



**Asia-Pacific  
Economic Cooperation**

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**2014/SOM3/IEG/DIA/003**

**Session: 1**

**Partnership for Financing Inclusive Green  
Infrastructure**

Submitted by: Asian Development Bank



**Promoting Infrastructure Investment  
Through Public Private Partnership  
Beijing, China  
13 August 2014**

The ADB logo consists of the letters 'ADB' in a white, sans-serif font, centered within a dark grey rectangular box.

ADB

# Partnership for Financing Inclusive Green Infrastructure

*APEC IEG Public-Private Dialogue on Promoting Infrastructure*

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Private Sector Operations Department

Beijing 13 August 2014

A decorative graphic in the bottom right corner of the page, consisting of numerous thin, parallel, curved lines that create a sense of motion and depth, resembling a stylized wave or a series of overlapping paths.

# What is New?

## A wide range of discussions on “new”

- *A New Approach to PPP* (HM Treasury Dec 2012)
  - access to wider sources of equity and debt finance to improve the value for money of financing projects
  - increase the transparency of the liabilities created by long term projects and the equity returns achieved by investors
  - speed up and reduce the cost of the procurement process
  - provide greater flexibility in the provision of services
- *Creating New Models: Innovative PPP for Inclusive Development in Latin America* (World Economic Form April 2014)
  - Reach towards more vulnerable sectors of society and the “bottom of the pyramid”

## Recent Discussion: Access to Finance

### A wide range of options:

- Create new financial institutions?
- Create new bond market?
- Create new PPP law?
- Create new regulations (tariff, off-take, exclusivity)?
- Create new private sector industry?
- Create new risk allocation framework?
- Create new contractual structure?
- Create new financial products?

# Recent Discussion: Financial Innovation

## A wide range of options:

- Upfront capital contributions / viability gap funding
- Project development funds
- Guarantee funds
- The need to design flexibility into contractual mechanisms
- Public sector equity and greater intervention in debt provision
- More variety in multilateral support mechanisms
- Joint ventures
- Hybrid PPP structures

Source: KPMG “Financing of Infrastructure Projects – Trends and Challenges (July 2014)”

# Our Approach

- Among various options, we focus on new solutions to reach out to the least reached and address the people's basic human needs.
- We tailor-made financial structure starting from sector issues.

**Development agenda**



**Identify the bottlenecks**



**Structure finance to enhance “bankability”**



**Arrange cofinance to link the project with broader financial community**

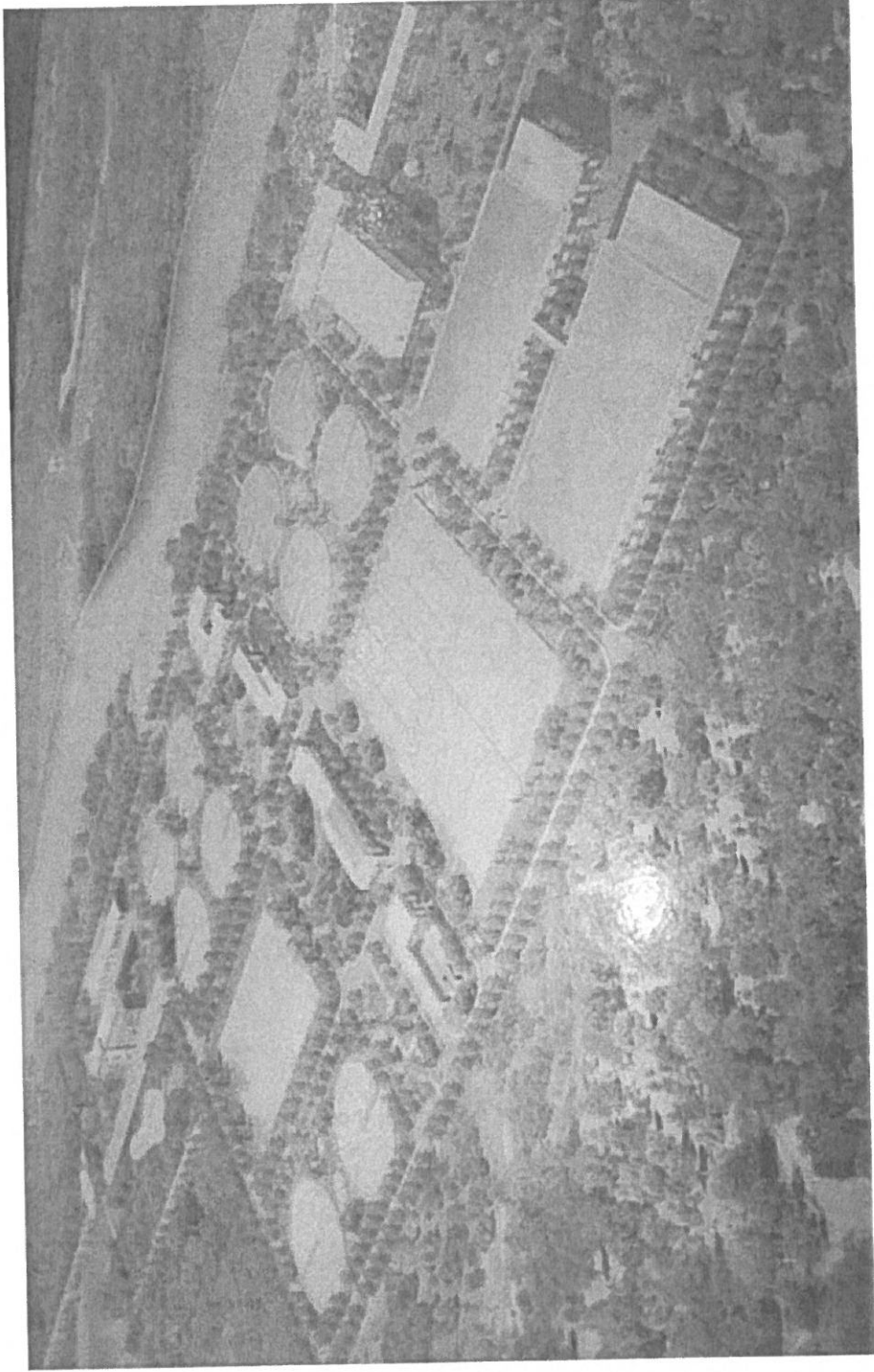
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# Case Study:

*How to Finance Wastewater Treatment PPP  
in Rural Area*

# PPP in Wastewater Treatment in Cities

- Primary cities have completed flagship PPP projects based on concession





# PPP in Wastewater Treatment in Rural Areas

- Urban-Rural gap has been widening. Outside of the major city areas, wastewater treatment facilities and sewage pipelines are limited. Less than 20% of wastewater was treated.
- Access to finance is limited. City commercial banks are less active in rural areas. Rural credit cooperatives and village and township banks are the main official banking institutions outside of cities. Each branch office cannot operate beyond its designated location.
- Associated infrastructure (such as sewage pipeline) and tariff collection are not open to private sector participation.
- Conventional technologies cannot effectively treat small volume and also require highly skilled staff for operation and maintenance.
- BUT technological advances is now creating novel opportunities in small-size infrastructure.

# Infrastructure Finance

## Typical challenges:

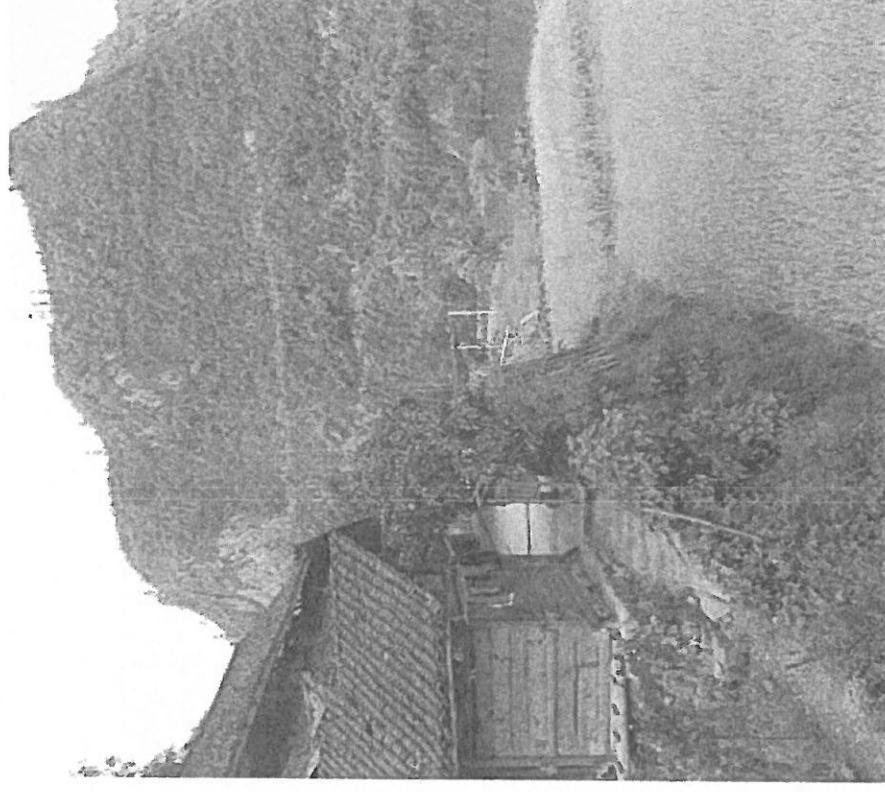
- High upfront capital costs
- Relatively low return and uncertainties over tariff level and collection
- Credit risks of host government
- Technical and economic criteria of equipment
- Operational and maintenance risks
- Substantial project preparation time regardless project size.

## Rural areas face additional challenges:

- Limited private sector interest
- Small infrastructure projects face unproportionally high transaction costs

# Beyond Project Finance

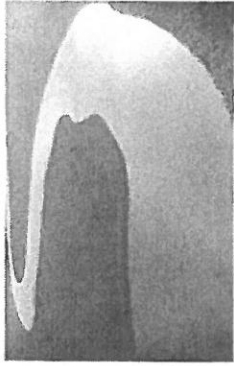
- ADB took a “portfolio” approach to support rural wastewater treatment projects based on PPP, often too small and time-consuming for international banks to finance on stand-alone basis.
- ADB’s loans have two components:
  - Direct Loan: USD/ RMB dual currency loan of up to \$100million equivalent, backed by ADB’s RMB bonds
  - Co-finance: USD loan of up to \$200 million funded by commercial banks
- Loans channeled to subprojects to support new concession scheme where country governments are bundling plants in multiple townships/villages.





# Following New PPP Potential along Water Flow

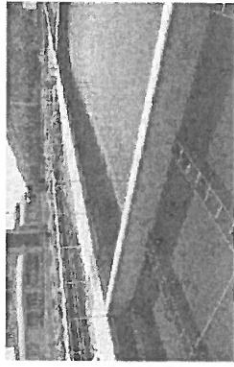
## Raw Water Extraction



Local government

- ▶ **ADB projects :**
- 1989
  - 2011

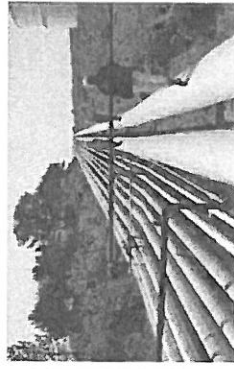
## Tap Water Treatment



Build-Operate-Transfer (BOT) since the late 1990s

- ▶ **ADB projects:**
- 2011
  - 2013

## Distribution



Newly opened for private sector participation

- ▶ **ADB projects:**
- 2011
  - 2012
  - 2013
  - 2014

## Wastewater Treatment

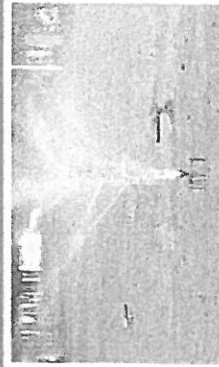


BOT or Transfer-Operate-Transfer (TOT) for upgrade

## Wastewater Reuse

New business model. So far limited local government, private sector attention

- ▶ **ADB projects:**
- 2013



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## **Endnote:**

*“Those who tried to build the present in the image of the past missed out entirely on the challenges of the future”*



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**2014/SOM3/IEG/DIA/004**

**Session: 1**

**Promoting Infrastructure Investment Through Public  
Private Partnership**

Submitted by: Peru



**Promoting Infrastructure Investment  
Through Public Private Partnership  
Beijing, China  
13 August 2014**

**APEC**

**IEG PUBLIC – PRIVATE DIALOGUE  
ON PROMOTING INFRASTRUCTURE  
INVESTMENT THROUGH PPP**

**SESSION 1**

August 13, 2014

**Gonzalo Prialé  
President AFIN**

**INTRODUCTION**

**AFIN IS AN ASSOCIATION OF OVER  
50 PRIVATE COMPANIES WHO HAVE  
ONGOING LONG TERM PPP CONTRACTS  
WITH PERU GOVERNMENT  
TO BUILD, OPERATE AND MAINTAIN  
PUBLIC USE INFRASTRUCTURE.**





## BACKGROUND

### PPP AWARDED PER PRESIDENTIAL PERIOD

(in US\$ million)

PRESIDENT	PPP NUMBER	AMOUNT	%
Fujimori (93 - 00)	15	3,193	10
Paniagua (00 - 01)	2	76	0
Toledo (01 - 06)	10	2,512	8
García (06 - 11)	38	7,855	23
Humala (11 - 16)	28	19,821	59
<b>TOTAL</b>	<b>93</b>	<b>33,457</b>	<b>100%</b>

Source: PROINVERSION

Elaboration: AFIN

## BACKGROUND

### AWARDED PPP / NOT STARTED YET

(2010 - 2013)

Year	Awarded amount (US\$ million)	Not started (US\$ million)	% Not started
2010	1,523	106	7
2011	3,688	910	25
2012	750	358	48
2013	4,761	3,221	68
<b>TOTAL</b>	<b>10,722</b>	<b>4,595</b>	<b>43%</b>

**AWARDED PPP: 34 | NOT STARTED YET: 14**

**BACKGROUND**

**DURING 37 MONTHS  
OF PRESENT GOVERNMENT**

**28 PPP AWARDED FOR US\$ 19,821 MILLION**

**10 PPP AWARDED IN 2014 US\$ 14,303 MILLION**

**MAIN ONES:**

**LINE 2 LIMA METRO (34 KM) US\$ 5,658**

**SOUTH PERU GASODUCT US\$ 7,328**

**BACKGROUND**

**PERU MAIN PROJECTS**

**LIMA METRO LINES 3, 4, 5 AND 6  
86.5 KMS. EST. US\$ 17,200 MM**

**LONGITUDINAL OF THE ANDES 3,473 KMS  
IN 6 TRANCHES**

**NORTH PERU GASODUCT EST. US\$ 3,000 MM**

**HYDROENERGY GENERATION  
6,000 MEGAWATS 2014-2018 EST. US\$ 15,000 MM**

ACTUAL SITUATION

## **NORMS IN PLACE**

**A PPP LEGAL FRAME,  
A REGIME FOR COFINANCED AND SELF  
SUSTAINABLE PRIVATE INITIATIVES,  
A REGIME TO APPLY FUTURE TAXES TO  
PUBLIC WORKS.**

**PROINVERSION, PRESIDED BY THE  
MINISTER OF ECONOMY,  
IS IN CHARGE OF PPP PROMOTING AND  
CONTRACTING.**

ACTUAL SITUATION

## **PERMISOLOGY**

**BOTTLENECKS NEED BE FACED AND SOLVED.**

**MAIN OBSTACLES IN ENVIRONMENTAL,  
ARCHEOLOGICAL, AND MUNICIPALITIES  
PERMITS.**

**DELAYS GENERATE COSTS OVERRUNS.**

**TO SIMPLIFY PROCEDURES AND  
PERMISOLOGY IS VITAL.**

**ACTUAL SITUATION**

**A MID TERM PPP PROGRAM IS NEEDED**

**TO ESTABLISH AN OFFICIAL CONTINUITY POLICY,  
TO ATTRACT INSTITUTIONAL INVESTORS AND MORE  
BIDDERS.**

**AFIN HAS PROPOSED A 2014-2018 PPP PROGRAM  
FOR US\$ 70,000 MILLION (35% OF GNP).**

**MAIN SECTORS ARE ENERGY 35%, LIMA METRO  
LINES 32%, TRANSPORTATION 24%, WATER,  
SEWAGE AND IRRIGATIONS 8%**

**ACTUAL TRENDS**

**PERU CAN FACE THE CHALLENGE**

**MICRO: GOVERNMENT IS MAKING EFFORTS TO PROMOTE  
PPP IN HEALTH AND EDUCATION.**

**MACRO: PERU HAS A SOLVENT FISCAL SITUATION.**

**NET PUBLIC GOVERNMENT DEBT IS CERO. ABOUT 15%  
OF GNP PUBLIC DEBT VERSUS 15% OF GNP IN PUBLIC  
SAVINGS.**

**MOST OF NEW PPP NEED COFINANCING. PERU IS  
EQUIPPED TO FACE THE CHALLENGE.**

**ACTUAL TRENDS AND CHALLENGES**

**HUGE INFRASTRUCTURE WORLD  
EFFORT IS NEEDED**

**MCKINSEY FOUND THAT US\$ 57 TRILLION NEED TO BE  
INVESTED IN WORLD INFRASTRUCTURE UP TO 2030, JUST TO  
SUSTAIN A MODERATE WORLD GROWTH RATE.**

**PACIFIC ALLIANCE (MÉJICO, COLOMBIA, CHILE AND PERÚ)  
ABOUT 3% OF WORLD GNP  
SHOULD INVEST US\$ 1.6 TRILLION IN INFRASTRUCTURE,  
DURING FOLLOWING 16 YEARS  
AT US\$ 100,000 MILLION PER YEAR.**

**PERU 10% OF ALIANZA DEL PACIFICO GNP  
WOULD NEED TO INVEST US\$ 10,000 MILLION PER YEAR.**

**FINANCING CHALLENGES**

**INFRASTRUCTURE FUND FOR COFINANCING,  
AT 2% OF GNP PER YEAR, FOR GUARANTEES.**

**INFRASTRUCTURE BONDS.**

**PERU IS RATED BY THE WORLD BANK (DOING  
BUSINESS 2014) PROTECTING INVESTORS: 16,  
REGISTERING PROPERTY: 22  
GETTING CREDIT: 28, OVERALL: 42**

**PERU GNP AVERAGE GROWTH  
2004 - 2013: 6.4%**

## ACCOUNTING CHALLENGES

HOW TO RESPONSIBLY ACCOUNT FOR  
THE FISCAL EFFORT OF COMMITTING TO A  
5 YEAR PPP PROGRAM?

ACCOUNT FOR GUARANTEES AND  
COFINANCING FOR EACH PROJECT, AND  
ALSO ACCOUNT FOR DIRECT, INDIRECT,  
AND INDUCED BENEFITS OF SAME  
PROJECTS.

**Direct benefits:** production, employment and  
production taxes generated by the sector due to an  
increase in final demand

**Indirect benefits:** production, employment and taxes  
generated in other sectors providing the directly  
affected industry, the goods and services necessary  
for its production

**Induced benefits:** production, employment and taxes  
generated by the increase in expenditure, generated  
due to the increase in income resulting from the direct  
and indirect benefits

**BIGGEST CHALLENGE  
OF THEM ALL IS  
TO OVERCOME PERMISOLOGY**

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