



Global Infrastructure Hub

PPP and Sustainable Growth – Asia PPP Practitioners' Network - 29 November 2017

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Global Infrastructure Hub

A G20 initiative

The GI Hub is an independent organisation, established by the G20 to increase the flow and quality of infrastructure investment opportunities in all countries

Initial Funding partners



Australia



United Kingdom



Saudi Arabia



Republic of Korea



People's Republic of China



New Zealand



Singapore



Mexico

The GI Hub is staffed by international infrastructure specialists from both the public and private sectors

Global Infrastructure Hub

The mandate – from the G20 Leaders' Communique, Brisbane, November 2014

Five focus areas



Promoting **Leading Practices** that can be replicated at scale for transformational impact



Building a global **Project Pipeline** to help match investors and projects



Identifying and addressing **Data Gaps** that matter to governments and investors



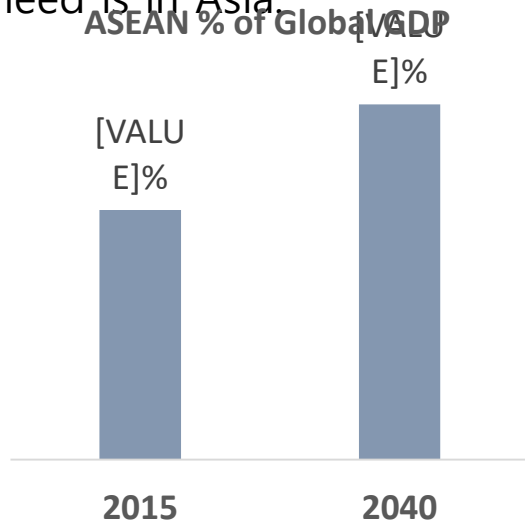
Building Capacity within public sector and other stakeholders



Creating a global **Knowledge Network** of infrastructure leaders and practitioners in Governments, International Organisations & the Private Sector

Global Infrastructure Outlook

- Infrastructure is the foundations of a stable and productive society. The right approach to providing and maintaining transport, energy, water, housing, and communication infrastructure is vital to create a strong and competitive economy.
- Global Infrastructure Outlook reveals infrastructure needs for 50 countries and 7 sectors. Key findings include:
 - In 2040 the world population will be 9 billion. With growth concentrated in cities and urban areas.
 - World currently spends about 3% of GDP on infrastructure however this needs to increase to 3.5% to meet 'infrastructure needs' out to 2040. And higher if it SDGs are to be met by 2030. More than 50% of global need is in Asia.



Source: GI Hub: 2017 Global Infrastructure Outlook

Asia Infrastructure Investment Need to 2040

	USD (trillion, 2015 \$)
Need	\$51
Spend	\$46
Gap	\$4.6
Need + SDGs (2030)	\$53
Gap	\$6.1

PPP and Sustainable Growth

We know the need for infrastructure is large

We know there are large amounts of private sector savings building up

- 1. Private sector investment in infrastructure**
- 2. PPPs and sustainable growth**
- 3. Retaining the economic benefits of PPP infrastructure through the asset lifecycle**

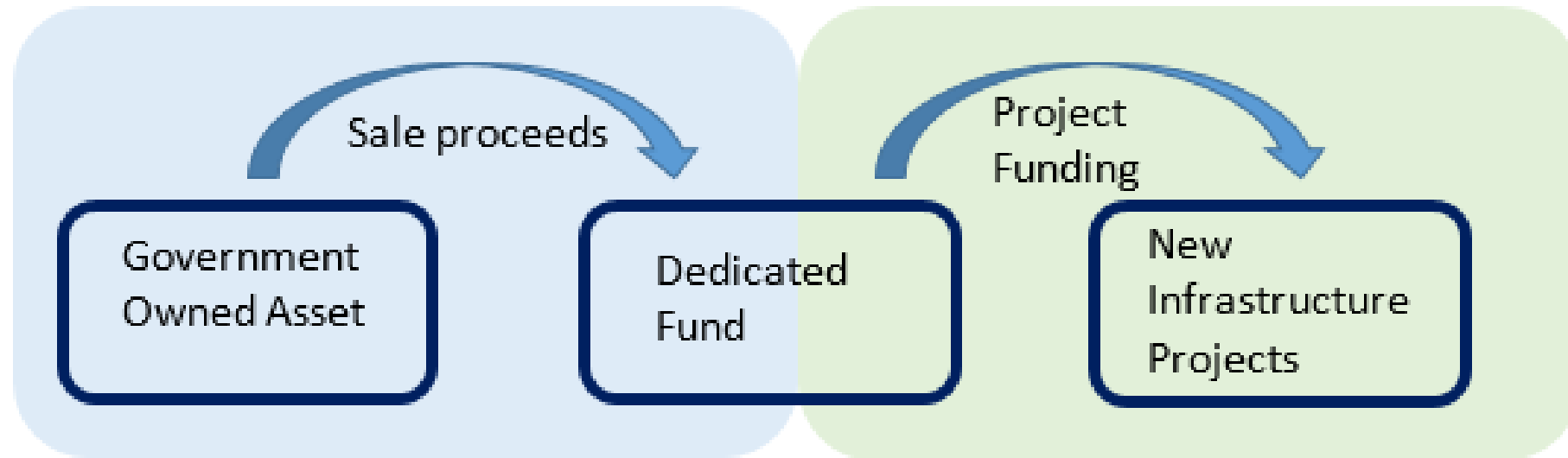
PPP and Sustainable Growth

- Infrastructure is the backbone of economic growth, well-being and social stability
- In advanced economies, IMF (2014) found that a 1% GDP increase in investment spending raises the level of output by about 1.5% four years after the increase
- Benefits depend on a number of factors –

the output effects are bigger in countries with a high degree of public investment efficiency - where additional public investment spending is not wasted and is allocated to projects with high rates of return

*In countries with **high efficiency of public investment**, the return in output is about **2.6%** over the 4 year period.*

PPP and Sustainable Growth – Asset Recycling



GI Hub 2017 Annual Global Infrastructure Survey

REPORT HIGHLIGHTS



90.3% of investors want to increase their investment into infrastructure

This is an increase from 65% last year

● 2017 ● 2016



37.5% of investors invest in emerging markets

This is an increase from 20% last year

● 2017 ● 2016

Of those already investing in emerging markets

82% want to increase their investment

Investors most optimistic about deal-flow in **EMERGING MARKETS**



85% of respondents expect the pipeline of projects will grow

- **186** infrastructure leaders took part in the survey. This is one of the largest of such surveys, involving C-level executives, investment directors and senior advisers in the infrastructure sector.

- Survey respondents represented **USD7 trillion** in assets under management.
 - This accounts for approximately **10%** of global assets under management.

Private Sector Investment in Infrastructure



Mapping of Instruments for the financing of Infrastructure

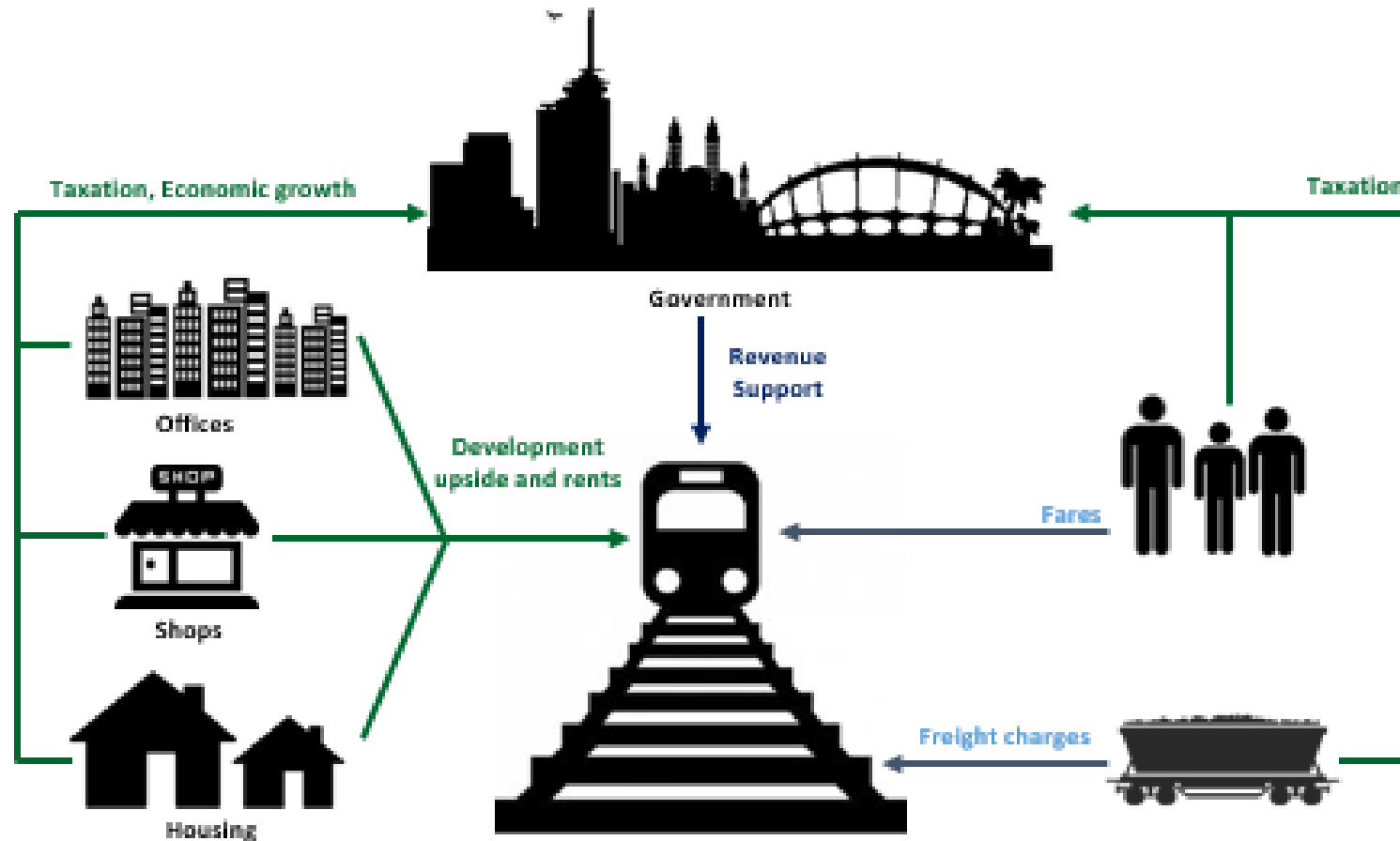
- Diversifying instruments and optimizing risk allocation
- Finance structures and instruments that match the preferences, profile and capabilities of investors
- Range of instruments that may complement traditional sources

Modes		Infrastructure Finance Instruments		Market Channels
Asset Category	Instrument	Infrastructure Project	Corporate Balance Sheet / Broader Entities	Capital Pool
Fixed Income	Bonds	Project bonds	Corporate bonds, Green bonds	Bond indices, Bond funds, ETFs
		Municipal, Sub-sovereign bonds		
		Green bonds, Sukuk	Subordinate bonds	
Mixed	Loans	Direct/Co-investment lending to Infrastructure project, Syndicated project loans	Direct/Co-investment lending to infrastructure corporate	Debt funds (GPs)
			Syndicated loans, Securitized loans (ABS), CLOs	Loan indices, Loan funds
Mixed	Hybrid	Subordinated loans/bonds, Mezzanine finance	Subordinated bonds, Convertible bonds, Preferred stock	Mezzanine debt funds (GPs), Hybrid debt funds
Equity	Listed	YieldCos, Closed-end funds	Listed infrastructure & utilities stocks, Closed-end funds, REITs, IITs, MLPs	Listed infrastructure equity funds, Indices, Trusts, ETFs
	Unlisted	Direct/Co-investment in infrastructure project equity, PPP	Direct/Co-investment in infrastructure corporate equity	Unlisted infrastructure funds (GPs)

PPP Project Preparation

- Enabling environment
- Long term planning
- Revenue sources
- Risk allocation
- Feasibility (technical, environmental and social)
- Risk management and mitigation
- Government capacity
- Pipeline
- Transparency

Project Revenue Sources



Risk Allocation in PPPs

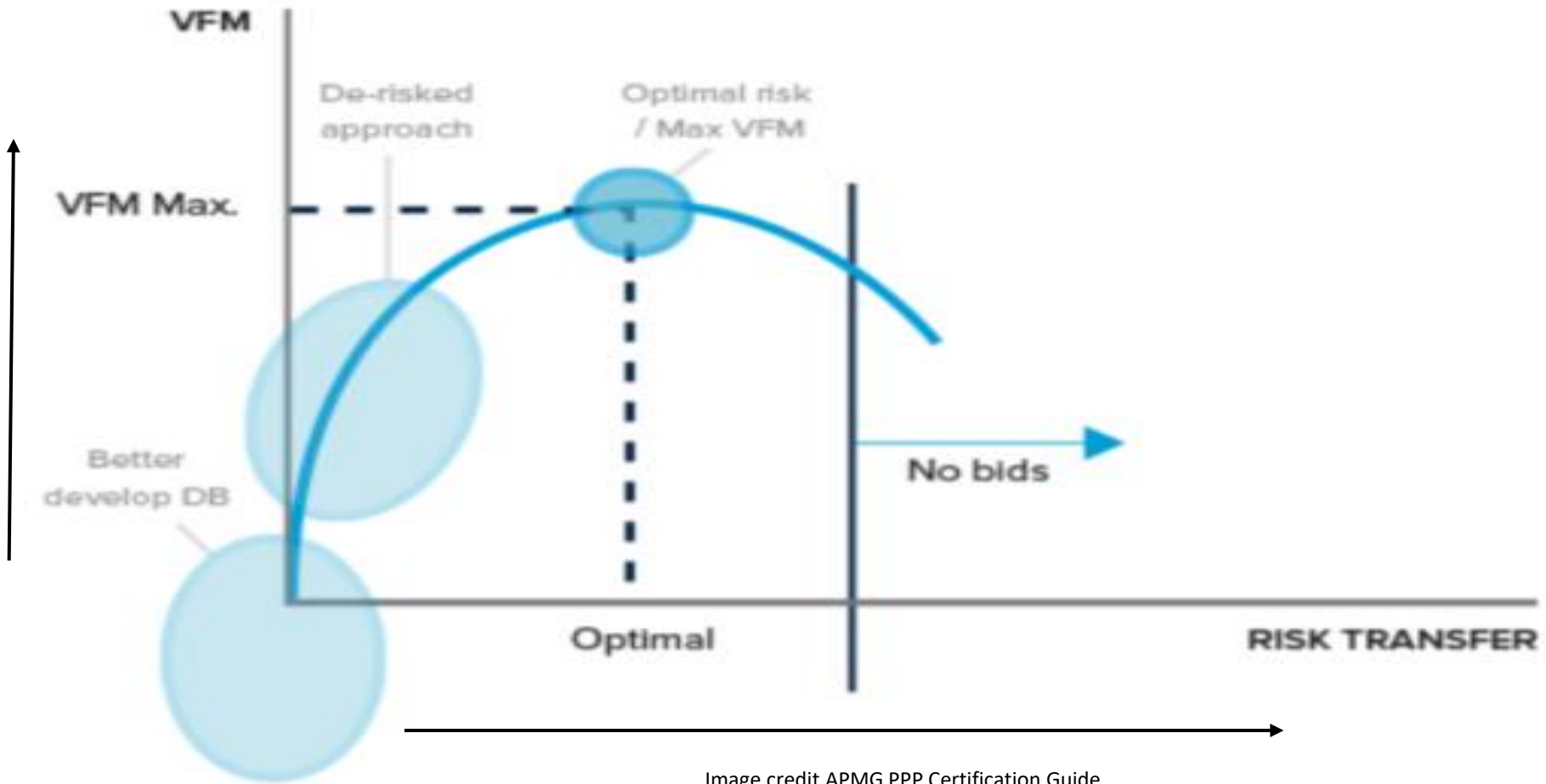


Image credit APMG PPP Certification Guide

GI Hub PPP Risk Allocation Tool



ENERGY



TRANSPORT



WATER & WASTE

- **12 risk allocation matrices for 12 project types**
- Looks at each key risk with the aim to describe a fair and considered distribution as between the public sector and the private sector aimed to stand the test of time
- Additional commentary on:
 - the **rationale**, typical **mitigation measures**, possible **government support arrangements**
 - a comparison between developed and emerging markets

GI Hub PPP Risk Allocation Tool



The tool is a reference guide to assist with understanding of typical PPP risk allocation arrangements


GI Hub PPP Risk Allocation Tool

<https://ppp-risk.gihub.org/>

Allocating Risks in Public-Private Partnership Contracts

Understanding risks is essential to every PPP agreement. Search below for how to best allocate risks between public and private sectors.

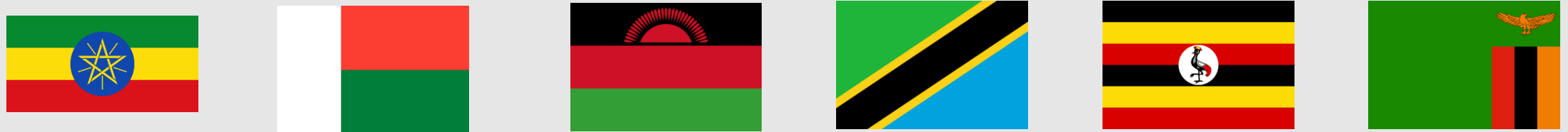
[DOWNLOAD FULL REPORT](#)

Search all projects and risk types... 

All Project Types ▼ | All Risk Types ▼ | Select Variable: Developed Emerging

[Question and Answer Page](#) [From the Blog](#) [Español](#) [政府和社会资本合作合同风险分配](#)

GI Hub PPP Risk Allocation Workshops



GI Hub PPP Risk Allocation Workshops



Retaining Economic Benefits of PPP Infrastructure

- **GI Hub PPP Contract Management Tool (early 2018)**
 - What happens after financial close? How do you ensure value for money?
 - Informed by data on 250+ projects globally (representative by region and sector)
 - Detailed case studies on 25 projects
 - Practical guidance on issues like team set-up, insolvencies, variations, disputes, terminations, renegotiations – with real life case study examples!
- Workshopped with 15 countries in Asia and Latina America in November 2017
- Expected to be finalised first quarter 2018

Concluding Remarks

1. Private sector investment in infrastructure

- Growing infrastructure need
- Willing private sector investors – 90.3% looking to increase their exposure to infrastructure
- Opportunity on both supply side and demand side is increasing - key is in project preparation and project structuring – it takes time

2. PPPs and sustainable growth

- PPP and sustainable growth can work together
- Key is in delivering quality infrastructure – includes social and environmental considerations

3. Retaining the economic benefits of PPP infrastructure through the asset lifecycle

- Maintenance and effective PPP contract management

Thank you!

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