



# General trends in the global PPP market

*Can international experience transform the Russian market?*

*Russian P3 Week*

*28 September 2021*

**Maud de Vautibault – Director practical tools and knowledge**

# About the Global Infrastructure Hub (GI Hub)



The GI Hub is the **dedicated infrastructure entity of the G20**



We support the G20 to drive an ambitious agenda on **sustainable, resilient and inclusive infrastructure**



We have a **global mandate** aligned with G20 priorities



**Partnerships and collaboration** are at the heart of what we do

# GI Hub bridges public and private interests to support the G20's agenda on sustainable, resilient and inclusive infrastructure





# General trends – stimulus

# A changing landscape for infrastructure post-COVID



1

Infrastructure stimulus as part of the recovery. But in the medium/long term the pandemic fiscal measures (17Tn) might reduced fiscal space for infrastructure investment



- Global Financial Crisis fiscal measures ~ US\$2tn.
- COVID-19 fiscal measures ~ US\$17tn<sup>1</sup>.
- This has resulted in a reduced fiscal space for infrastructure investment.

2

In addition to dealing with the pandemic, there is a need to address **climate change**



- To achieve net zero clean energy investment will need to triple by 2030 to around US\$4tn<sup>2</sup>.
- Renewable energy addresses only 55% of the emissions needed to reach the 1.5°C target<sup>3</sup>. There is a need to explore other approaches .

3

And a **rapidly growing population** showing signs of divergence in inequality especially in emerging economies.



- The world is showing signs of recovery but there are clear divergences across regions.
- Inequalities and poverty rates have worsened, and debt levels have risen sharply.

<sup>1</sup> International Monetary Fund, 2021. *IMF Fiscal Monitor April 2021* for the 24 G20 economies

<sup>2</sup> International Energy Agency (2021). *Net Zero by 2050: A Roadmap for the Global Energy Sector*

<sup>3</sup> Ellen MacArthur Foundation (2019). *Completing the picture: How the circular economy tackles climate change*

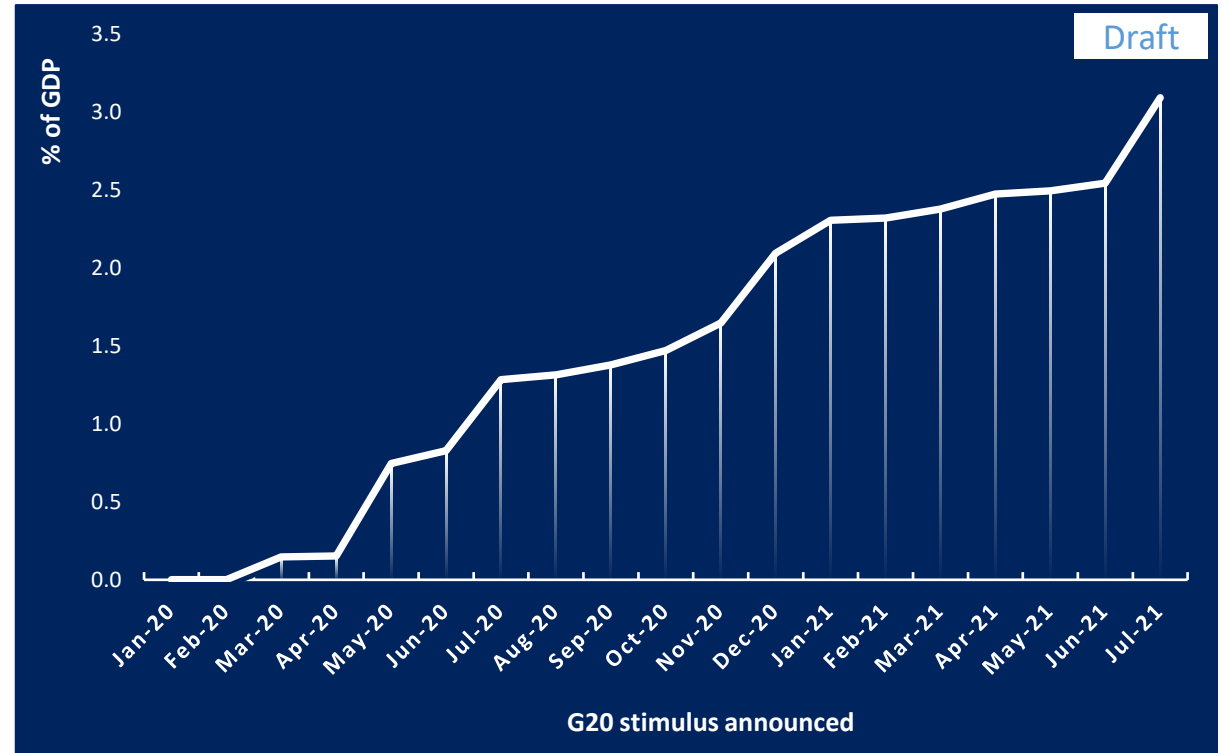
# Governments worldwide are increasingly using infrastructure for economic recovery



## InfraTracker

*to be released in Nov. 2021*

To provide trends and insights from recent infrastructure-as-a-stimulus announcements (national governments only) to help governments make more informed decisions on achieving transformative outcomes through infrastructure post-COVID.



# Highlights from GI Hub's InfraTracker – coming in November 2021



## G20 total stimulus

**US\$3.1tn** of infrastructure as a stimulus has been announced by national governments since February 2020. This is around **3.1% of G20 GDP<sup>5</sup>**.

## Transport sector

The **transport sector** accounts for most of the stimulus (around 26% of total stimulus), with **social infrastructure** (around 19% of total stimulus).

## Jobs, growth & sustainability

All infrastructure achieves job creation and economic growth. We have also seen strong trends in **achieving environmental sustainability outcomes**, especially in terms of **decarbonisation**.

## Commitment to infrastructure

This demonstrates a high level of commitment from G20 governments to infrastructure. Furthermore, a strong trend was observed towards investing in better quality infrastructure.

## Rail and roads

**Rail and road** investments comprise more than 60% of stimulus for the transport sector. **Rail** in particular has a high focus on achieving transformative outcomes not just in terms of jobs and growth but also in **decarbonisation** and **inclusive mobility**.

## Emerging trends

We have also seen strong trends in achieving **inclusive** (mobility and affordability) and **digital connectivity** outcomes through social and digital infrastructure.

<sup>5</sup> Using 2020 GDP figures from the IMF



# General trends for PPPs and evolution



# PPP model – definition

*PPP Knowledge Lab – world Bank*

*A long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance.*

## Definition (PPP Guidelines NSW, Australia) :

- Create public service-enabling infrastructure assets through public and/or private sector financing
- Include a contribution by Government through land, capital works, availability payments, risk sharing, revenue diversion or other supporting mechanisms; and/or
- Engage the private sector for a specified period for the delivery of related services

**Functional approach** (GI Hub Improving Delivery Models appendix):

- Design
- Built or rehabilitate
- Finance
- Maintain
- Operate

*To encompass the various forms : BOO, BOOT, BOT, DBFM, P3, DBFMO, PPP....*

## Two basic form :

- **Government's-pays PPPs** where the private sector revenue stream takes the form of an availability payment from Government or/"**Social Infrastructure PPPs**" (used for schools, hospitals, prisons, public buildings)
- **Users-pays PPPs** where the source of revenue takes the form of charges paid by users the infrastructure. The PPPs are often called "**economic infrastructure PPPs**" (used for roads, railways...)

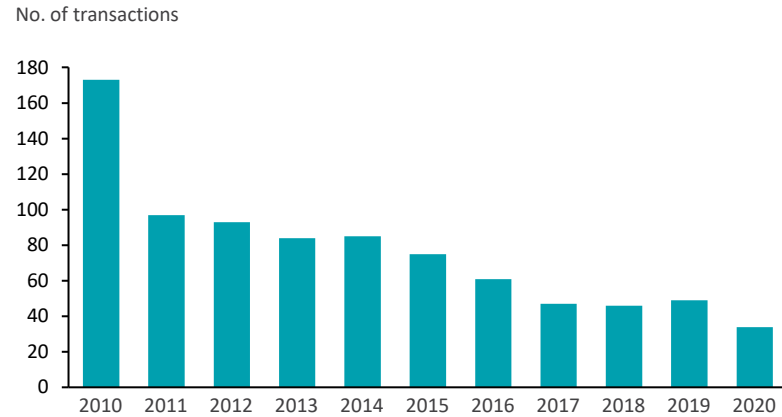


# PPP model trends – observations and challenges

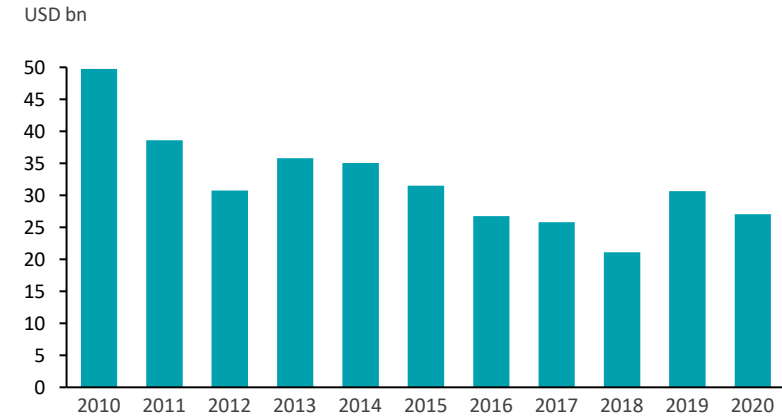


Number of primary market PPP transactions

Developed

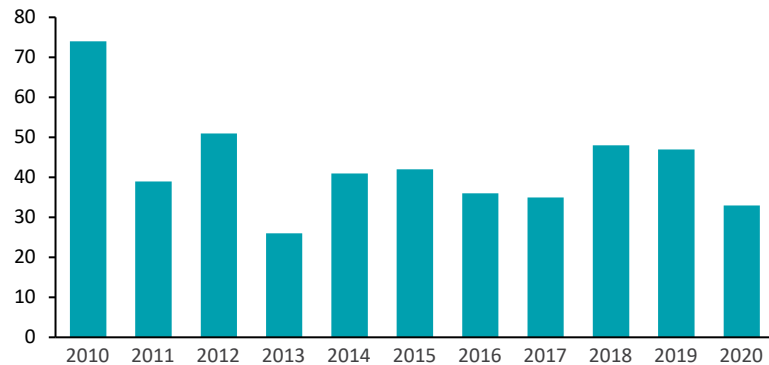


Value of primary market PPP transactions

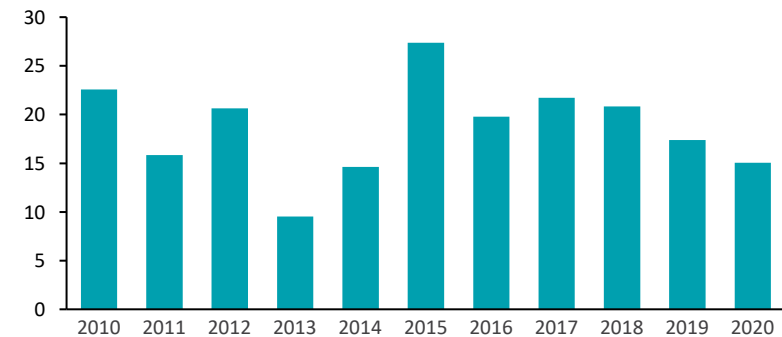


No. of transactions

Emerging



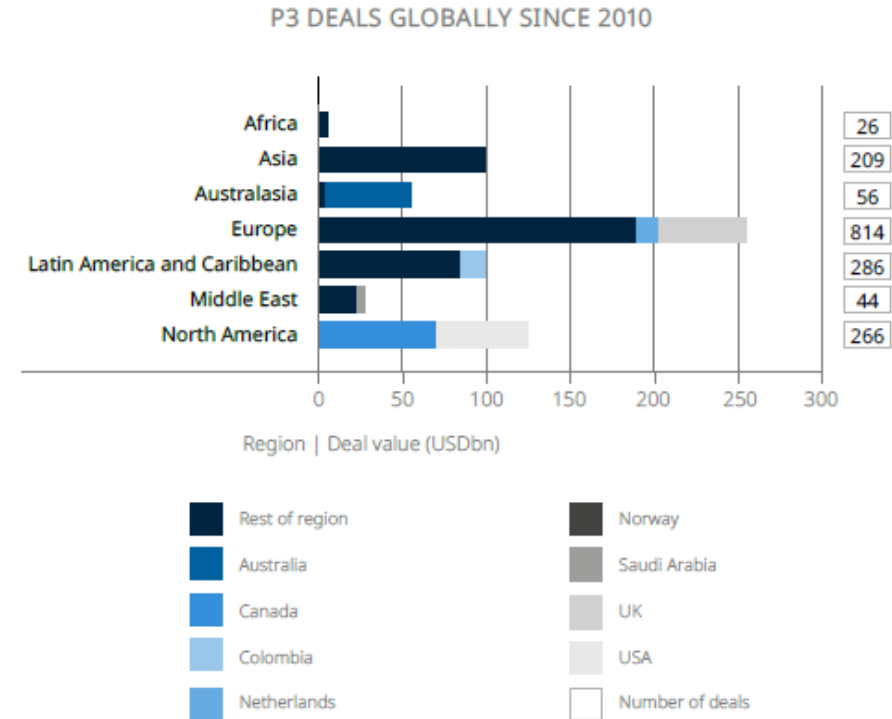
USD bn



Source: Global Infrastructure Hub based on IJ Global data.

# PPP model trends – observations & challenges

- PPP average 10-30% of the total public procurement
- PPP model/ more specifically Government pays PPPs (PFIs) **challenged** in some jurisdiction over the past few years. **Why?**
  - Higher financing costs & added value private financing?
  - Value for money
  - “Hidden” debt/fiscal transparency
  - Performance issues
  - Complexity (due diligence) & lack of flexibility
  - Risk transfer
  - Insolvency
- PPP users-pay model (concession) for economic infra. (transport, telecom, utilities) “less contested”<sup>1</sup>
- In **emerging** markets **blended finance**, guarantees (role of MDBs) with mix-models/question of contingent liabilities and financial transparency



Source: Inframation

*The illusion saying “PPP is the solution to close the funding gap” is over – PPP can provide short-term fiscal space and be used to scale-up large programs, but must be assessed carefully*

# PPP model trends – observations and challenges



## Challenges remain:

- **Investment-decision making process/project appraisal not always streamlined nor consistent:**
    - Should be applied regardless the type of contract (cost-benefit-analysis, economic case/business case)
    - Contractual model selection often triggers an investment-decision making process
    - Question of thresholds and approvals
    - Improper cost estimation approaches
  - **Complexity of legal regimes and contractual categories' definition** often adds confusion:
    - Legal regime often adds confusion (Demand risk)
    - Rigidity of contractual models (where a “mix” of models is needed)
    - Cap on public and private level of financial contribution –
    - Level of debt guarantee by Governments
  - **Procurement and packaging strategies, market consultation overlooked**
  - **Complexity/rigidity** of procurement process not always aligned with the sector rapid evolution (cutting-end innovations) – Competitive dialogue and unsolicited bid (maturity/transparency)
  - **Mis-understanding of risk allocation** and risk management
  - **Lack of contract standardization** (scaling-up large programs)
  - **Ideological approaches vs rational and pragmatic approaches**
-

# PPP model trends – a pragmatic approach



- PPP is just an “instrument”, one of the tools the public contracting authority can use
- **Pragmatic** and **agnostic** approaches (without ideology)
- Evolution of the model (the model is not the problem only the “usage” of it):
  - **Suitability** : PPP is not always the right model/**suitability is key** (large programs/replicability/leveraging private sector financing and capabilities/unbundling metro projects using various contracting approaches)
  - **Functional approaches** scoping the needs of the contracting authority,
  - **Investment decision making process**: identify needs, economic appraisal and key risks, **approve budget funding** at business case stage, **regardless the type of contract/**
  - **Flexibility** of funding and financing (public contribution and private finance)/mix models
  - **Accountability** (local communities) and clear **outcomes**, monitored
  - **Fiscal transparency** and contingent liabilities rigorously assessed
  - **Transparent accounting treatment** and reporting on/off balance sheet
  - **Risks** : lenders/equity (level of risks/security package) – construction companies (risk management)
  - Contract-out at a sufficient level of **design maturity** : PPP is a fixed-price contract, another approach should be chosen for large and complex infrastructure where the level of uncertainty is too high:
    - Early contractual involvement/Progressive design/Collaborative contracting
- Allow **innovation** in the public procurement “space” – To produce expected outcomes coming from the contract “global” scope (design, construction, maintenance and operation) and seek private sector innovation

# Trends PPP model – a pragmatic approach



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Home / Resources / Project Case studies - Global Infrastructure Hub / Standardised state financing program for the development of public schools

CASE STUDIES

PUBLICATION DATE 20 SEPTEMBER 2021

## Standardised state financing program for the development of public-school infrastructure through PPP



### Scaling-up programs through PPPs

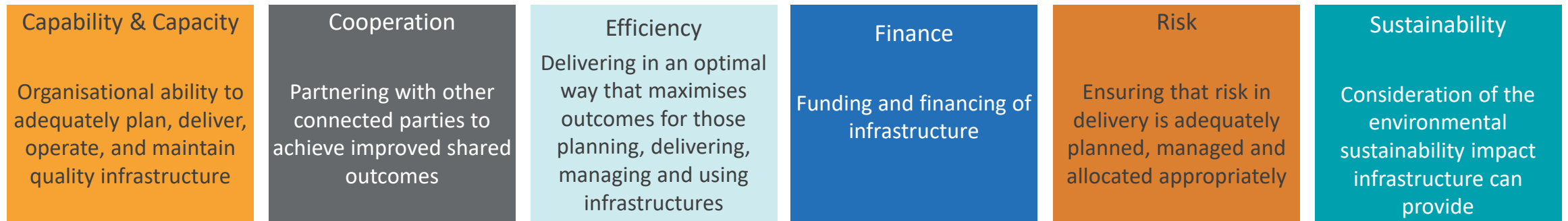
- Standardization and state support (guarantees schemes)
- Scaling-up to go-faster : Belo Horizonte schools Brazil
- Greater involvement of State as a shareholder; evolution of the PPP model : Welsh MIM model – 21<sup>st</sup> Century school project (creation of joint-venture up to 20% owned by the government with private investors)/Eurostat validation

# Trends PPP model – a pragmatic approach



The Improving Infrastructure Delivery Models (IDM) Initiative provides a detailed snapshot of the improvements made by government and industry to address common challenges in the infrastructure sector. The core component of the IDM initiative is the Delivery Challenges and Improvements Framework. The framework comprises:

**28** Challenges and **61** improvements identified across **6** themes



**103** case studies, examples and resources exemplifying the improvements identified across these themes

The Improving Delivery Models Initiative will launch in October 2021 at [www.gihub.org](http://www.gihub.org)

# Other examples







USA

# Bundling of public private partnerships (PPPs) to create efficiencies and economies of scale

## Context

- In light of Pennsylvania having over 4,500 bridges classified as structurally deficient, the Pennsylvania Department of Transportation (PennDOT) decided to prioritize infrastructure repair and replacement work

## Problem

- PennDOT estimates it would take 8-12 years to replace the bridges through a traditional procurement process
- Many of the bridges are located in rural areas with low traffic volumes, hence PPP solutions are not attractive for investors

## Innovation

- 558 of the bridges to be replaced were bundled together as part of a single PPP procurement package
- The PPP deal involves the design, build, finance, and maintenance (DBFM) of the bridges over a 28-year term
- Selected bridges are of similar size and design, allowing for standardization

Pennsylvania Rapid Bridge Replacement P3

Innovation Type: Frontier extending

Lever Type: Risk Management

Useful Links:

- [PennDOT project profile](#)
- [Plenary Walsh Keystone Partners project profile](#)
- [US State Bridge Bundling Programs](#)

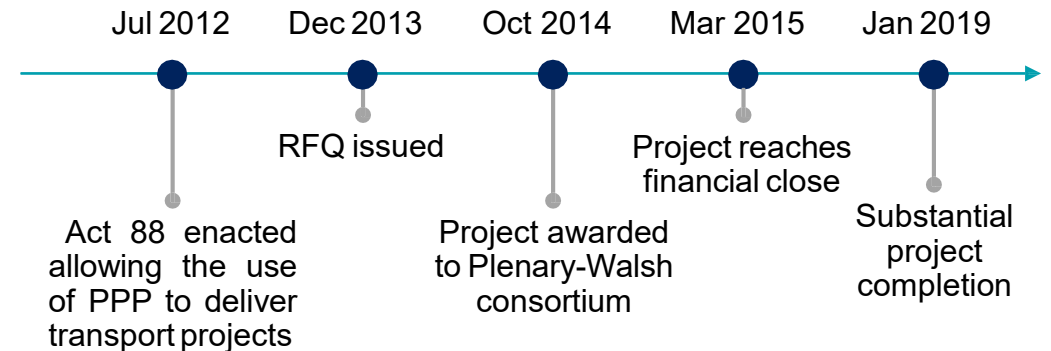


## Innovation Details

## Stakeholders Involved

- PennDOT — Project owner
- Plenary Walsh Keystone Partners (PWKP) — Consortium responsible for delivering PPP project
- Welsh Investors — Project sponsor and equity investors in the PWKP consortium
- Plenary Group — Project sponsor and equity investors in the PWKP consortium; also acting as financial arranger

## Timeline





USA

# Bundling of public private partnerships (PPPs) to create efficiencies and economies of scale



Pennsylvania Rapid Bridge Replacement P3

Innovation Type:  
Frontier extending

Lever Type:  
Risk Management

Useful Links:

- [PennDOT project profile](#)
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- [US State Bridge Bundling Programs](#)



## Results/Impact

- Bundling of the bridges is expected to reduce the total cost of the project by 20%; the average cost of building and maintaining each bridge in the PPP contract is USD 1.6M, significantly lower than the USD 2M estimated through a standard process
- Construction of bridges is expected to take 4 years under the PPP bundling procurement method, much faster than the 8-12 years estimated using a traditional procurement method
- As of January 2019, more than 500 bridges have been completed

## Key lessons learnt



Bundling of assets provides the scale necessary for smaller projects to be procured viably as PPPs



Packaging assets with similar characteristics allows for more efficient delivery through (1) standardization of design and (2) innovative delivery methods (e.g., prefabrication of bridge components off site)



PennDOT had the necessary institutional capabilities to set up and deliver the PPP; the PennDOT's PPP Office and the PPP Board had been established under the 2012 Public-Private Transportation Partnerships Act



Indonesia

# Promote private investments in infrastructure projects by providing government guarantees



## Context

- The rapid growth in Indonesia's urban areas compared to other countries in Asia, coupled with migration to cities required a rapid scale up in infrastructure investment by the Indonesian government to provide adequate urban infrastructure for its people. There was a 3% increase in urban population year on year during the period between 2000-2010

## Problem

- To accelerate the development of its infrastructure, Indonesia needed to invest more than the annual budgetary allocation in greenfield infrastructure
- Due to prevailing fiscal constraints, the government found it challenging to have access to the funds needed to finance infrastructure projects
- To attract international investors, Indonesia needed to establish a strong track record for successful PPP delivery

## Innovation

- The Government of Indonesia set up Indonesia Infrastructure Guarantee Fund (IIGF) as a state-owned enterprise (SOE) under the Ministry of Finance (MoF)<sup>1</sup>
- The IIGF leverages private investments in infrastructure projects by providing government guarantees or credit enhancements to PPP projects that are financially feasible
- Given the limited capital base, the IIGF guarantees are backed up by co-guarantors, including the MoF and the World Bank Group

Indonesia Infrastructure Guarantee Fund

Innovation Type: Frontier Traversing

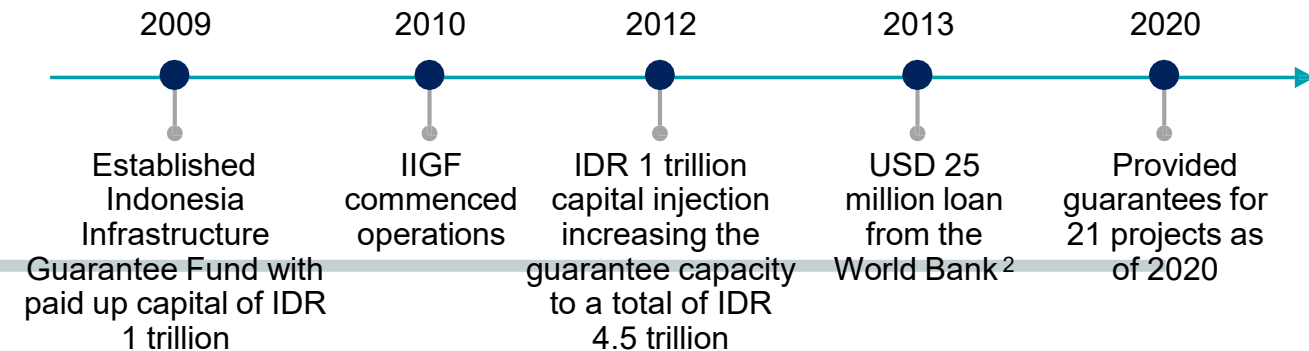
Lever Type: Risk Management

Useful Links:

## Stakeholders Involved

- Government of Indonesia
- World Bank Group
- Japan International Cooperation Agency
- Asian Development Bank

## Timeline



Infrastructure Hub

1. IIGF is capitalised by contribution from the Government of Indonesia's budget (authorised capital of approximately USD 1 billion). In addition, IIGF can access financial assistance provided by the World Bank to provide World Bank-supported IIGF guarantees.

2. In addition, MIGA provided a USD 50 million co-guarantee commitment



Indonesia

# Promote private investments in infrastructure projects by providing government guarantees



## Results/Impact

- IIGF **provided advice to contracting agencies on improving PPP project preparation** so that projects meet its appraisal standards and comply with applicable regulations and criteria prior to guarantee issuance
- The availability of the **IIGF guarantee increased the certainty of private sector participation and financing for infrastructure** development in Indonesia
- IIGF has provided guarantees to 21 PPP projects worth IDR 210 trillion (USD 14.6 billion) and two guarantees for a direct loan worth IDR 6 trillion (USD 416 million) between 2010-2020<sup>1</sup>

## Key lessons learnt



**Procurement:** The IIGF had to overcome hurdles to reach a consensus with other government institutions and ministries when it was first established. It also struggled to convince investors to join government projects, so the IIGF did not perform well in the beginning. It was essential to show how a guarantee fund can prove valuable to long-term infrastructure projects by facilitating a better stakeholder engagement



**Governance:** As the single body to appraise infrastructure PPPs that sought guarantees, IIGF provided consistency, clarity and standardised procedures, as well as better management of MOF fiscal risk vis-à-vis normal government guarantees



**Governance:** It was critical for the IIGF to build an ecosystem with experts in alternative financing and PPP schemes such that IIGF's role as development risk manager was strengthened

Indonesia Infrastructure Guarantee Fund

Innovation Type:  
Frontier Traversing

Lever Type:  
Risk Management

Useful Links:



India

Infrastructure Investment Trusts

Innovation Type: Frontier Traversing

Lever Type: Financing

Useful Links:

# Provide long term refinance via infrastructure investment trust mechanism



## Context

- In 2014, the Securities and Exchange Board of India (SEBI) introduced Infrastructure Investment Trusts (InvITs) to provide an avenue for infrastructure developers to divest operational projects and reduce their leverage
- India had difficulty attracting and retaining long term capital from overseas. Therefore, the Indian government introduced various initiatives to demonstrate domestic confidence to foreign investors

## Stakeholders Involved

- Securities and Exchange Board of India
- Digital Fibre Infrastructure Trust
- India Grid Trust
- India Infrastructure Trust
- Indian Highway Concessions Trust
- IndInfravit Trust
- IRB Infrastructure Developers Limited
- IRB InvIT Fund
- MEP Infrastructure Investment Trust
- National Highways Infra Trust

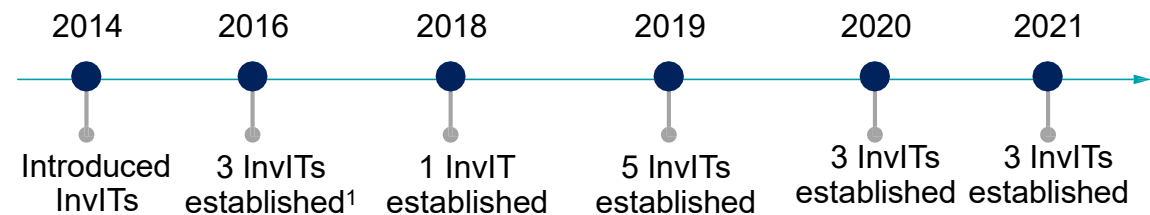
## Problem

- The global financial crisis resulting in a weak macroeconomic and inflationary environment, coupled with a policy gridlock, and political instability, had led to the sluggish growth of infrastructure
- The Indian infrastructure sector needed substantial investments to fulfill the demands of the growing economy
- There was limited entry for foreign portfolio investors to enter the capital markets because of restrictive foreign direct investment policies

## Innovation

- InvITs provided the developers and the government (where they had an equity portion) an opportunity to monetise their assets by pooling multiple projects in a single entity, thereby releasing capital for further deployment in new projects
- Individual and institutional investors pooled money and invested in income-generating assets. The cashflow generated was distributed among investors as dividend income
- SEBI provided well-structured trust requirements – having a trustee, sponsors, an investment manager, and a project manager in place. Each had a crucial role to play in running an InvIT.

## Timeline



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<sup>1</sup>An InvIT is required to get listed within three years from the date of registration.



India

Infrastructure Investment Trusts

Innovation Type: Frontier Traversing

Lever Type: Financing

Useful Links:

# Provide long term refinance via infrastructure investment trust mechanism



## Results/Impact

- **The Indian InvIT market has supported formation of 15 InvITs to date** – in roads, power transmission, gas transmission and telecom towers sectors, amounting to an aggregate initial offer value over INR 700 billion (USD 9.59 billion)
- **Robust and predictable regulatory regime** – the Reserve Bank of India has relaxed the Indian foreign investment and exchange control regulation to permit foreign investors to invest in units of InvITs, within an overall ceiling of 20% of their net worth
- **A new source of liquidity for government** – the trusts augmented government's revenues and increased financing for critical sectors, including transportation and energy, by carving out a state-run entity into a fully-owned subsidiary

## Key lessons learnt



**Regulatory frameworks:** Favourable tax regimes where InvITs were exempted from dividend distribution tax (subject to certain conditions) were established – this drove appetite and comparatively better yields



**Regulatory frameworks:** InvITs must hold investments in infrastructure assets for a minimum period of 3 years, which can ensure that InvITs do not make speculative investments



**Procurement:** 80% of the assets of the InvIT were required to be projects that have commenced commercial operations and have all requisite approvals in place. This ensured that the InvIT was viable in terms of return on capital and lower development risk



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#### Contact

Maud de Vautibault

[maud.devautibault@gihub.org](mailto:maud.devautibault@gihub.org)



[www.gihub.org](http://www.gihub.org)



Global Infrastructure Hub



Gi\_hub

#### Australia Office

(Global Headquarters)

Level 23, 68 Pitt Street

Sydney NSW 2000

AUSTRALIA

#### Canada Office

90 Richmond Street East

Suite 102

Toronto Ontario M5C 1P1

CANADA

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