

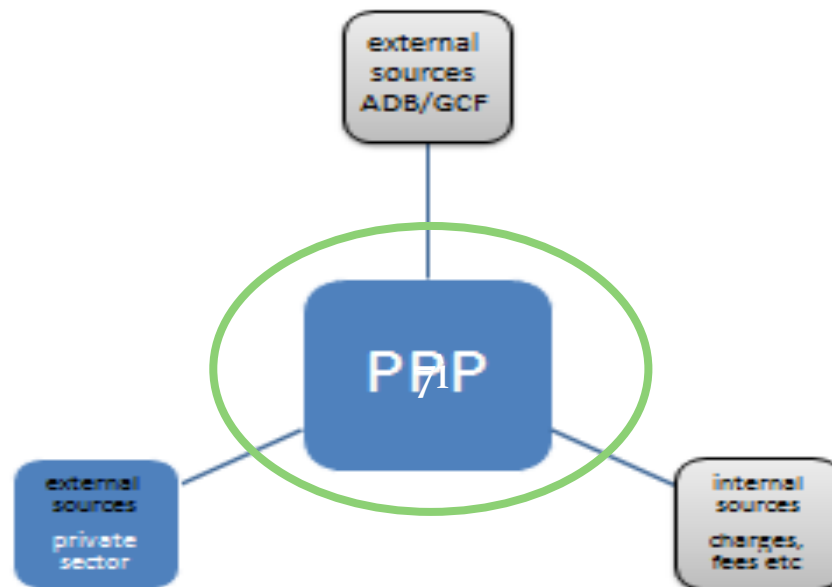
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PPP Mechanisms for Sustainable Cities

Hubert Jenny
hjenny@adb.org

Effective PPP: VALUE FOR MONEY

Where are we?



Why do our clients want PPP?

- ❖ DMCs want to deliver more infrastructure and better services through access to:
 - Finance (Private Institutional and Commercial)
 - Skills from private sector lacking in the public sector

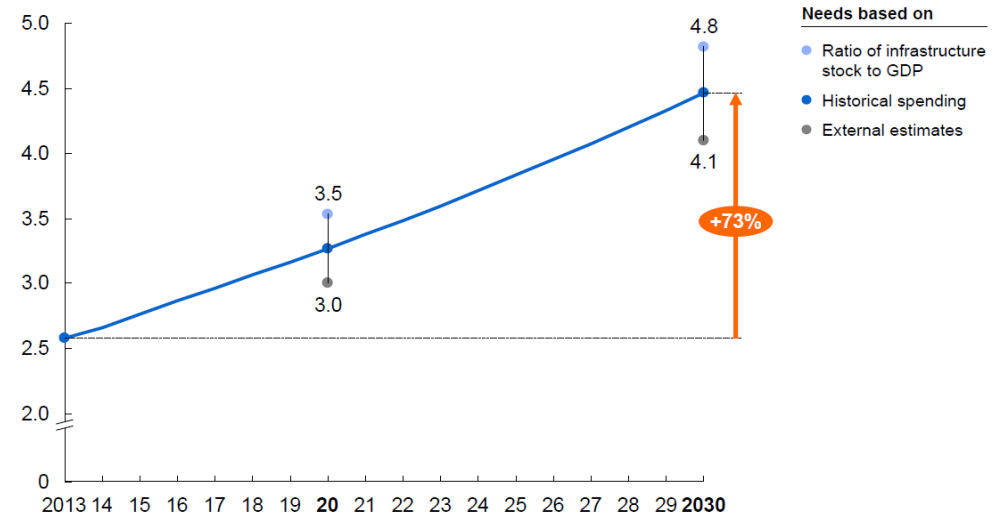
"...Whilst the Asian Development Bank (ADB) predicts that between 2010 and 2020 Asia will need to spend approximately US\$8 trillion in order to just maintain current levels of growth, according to PwC, the Asia Pacific region will need to spend US\$5.36 trillion annually on infrastructure by 2025 (representing nearly 60% of the world's total)."

PwC July 2015



Annual baseline infrastructure investment needs are expected to rise by ~70 percent from ~\$2.6 trillion in 2013 to ~\$4.5 trillion in 2030

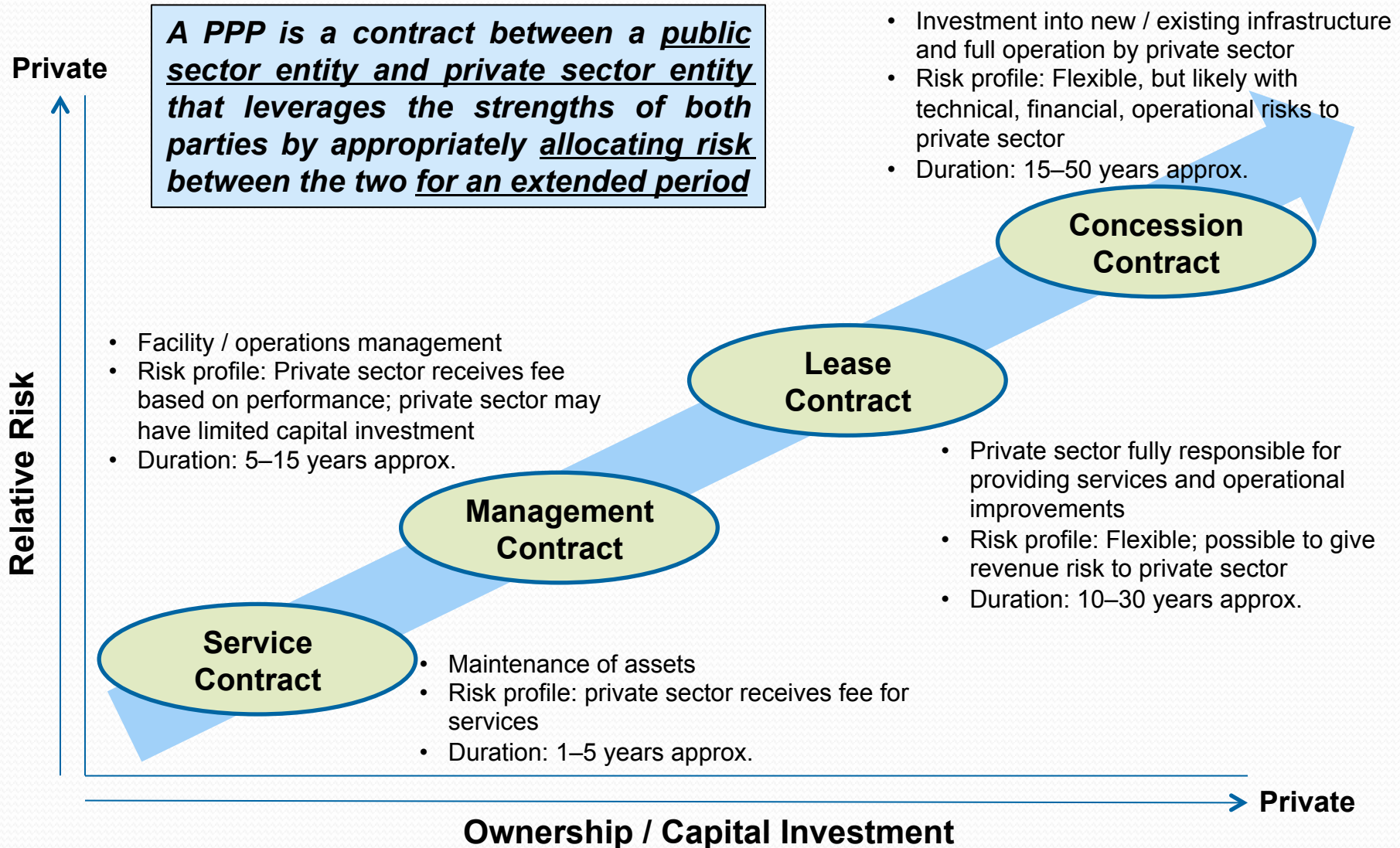
Global "baseline" infrastructure investment needs, 2013–30
\$ trillion, constant 2010 dollars



SOURCE: OECD; IHS Global Insight; GWI; IEA; ITF; McKinsey Global Institute analysis

McKinsey 2013

What characterizes a PPP contract?





ADB Support to PPP in PRC, but also
Philippines, Viet Nam, Indonesia, Kazakhstan, Tonga:

- Legal Framework => Wholesale PPP
- PPP Center => Awareness & Screening
- Capacity Development => Knowledge
- Monitoring & Evaluation PPP Environment

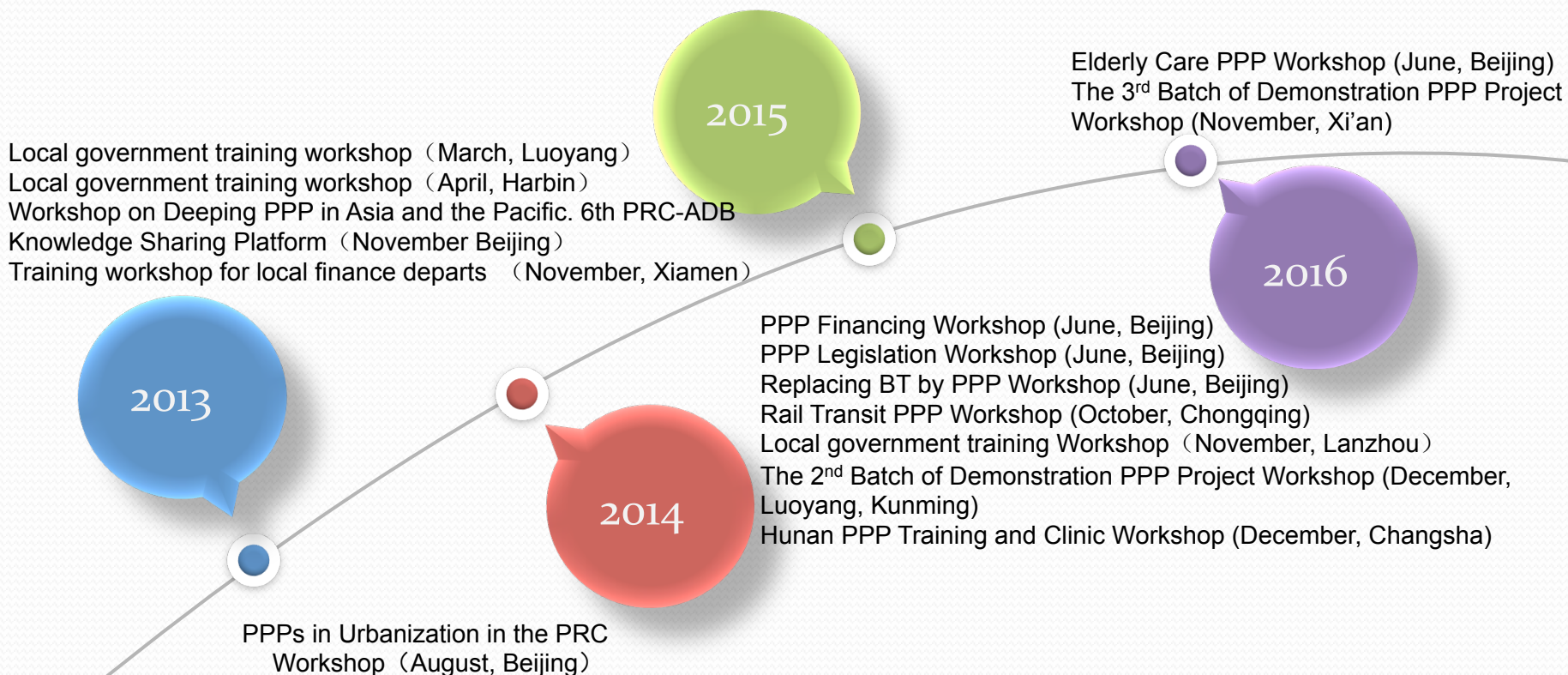
ADB PPP Operational Framework

Pillar 1	Pillar 2	Pillar 3	Pillar 4
Advocacy and capacity development	Enabling environment	Project development	Project financing
<ul style="list-style-type: none"> • Create awareness • Invoke leadership • Identify PPP potential in sector planning and the private sector development agenda • Develop capacity of Government • Enhance external knowledge management links 	<ul style="list-style-type: none"> • Develop policy, legal, regulatory and institutional framework to facilitate, guide and manage the development of PPPs (country and sector specific) 	<ul style="list-style-type: none"> • Assist in the development of pathfinder projects • Provide support (including advisory support) throughout the process from structuring to bid management and contract award/financial close. 	<ul style="list-style-type: none"> • Provide long-term debt financing including local currency • Catalyze commercial financing by equity, debt and guarantees. • Provide public sector financial support through schemes to ensure viability and cash flow sustainability.

ADB is unique in having comprehensive operational modalities to support PPP

Knowledge dissemination, training	PPP Act; Streamlined PPP regulation; Tariff reform	Feasibility studies	Nonsovereign financing
	PPP units; Planning and coordination	Preparation support	Sovereign financing
		Transaction Advisory Services	

PRC Capacity Building Provided by ADB



PRC: TAs for PPP (2013-2016)

- 01 TA-8505 Leadership in Public-Private Partnerships.
- 02 TA-8717 Preparing a Concession Law for Infrastructure and Public Services.
- 03 TA-8869 Financing Public-Private Partnerships.
- 04 TA-8940 Municipality-Level Public-Private Partnership Operational Framework for Chongqing.
- 05 TA 7313 SP2.11-PPP Capacity Building of the Chongqing Municipal Government.
- 06 TA 7313 SP 2.12-PPP Capacity Building in Gansu Province.
- 07 TA 7303 SP-Capacity Building in Public-Private Partnership Agreements.
- 08 TA-6428 Sample PPP Agreements.
- 09 TA 7862 SP1.24-Feasibility Study of PPP projects supporting Hunan and Chongqing.
- 10 TA 8103 Innovative Financing for Urban Infrastructure and Municipal Services in Harbin.
- 11 TA-8082 Promoting Private Investment for Social and Economic Development in Shaanxi Province.
- 12 TA 8780 SP 2.6- Promotion and Application of PPP Demonstration Projects in Social Sector

PRC: New TAs Prepared (> 7: 2017 – 2020)

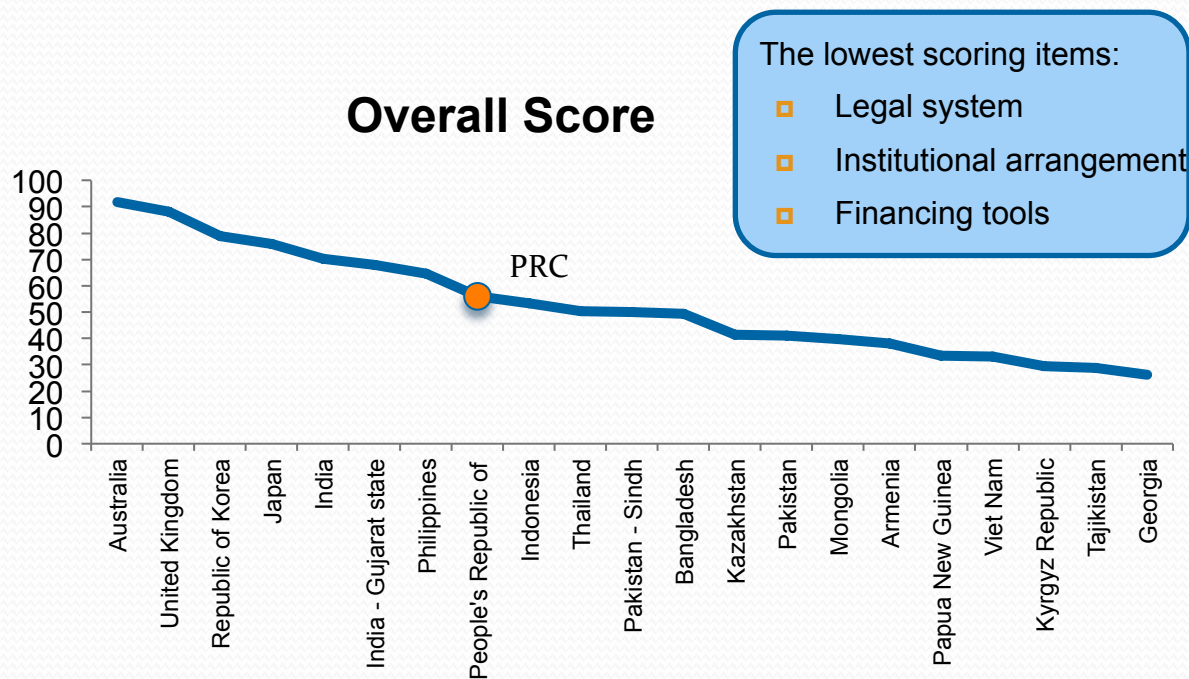
- Support Sichuan Finance Department to address the role of pension funds in PPP financing;
- Help the DRC evaluate the VFM of the PPP program;
- Collect international experience on PPP program transparency and implications, and improve information disclosure by drafting PPP Information Disclosure Guideline for CPPPC;
- Support NDRC to do post review of the first batch of BOT pilot projects in the PRC in 1990s including ADB's project Chengdu No.6 Water Plant;
- Help NDRC for study on Assessing and Prioritizing Mechanism for PPP Projects;
- Support CPPPC to optimize the current PPP Implementation Guidelines by studying the project development and approval procedures;
- Help Shandong Finance Department for a study on PPP projects performance assessment.



Some knowledge products delivered by TAs

M&E PPP Environment

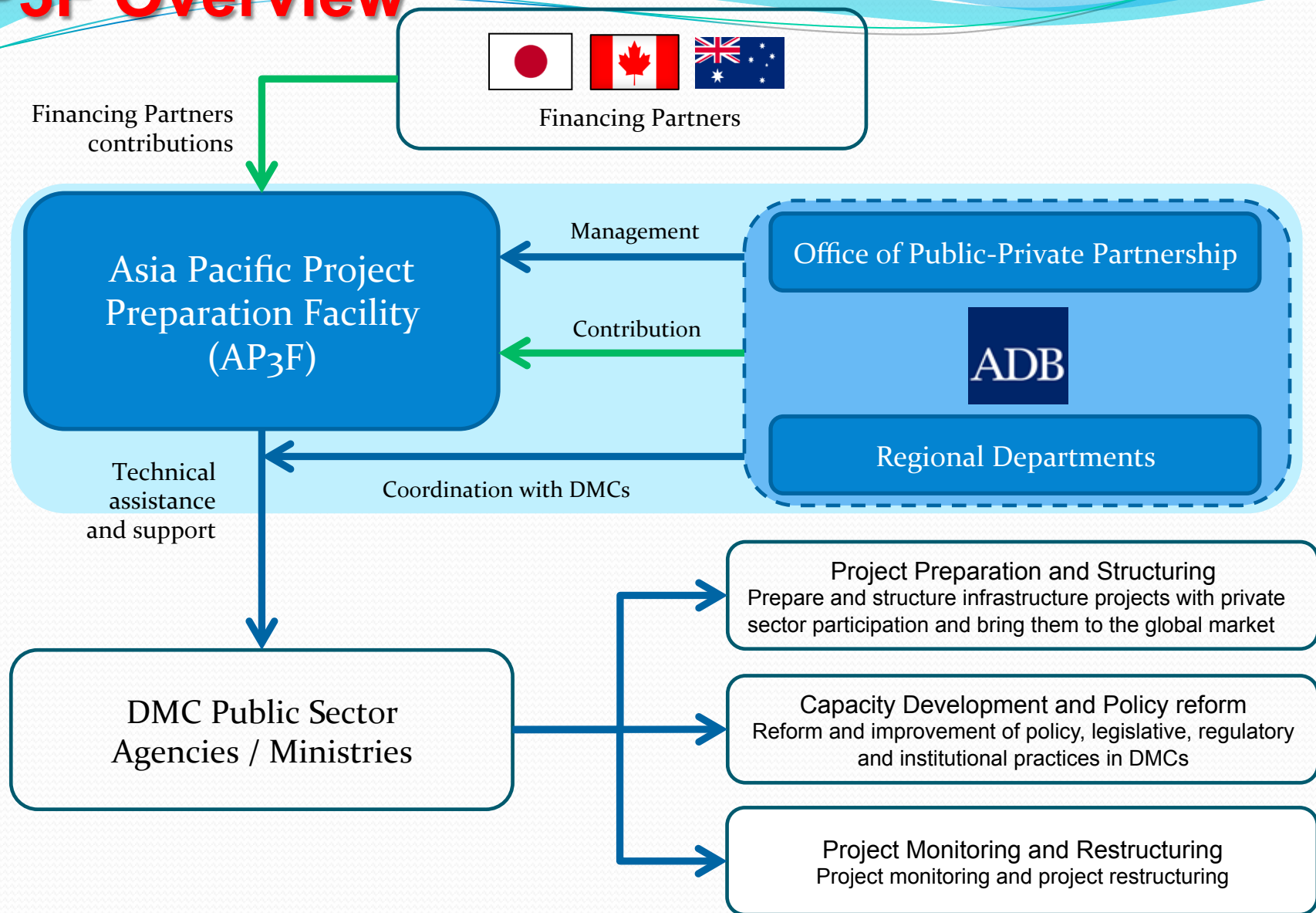
- The overall score of the environment for PPP



Overall Score	
Australia	91.8
United Kingdom	88.1
Republic of Korea	78.8
Japan	75.8
India	70.3
India - Gujarat state	68.0
Philippines	64.6
People's Republic of China	55.9
Indonesia	53.5
Thailand	50.4
Pakistan - Sindh province	49.9
Bangladesh	49.3
Kazakhstan	41.4
Pakistan	41.0
Mongolia	39.7
Armenia	38.0
Papua New Guinea	33.5
Viet Nam	33.1
Kyrgyz Republic	29.5
Tajikistan	28.7
Georgia	26.2

Source: Economist Intelligence Unit. 2014. Evaluating the Environment for Public–Private Partnership in Asia-Pacific: The 2014 Infrascope. Commission by ADB. (April 2015)

AP3F Overview





PPP Best Practices

Procurement PPP Projects

- ✓ The need for High Technology
- ✓ The need for Competition and Transparency
- ✓ Screening & Project Preparation: Pre-FSR / FSR:
Realistic Assessment of demand
- ✓ Bid Documents:
 - ✓ Prequalification Bidders: Attract best companies
 - ✓ Output based Specifications (Boeing 777)
 - ✓ Standards (Environment, Material, ...)
 - ✓ Evaluation: Least CAPEX or NPV ? Or
Least Subsidies, Least Concession Fee / Tariff ?

Risks Sharing: Public and Private Sector

- **Market risk**

- Which party takes demand / volume risk?
- International project finance lenders increasingly are not prepared to take demand risk; however domestic companies and SOEs using shorter term corporate loans can take a more optimistic “equity upside” view and accept more demand risk.

- **Interface risk**

- Grantor of the concession needs to provide undertakings in relation to interconnections and scheduling, with enforceable rules for compensating loss of revenue, increased costs, and damages from operation and maintenance failures.

- **Capital costs and subsidies**

- Does recovery of the investment require a tariff higher than the public is willing to pay?
- Will the government subsidize the shortfall to meet social objectives and allow the private sector operator to make a reasonable profit and/or access to finance?

Risks Sharing: “Best party to manage risk”

- **Land acquisition and environmental risk**
 - The grantor is the best party to manage the risk arising from land acquisition and environmental / geotechnical risks associated with existing ground conditions and environmental risks.
 - Domestic companies and SOEs may be willing to take an equity upside view on traffic risk in return for land that may increase in value.
- **Regulation and policy risk**
 - Regulations need to be transparent and consistent
 - “Change in Law” costs are normally built into the concession framework
- **Availability Payment Risk; Early Termination Payment Risk; Right to Step in:**
 - Private sector needs to be satisfied with the regular payment risk of a grantor over the entire life of the concession, if subsidies are due.
 - If force majeure or material breach, grantor may be required to pay back the outstanding debt of the private sector operator. Private sector needs to get comfortable with the grantor’s counterparty credit risk.
 - Public sector right to step in to take over the operation of the private assets in case of documented under-performance of the private operator.



PPP Examples

PPP: Example Water Sector

Water Tariff Increase against Improvement of
Selected Key Performance Indicators (5 to 10)

Basis for Service Contract / Business Plan

=> FAIR TO BOTH PUBLIC & PRIVATE

EQUATIZATION WATER SECTOR VIET NAM

- To be completed by 2020
- Divestiture from public to private, including sale of golden share: 100% private !
- Build on ADB public financed \$1 billion “water sector investment program” 2011 – 2020:
 - Support VN legal framework: Full Cost Recovery
 - Move from Concessional to Semi-Commercial Lending
 - Financial Sustainability: Tariff increase !
 - Operational improvement beyond coverage
 - 2016: \$700 million

Viet Nam: First BOT Infrastructure project

- 1992: Signing MOU Binh An Water Supply Project
- 1994: BOT Contract signed between Private Consortium and HCMC Peoples' Committee
Establishment Binh An Water Corporation Limited (BAWC)
as 100% Malaysian owned BOT Company
- 1995: Investment License: Key Incentives granted
 - Profit tax rate of 10%
 - Profit remittance tax rate of 3%
 - Exemption of land use rights tax
 - Tax holiday 4 y. from 1st year of reported taxable profit

BAWC PROJECT CONSTRUCTION PHASE



28th March 1997: Ground Breaking Ceremony

2 July 1997: Delays due to Asian Financial crisis

23rd July 1999: Completion of construction phase and commissioning for production

BAWC PROJECT OPERATIONS



- August 1, 1999: Start commercial production
- Initial production capacity: 100,000 m³/day
- Staff force: 73 staff including 2 Malaysians (General Director and Chief Accountant)

ADB: Bhutan e-Health center (Smart Health)

- Medical doctor delivers **virtual medical service** in primary healthcare
- electronic Health Center (eHC) using new internet technology Television White Spaces (**TVWS**)
- Experimented by HP in three villages in three states (2013)

Standard **shipping container**;
Connected doctors through **internet**;
Container **goes around** the villages



ADB: Myanmar e-campus (Smart campus)

Smart Campus is

- Solution Yangon Technological University, comprises:
 - Speech-enabled, responsive systems
 - Natural language understanding in human-machine interaction
 - Voice biometrics for secure authentication of users
 - Anytime, anywhere access of systems
- a **multi-channel** solution that works across Internet, smartphones, feature phones and web
- a solution that is powered by technologies such as
 - Automatic Speech Recognition
 - Voice Biometrics

Green Finance Catalyzing Facility

- Assist developing **Green Finance Mechanism:**

- Help fund green & bankable project pipeline

- Leverage private and commercial funds

- Create incentive-based flow of funds, linked to both Green and Bankability Indicators

- Proposed Concept intends to pilot in China a framework for green investment financing.

GFCF Project MUST have

Green Indicators to achieve Milestones/Targets

Financial indicators to achieve Targets

Bankability gap identified to achieve XX% IRR

Sponsor Equity Minimum 10% Required

Commercial Debt Minimum 40% Required

GFCF WILL Provide

**Funding
40% (average) – for
CAPEX
upfront for 7 years**

- *From sovereign guaranteed donor funds through GFCF*
- *The 40% number can vary per sector*

**Funding
2.5% (US\$20
million)– for
project
preparation**



- *From sovereign guaranteed donor grant funds through GFCF*
- *to be recovered from bidders*

**Replacement
Debt Funds in
Year 7**

- *From institutional and commercial (not sovereign guaranteed) funds through the GFCF*

**Guarantee Shadow
Revenues up to 5
years of Operations
to achieve X% IRR**

- *From annual government budget support*



PRC: Hubei Yichang Elderly Care PPP



Rationale for Yichang EC PPP

Why PPP

PRC demand for demonstrative PPP models in social sectors

- Competitively and transparently bid PPPs
- Market players to deliver innovation and financing

Why ECS

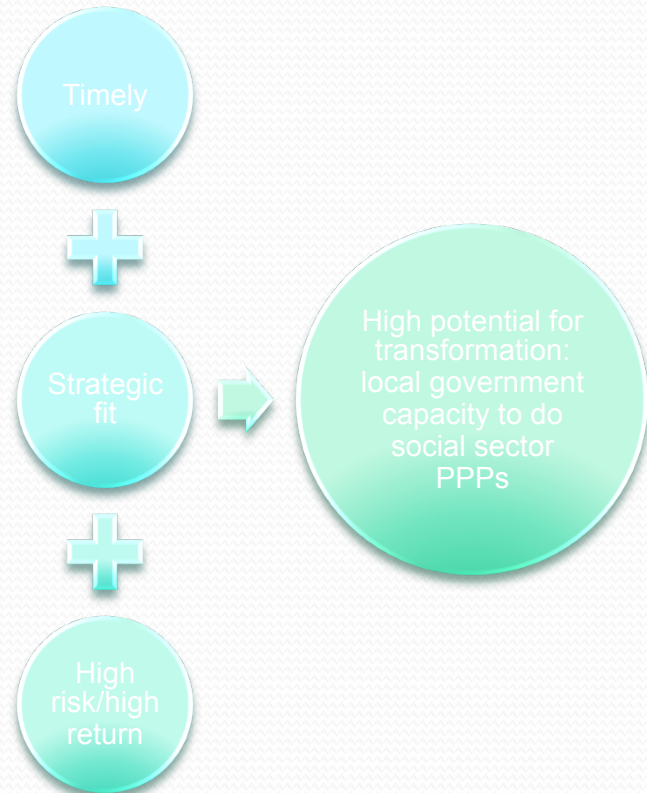
Most pressing social service needing urgent response based on innovation, efficiency, affordability

- Complexity of demand profile (social preferences versus stark reality) requires innovative response
- Diverse services that are affordable and accessible – and that increase the latent demand

Why ADB

Support honest dialogue between market bidders and a local government

- Ensure transparency, credibility
- Bring in international experience



Approach for ADB Financing

Build local government capacity to design, procure, implement and monitor true and transparent PPP

Takes long time, cycle of bidding and implementation

Requires use of country system to strengthen the local government “machinery” or mechanisms to work within national PPP regulatory framework

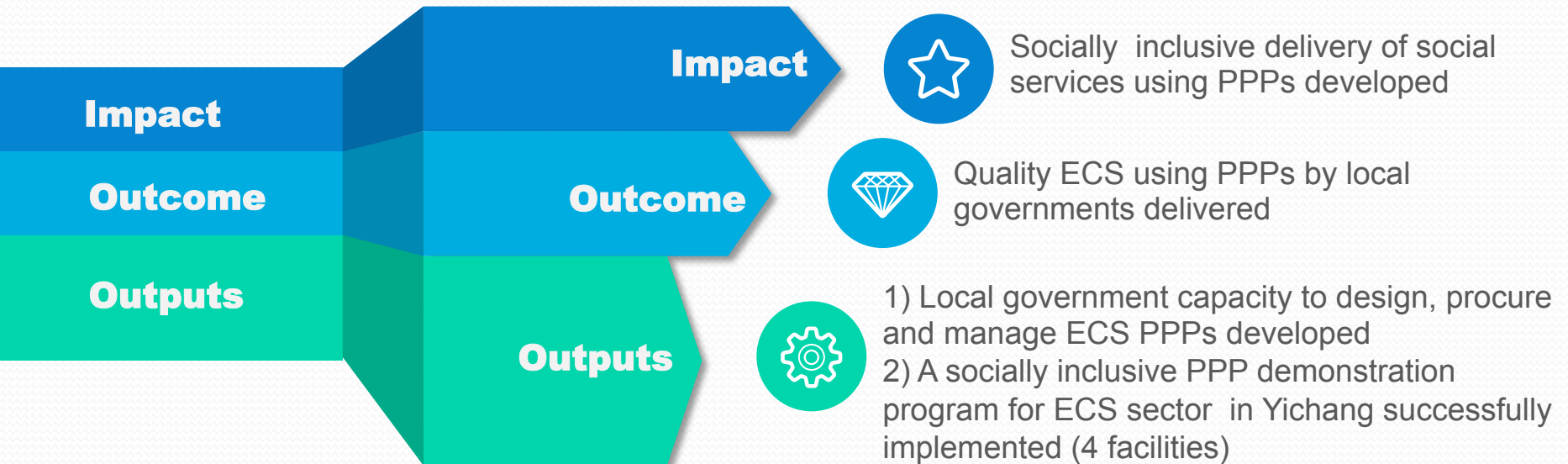


Finance local government to support the PPP using performance and output indicators

Milestone payments (Disbursement Linked Indicators) to local government as incentives to develop and maintain implementation

Local government to use ADB funds to support the PPP

Program Results



The program has a concise results framework based on PPP capacity building needs and Yichang's LTC Plan. Disbursement-linked indicators (DLIs) of the RBL program are based on the program's results framework and form the basis for disbursing ADB financing.

Key Contacts in ADB

PRC Resident Mission
17th Floor, China World Tower A
1 Jian Guo Men Wai Avenue
Chaoyang District, Beijing
100004, PRC
Tel: +86 10 8573 0909

Hubert Jenny
Principal Infrastructure Specialist
East Asia Regional Department
Email: hjenny@adb.org

Yihong Wang
Senior Investment Specialist
East Asia Regional Department
Email: ywang@adb.org

Headquarters
6 ADB Avenue, Mandaluyong City
1550 Metro Manila
Philippines

Takeo Koike
Director
Office of Public–Private Partnership
Tel: +63 (2) 683 4444
Email: tkoike@adb.org

THANK YOU