure smart data rooms, integrate AI application (NLP), Advanced Analytics
 - ✓ Market Testing: Limited participants
 - ✓ Pilot: Enhance functionality – rules engine, data visualisation, reporting engine, etc.
 - ✓ Onboarding: Market participants
 - ✓ Production ready: scalability (participants, geos, deal flow)
- ❑ Convening of multi-stakeholder platforms
- ❑ Data management across full project lifecycle
- ❑ Support different financial instruments (loans, bonds, securitization, etc.)
- ❑ Support labelling: enhanced data capture & management
- ❑ Managing and enabling due diligence
- ❑ Addressing complexities in a regulated industry
- ❑ Address barriers to financing sustainable infrastructure – Mark Carney's **COP26** Private Finance Strategy

Executive Summary

Case for End-to-End solution: Essential , Effective, Achievable and Secure

PLATFORM BENEFITS¹

- Ecosystem partner connectivity
- Deal flow access and scalability
- Secure information sharing – electronically
- Advanced analytics, data insight and transparency
- Process efficiency: automated, simplified & faster
- Smart documentation and consistency



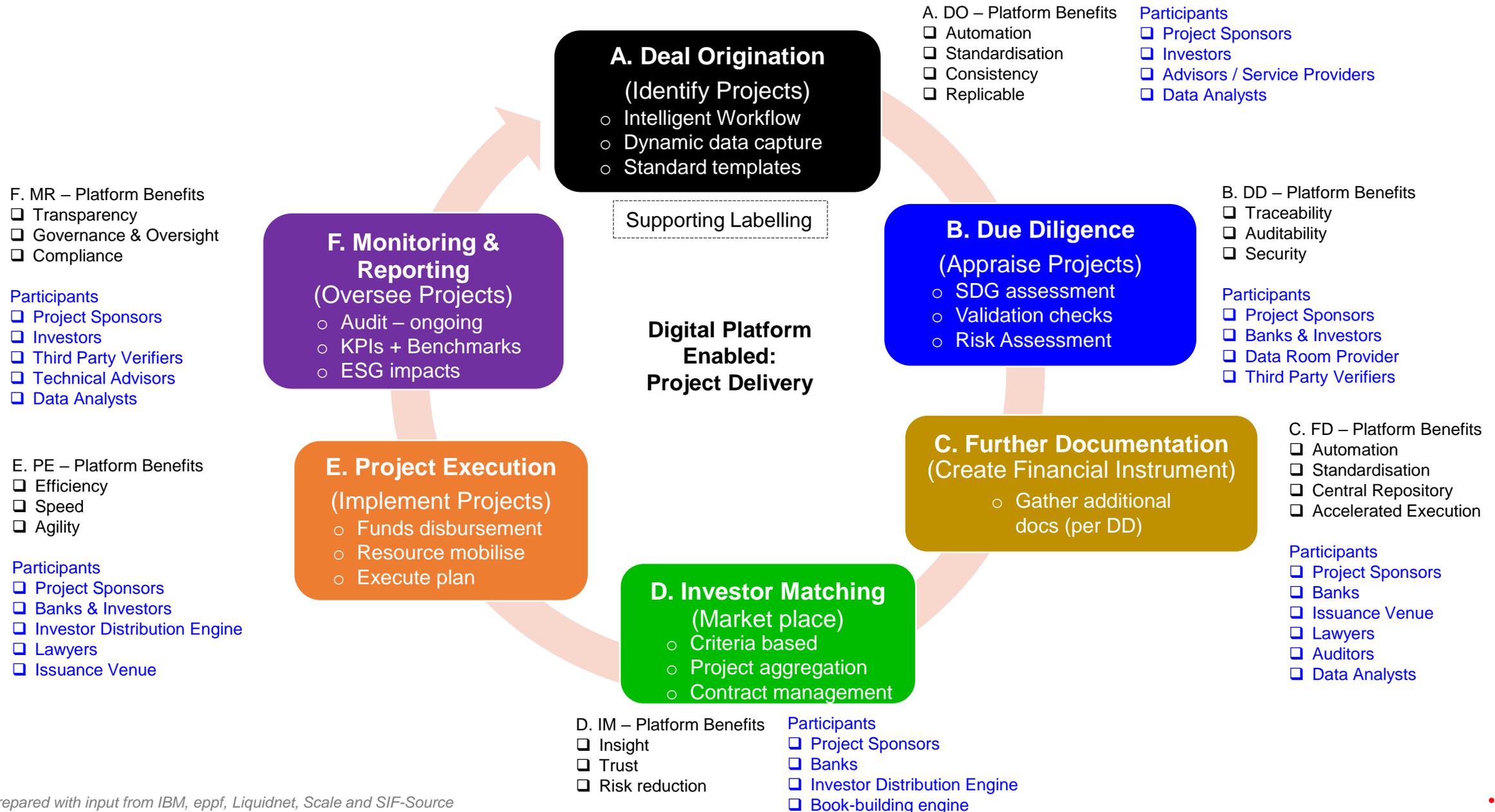
PLATFORM BENEFITS²

- Cost reduction
- Downstream and sell-on business opportunities
- Global standardisation of methods & practices (across geos)
- Auditability, reduced risk and increased trust
- Embedded data governance
- Ongoing application support (24/7, any location)



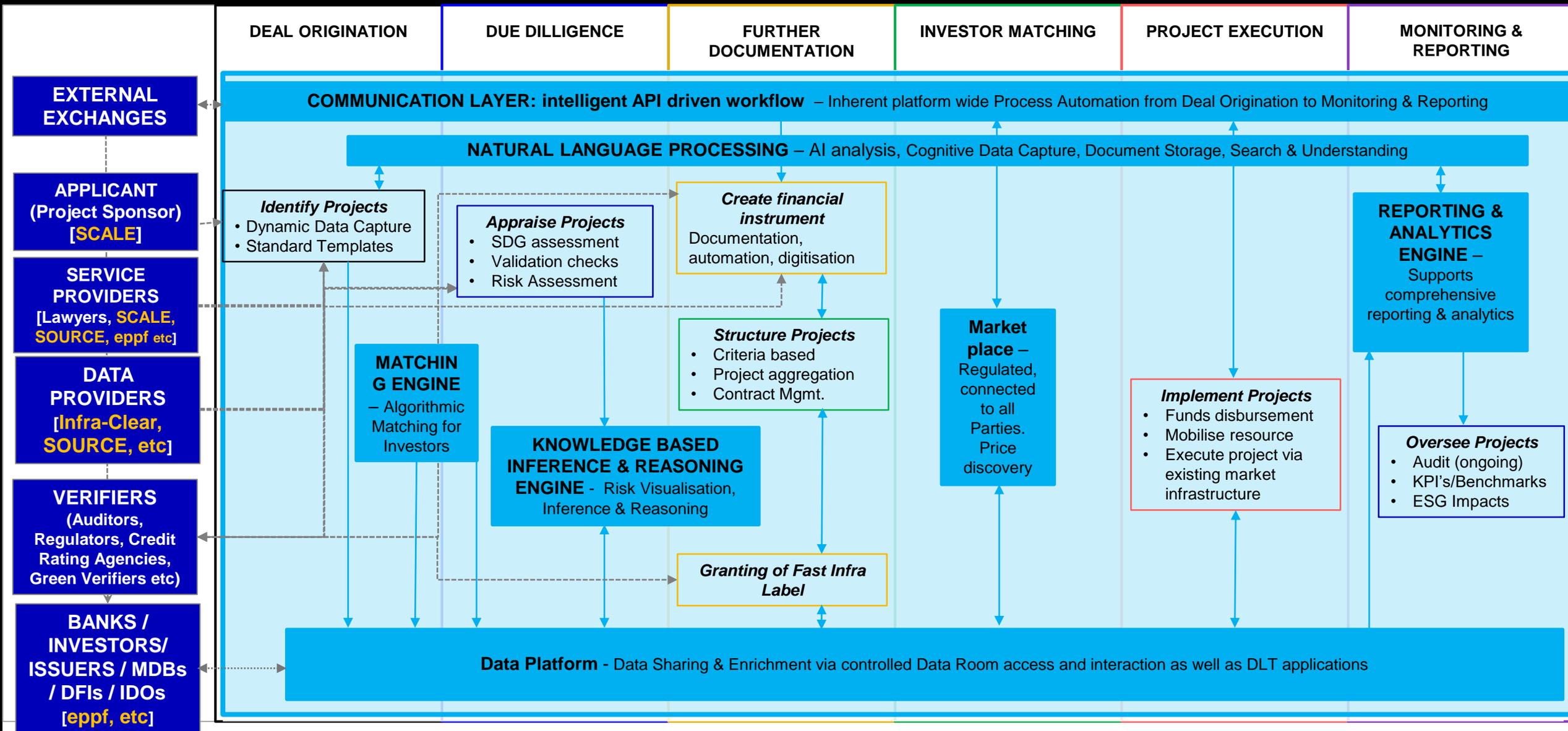
Project Lifecycle: FAST-Infra Technology Platform

(Phased development approach and incremental enhancement of functionality to create value for users through the various project phases of sustainable infrastructure financing)



FAST-Infra End to End Technology Platform

Illustrative Architecture



IBM Network Examples: Case Studies



Bank Guarantee Network

Standardising key industry processes

Eliminating excessive paperwork

Transparent end to end process



Trade Finance Network

16 Banks over 15 Countries

Marketplace to drive flow

Digital end to end process



Global Trade network

Tracking 60% of Global Trade

Data automating Trade Finance

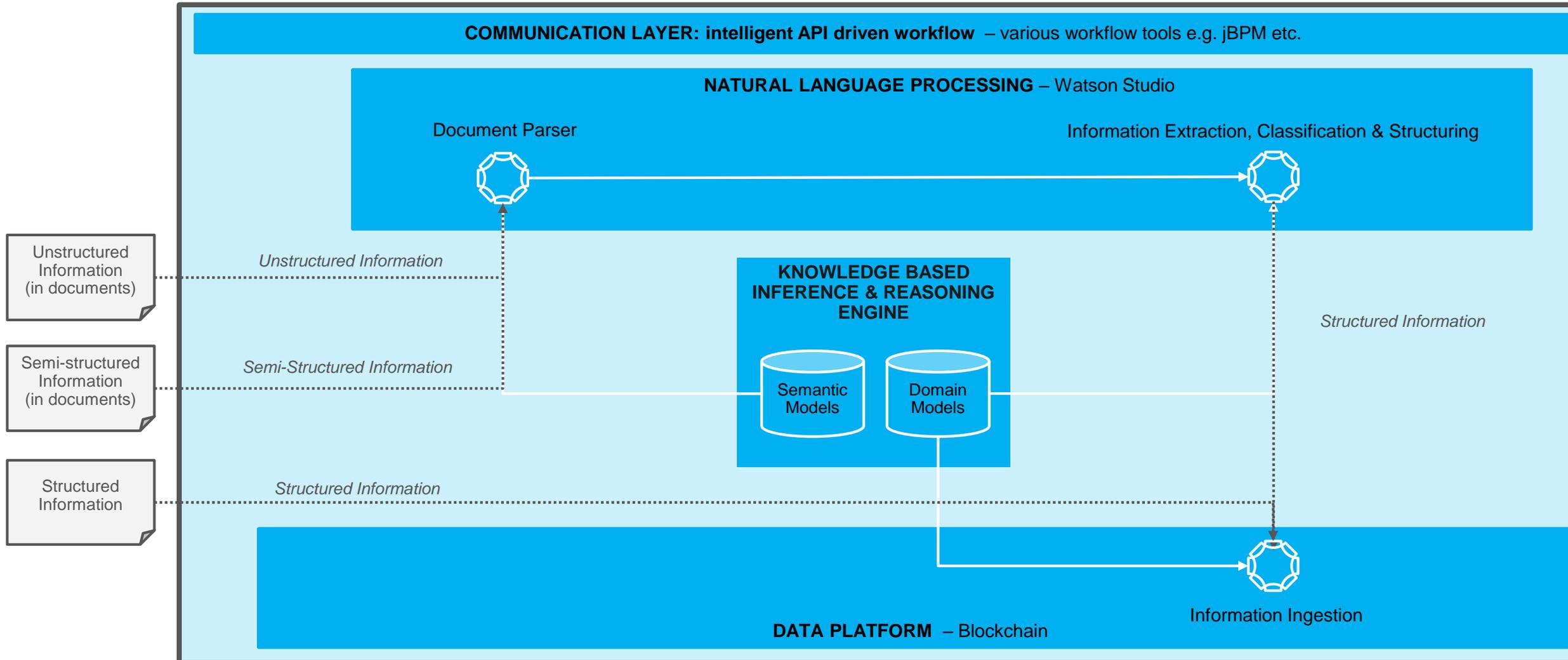
Joint Development with Banks

Appendix

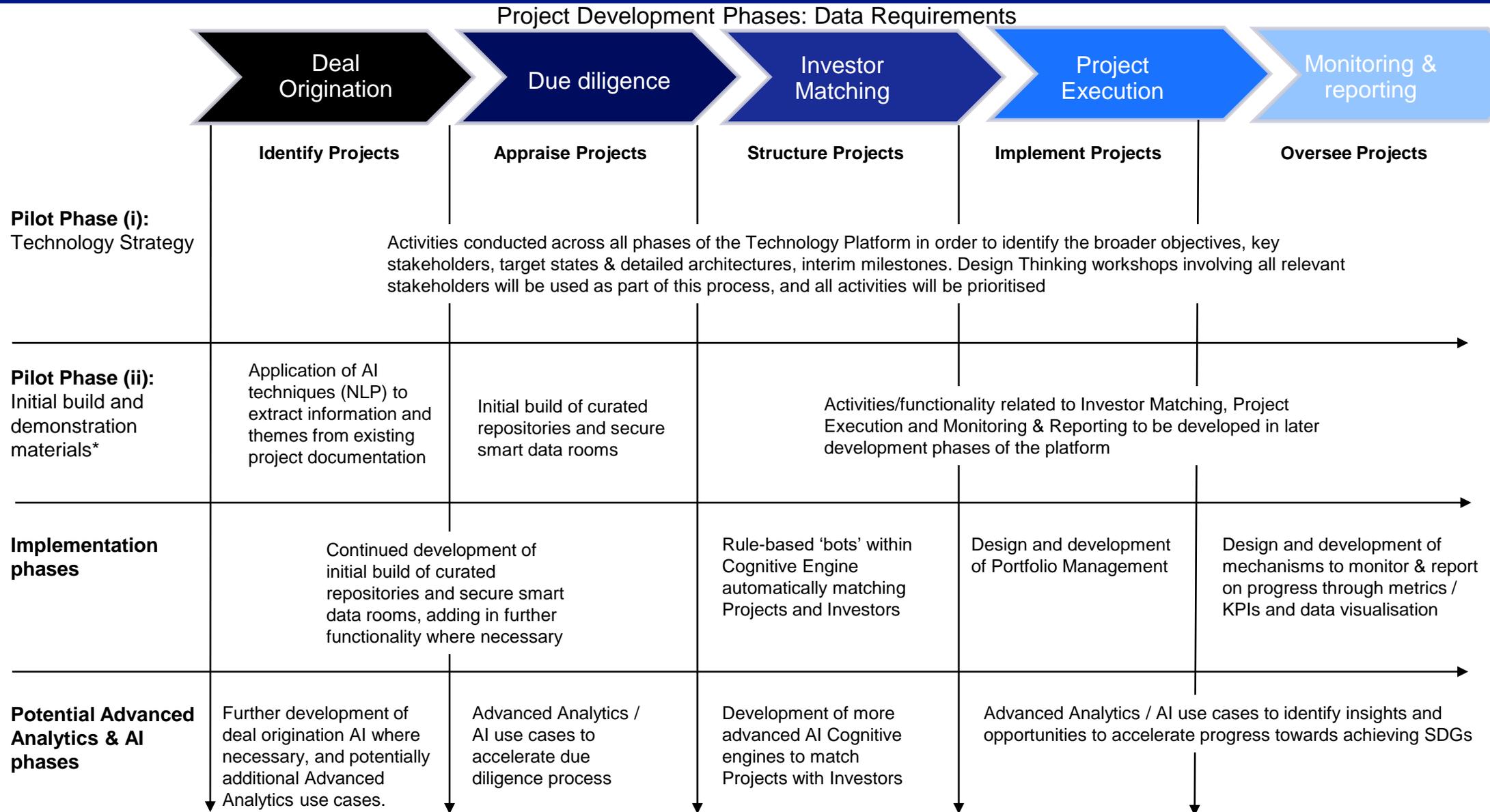


FAST-Infra Technology Platform

High Level Information Ingestion Flow



Data Management Strategy across full project lifecycle



Thank you

Securitization and Data Utility Platform

Rationale and Proposal

February 11, 2020



Observations from Bayfront's experience

What worked

- Proved that infrastructure securitization is possible
- Created dedicated, organized loan takeout facility
- Several banks, insurance companies and multilaterals came together
- 21 banks signed MOU for loan takeout mechanism
- Strong government support

Unresolved challenges

- Dense documents → analysis, portfolio sculpting, and negotiation still done manually
- Cumbersome negotiations around confidentiality and economics. Took over a year to assemble and securitize 37 loans
- Private secondary pool; not yet a deep liquid marketplace
- High Solvency 2 capital charges remain

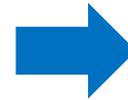
To make infrastructure an asset class, we need

1. ~~[Standardization]~~ / **Useful data** to easily compare project terms and risks
2. **Tools** to accelerate review and improve monitoring
3. **Rules** around disclosure, performance reporting, security

Data is available– and extractable

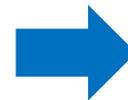
Myths about project finance data

“Documents are confidential”



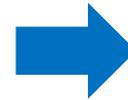
69% of governments disclose contracts; InfraClear has already assembled thousands of agreements

“Projects are unique and can’t be compared”



Terms are harmonized because same banks and law firms structure deals around the world.

“Only experts can understand complex contracts”



Natural language processing increasingly used to analyze contract terms

InfraClear translates project finance documents into usable data

Unstructured agreement

Quantify risks

National Highway Authority of India Concession Agreement

ARTICLE 34
FORCE MAJEURE

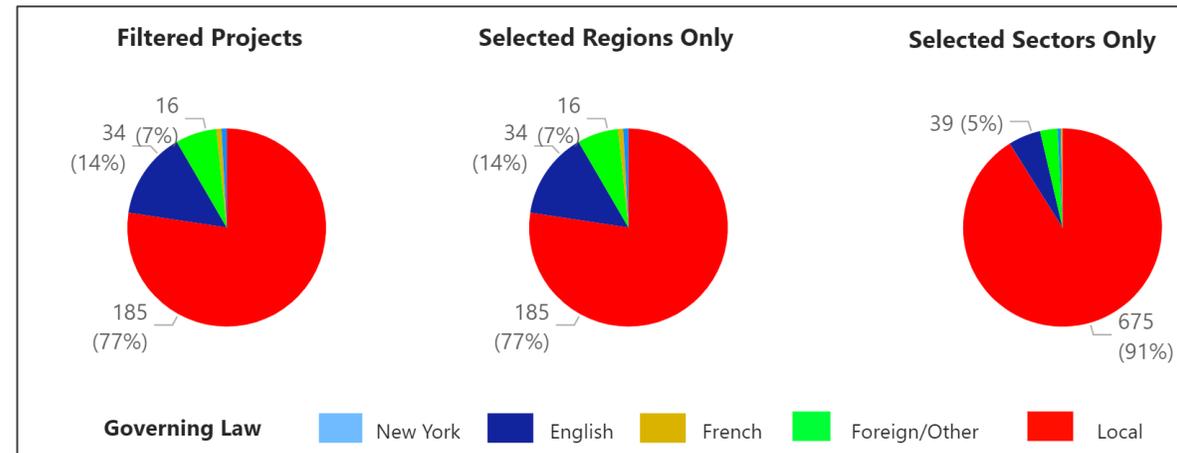
34.1 Force Majeure

As used in this Agreement, the expression "Force Majeure" or "Force Majeure Event" shall mean occurrence in India of any or all of Non-Political Event, Indirect Political Event and Political Event, as defined in Clauses 34.2, 34.3 and 34.4 respectively, if it affects the performance by the Party claiming the benefit of Force Majeure (the "Affected Party") of its obligations under this Agreement and which act or event (i) is beyond the reasonable control of the Affected Party, and (ii) the Affected Party could not have prevented or overcome by exercise of due diligence and following Good Industry Practice, and (iii) has Material Adverse Effect on the Affected Party.

34.2 Non-Political Event

A Non-Political Event shall mean one or more of the following acts or events:

- (a) act of God, epidemic, extremely adverse weather conditions, lightning, earthquake, landslide, cyclone, flood, volcanic eruption, chemical or radioactive contamination or ionising radiation, fire or explosion (to the extent of contamination or radiation or fire or explosion originating from a source external to the Site);
- (b) strikes or boycotts (other than those involving the Concessionaire, Contractors or their respective employees/representatives, or attributable to any act or omission of any of them) interrupting supplies and services to the Project Highway for a continuous period of 24 (twenty four) hours and an aggregate period exceeding 7 (seven) days in an Accounting Year, and not being an Indirect Political Event set forth in Clause 34.3;
- (c) any failure or delay of a Contractor but only to the extent caused by another Non-Political Event and which does not result in any offsetting compensation being payable to the Concessionaire by or on behalf of such Contractor;
- (d) any judgement or order of any court of competent jurisdiction or statutory authority made against the Concessionaire in any proceedings for reasons other than (i) failure of the Concessionaire to comply with any Applicable Law or Applicable Permit, or (ii) on account of breach of any Applicable Law or Applicable Permit or of any contract, or (iii) enforcement of this Agreement, or (iv) exercise of any of its rights under this Agreement by the Authority;
- (e) the discovery of geological conditions, toxic contamination or archaeological remains on the Site that could not reasonably have been expected to be discovered through a site inspection; or



Natural Force Majeure - Empirical Analysis

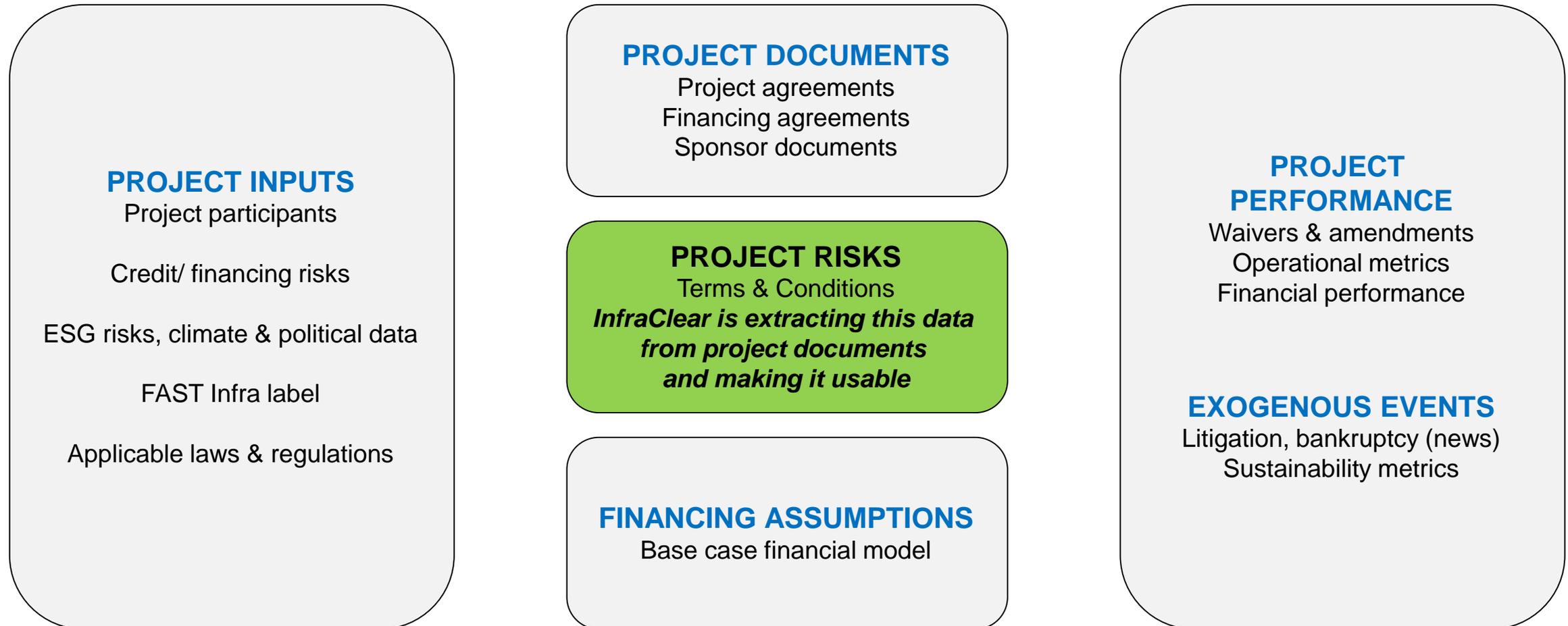
Type of Event	Number of Disasters in Country	Covered In Contract?
Storm/hurricane/typhoon/blizzard/cyclone	1895	Yes
Fire	141	Yes
Weather/Natural phenomenon	117	Yes
Erosion/landslide/avalanche	95	Yes
Flood	78	Yes
Earthquake	2	Yes
Act of God		Yes
Aquifer		No
Archaeological/paleontological		Yes
Break down		No
Collapse/cave-in		No
Disaster		No
Disease/epidemic/pandemic		Yes
Drought		No
Lightning		Yes
Pest/wildlife/botanic disease		No
Pollution/contamination		Yes
Safety/injury		No
Tsunami		No
Volcanic activity		Yes
Wind/tornado		No

Show events in map

- Select all
- Animal Incident
- Avalanche
- Coastal Erosion
- Contamination
- Disease
- Drought
- Drowning
- Earthquake

Data on key project terms allows for apples-to-apples comparison of projects

Centralized data repository can be key feature of an end-to-end platform



Granular information on project risks is a key missing link.

Data can transform economics of securitization

**Reduce Solvency 2
capital charges
by up to 50%**

- Capital charge for OECD unrated project loans can fall from 23.5% to 9.9%
- Charge for emerging market project loans can fall from 23.5% to 11.6%
- Charge for global infrastructure debt securities (BBB) can fall from 20.0% to 15.7%
- Could add up to 2.5 percentage points to return for an infrastructure portfolio

**Increase
transaction velocity**

- Make it easier to compare projects and sculpt portfolios
- Reduce time loans spend in warehousing facility

**Create new asset
sub-classes**

- Use granular data to sculpt new portfolios/ new asset classes, e.g., emerging market infrastructure CLO, global solar CLOs

See *Credit Risk Dynamics of Infrastructure Investment: Considerations for Financial Regulators* by Andres Jobst, Office of the World Bank CFO, 2018

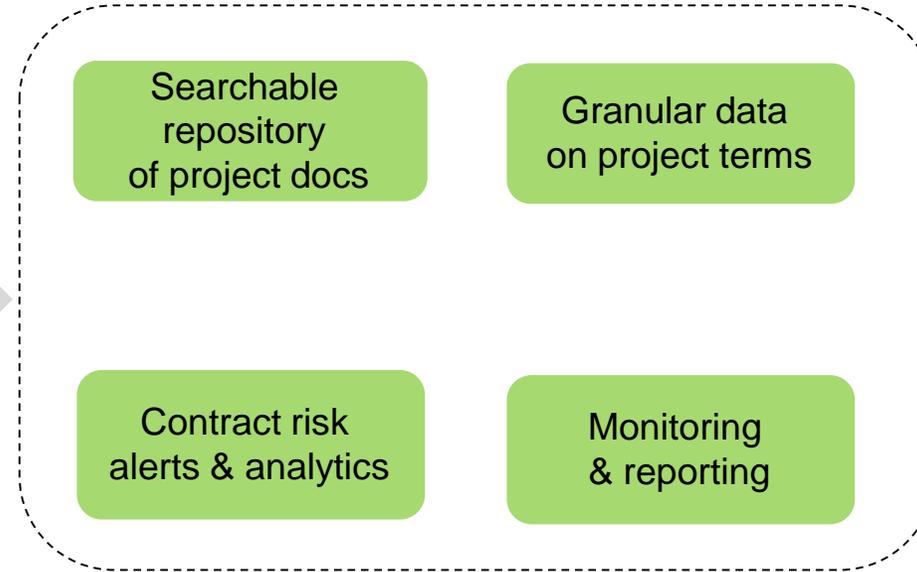
For qualifying infrastructure investments with a maturity of 10 years, capital charge for global project loans falls from 23.5 percent to 12.9%. With enhanced credit performance, capital charges could reduce to 9.7%. For emerging markets, capital charge can fall to 15%, and further fall to 11.6% with credit enhancement. For rated global infrastructure debt securities rated Baa/BBB, capital charge can fall from 20.0% to 15.7%. For Ba/BB securities, it can fall from 35% to 28.5%

The right technology tools can increase transaction velocity

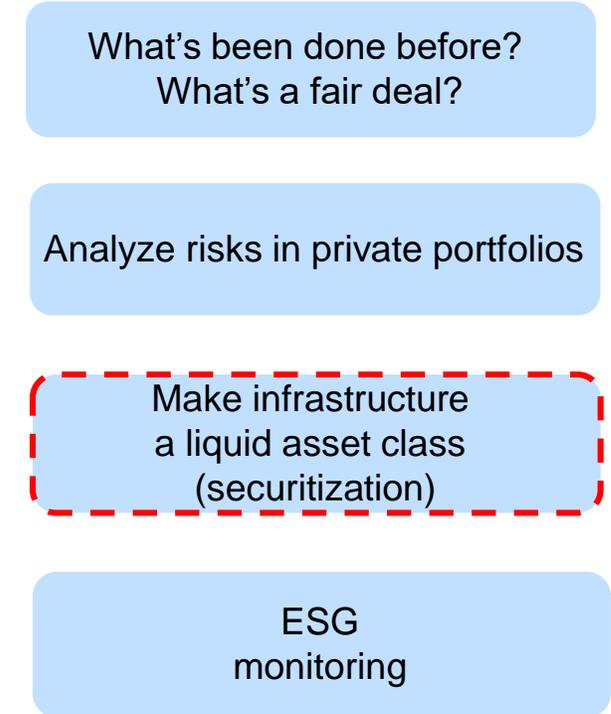
1. Gather data



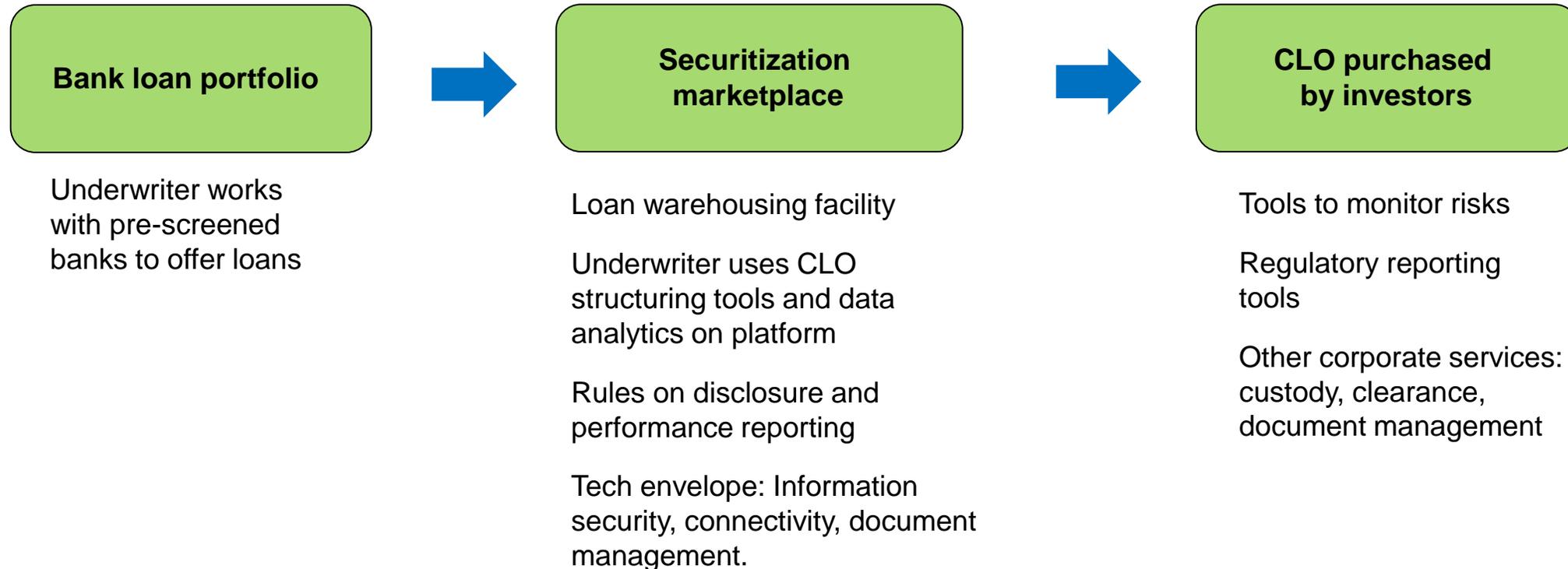
2. Data and tools (housed in an end-to-end platform)



3. Address frictions in securitization

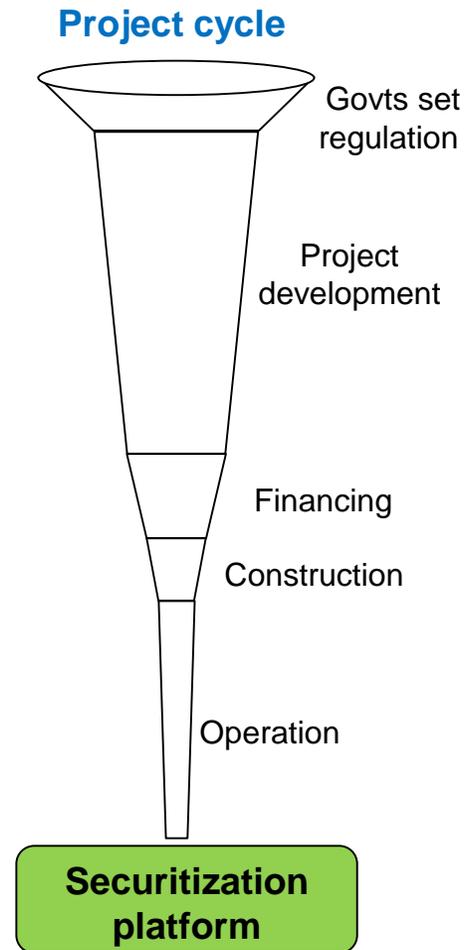
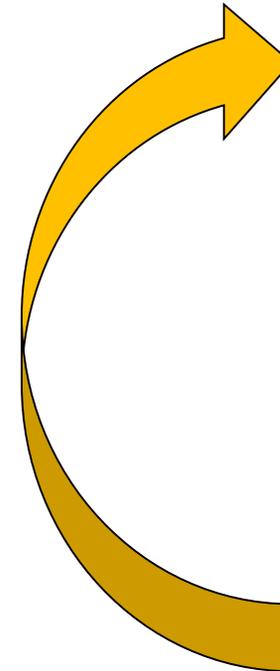


Build on Bayfront's experience to create a more efficient, liquid marketplace



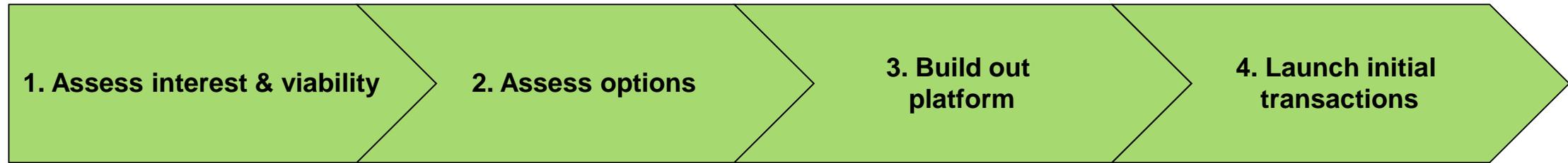
How securitization transforms the project cycle

- Instead of “structuring projects to be bankable”, lenders will force developers and governments to structure projects to be securitizable
- Linking to an exchange (quasi regulatory powers) forces document disclosure and transparency
- Securitization platform’s standards (including FAST Infra label) quickly become industry standard for new projects



Securitization can standardize infrastructure (as it did to real estate)
Projects that are not sustainable & transparent will be tougher to securitize

How to move forward



Assess business case

Identify potential sponsors & technology development options

Refine strategic options

Fundraising, ownership and governance

Go/ no go decision

Detailed project execution plan with milestones and deliverables

Full platform development, including technology and services procurement

Develop rules, governance, data sharing

Underwrite and launch initial transactions

Components of securitization platform

Element	Securitization platform
What is it?	Marketplace to acquire, warehouse, package, and sell loans. Houses document, structuring, and monitoring tools that all buyers and sellers can use. Has granular data on project terms and performance.
Customers	Sellers of loans: project finance banks, multilaterals, DFIs Buyers of loans: institutional investors such as insurance companies, pension funds, sovereign wealth funds
Ownership & capitalization	[\$200 million] in equity, [\$2 billion] loan warehousing facility (based in Bayfront's experience) Investors: exchange, pension funds, insurance companies, and banks
Data	Data on projects' terms, conditions, risks, and performance [InfraClear]
Structuring tools	Tools for CLO structuring, pricing and monitoring; risk analytics
Regulation/ capital relief	Work with key regulators (e.g., EIOPA)
Licenses and rules	Governed by rules around offerings, disclosure, performance reporting, etc. [EPPF, London Stock Exchange]
Technology envelope	Information security and management, document controls, ledgers [IBM]

Choices should be driven by needs of customers.



3. Market Participants' Q&A

- *Market Participants discussion and conclusion*

Technology enabled Platform: Market Participants consensus

Questions with possible options – Poll

Consensus on feasibility :

1

FAST Infra objective: do the proposals correctly address the industry challenges, as you see them?



- a) Proposals would address challenges
- b) Other challenges need to be included

c) Internal challenges exist and cannot be addressed by FAST-Infra

2

FAST Infra objective: will these proposals help sustainable infrastructure develop as a deep and liquid asset class?



- a) Yes
- b) Some degree of success can be expected

c) Sustainable infra requires an alternative solution

3

FAST Infra initiative implementation: should the solution be transformational or address a very focussed on a specific challenge?



a) Transformational

b) Focussed on a specific issue

4

FAST Infra focus area: should it address a sector e.g. energy or be across all sectors?



a) Address one sector

b) Go across all sectors

5

Resource commitment: will you commit time and financial resources to advance these proposals?



a) Likely to commit funds or resource

b) Unlikely to commit at this stage

6

FAST Infra next steps: would you be willing to participate in a half day focus design workshop?



a) Yes I will participate in a half day workshop

b) No I will not participate in a workshop

Conclusion: Playback on consensus of Market Participants



4. Next Steps

- *Recap today's agreements to propose next steps*
- *Plan for next workshop and implementation approach*

Proposed Next Steps

Market participants expression of interest and commitment to take this initiative forward will help drive next steps. Highlighted below are next steps for consideration

- 1 Establish roles & responsibilities, programme governance & plan
- 2 Agree implementation approach & timeframe
- 3 Arrange follow-up FAST-Infra workshops as required

Post finalising the participants, we will develop detailed next steps with a potential focus on targeted discussion groups

Appendix

- *Today's Participants*

Session attendees



- ◆ Michael Ridley, HSBC GAM
- ◆ Rashad Kaldany, Blue Like An Orange Capital
- ◆ Katherine Kort, Bank of America
- ◆ Martijn Tielens, Swiss Re AM
- ◆ Aslihan Gedik/Robert Koller, EPPF
- ◆ Giridhar Srinivasan/ Eric Parker/ Roger Singh, Infraclear
- ◆ Murray Simpson/ Lutamyo Mtawali/ Paul Hislop, IBM
- ◆ Christophe Dossarps / Cedric Van Riel, Source
- ◆ Siddharth Pisharody, Temasek
- ◆ Kinga Bosse, State Street
- ◆ Jean-Pascal Pham-Ba, Scale.NGO
- ◆ Peter Hegge /Sebastian Schroff, Allianz IM
- ◆ Michael Morcom / Jason Channell, Citi
- ◆ Heng Li, ICBC
- ◆ Christian Deseglise, HSBC
- ◆ Tony Lent, Capital for Climate
- ◆ Clemente del Valle, Andes University, Colombia
- ◆ Thomas Walenta, AIIB
- ◆ Paul Tregido/ Seth Merrin, Liquidnet
- ◆ Christopher Marks, MUFG
- ◆ Ash Thimmaiah /Jennifer Livingstone, HSBC
- ◆ Jean Marc Mercier /Kara Byun, HSBC
- ◆ Brett Orlando, Independent Consultant
- ◆ Charles Corbett, Standard Chartered
- ◆ Jill Beggs, Munich Re
- ◆ Michael Baldinger, UBS
- ◆ Marissa Drew, Credit Suisse
- ◆ Shuen Chan/ Marija Simpraga, LGIM

Contacts



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◆ Vikram Widge

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