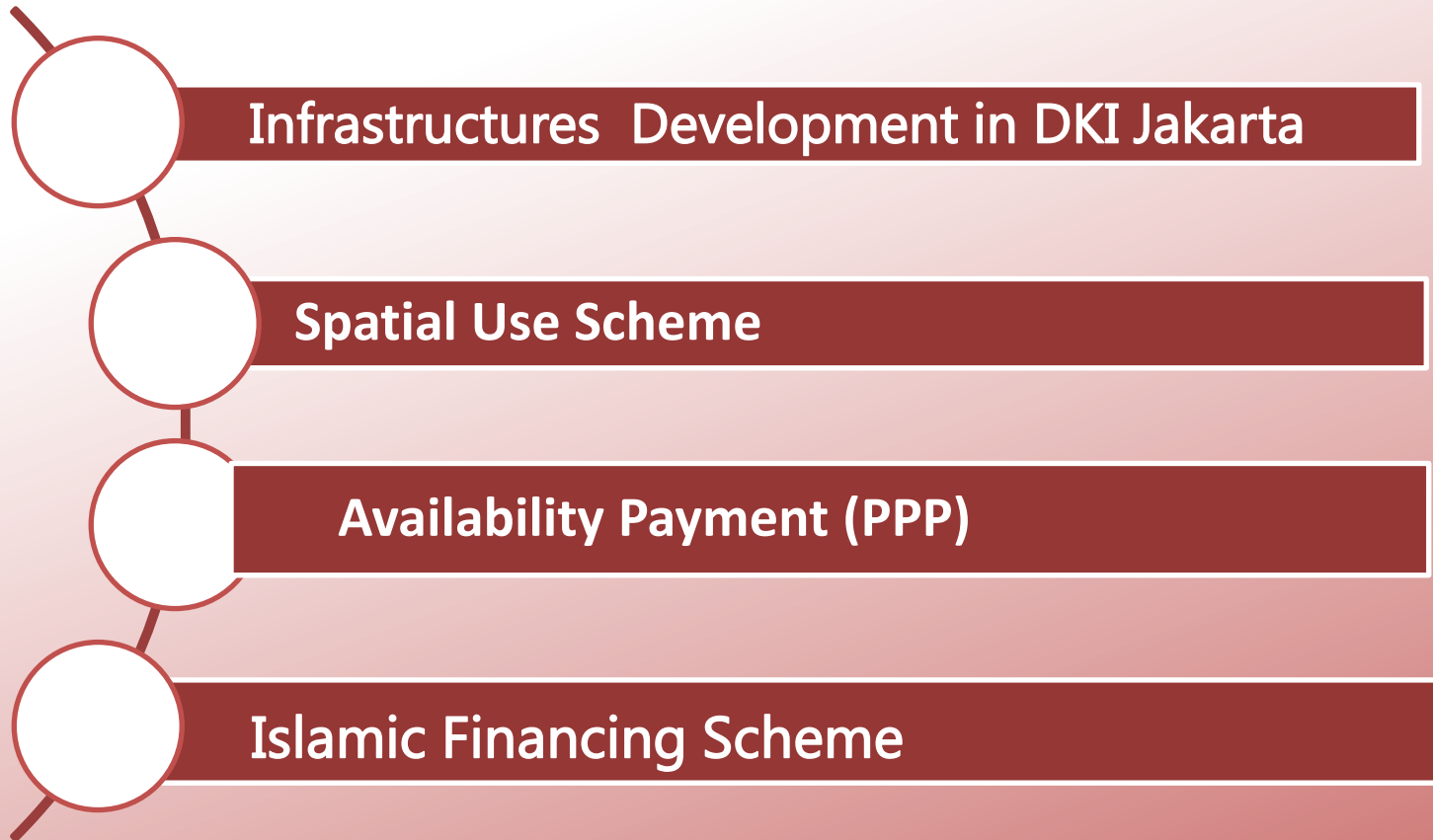


Financing Climate Change Project: Beyond Conventional Scheme – Case of Jakarta

Oswar Mungkasa
Deputy Governor of Jakarta
for Spatial Planning and Environment

Panel Financing Adaptation Projects in Cities - 28 April 2018
The 9th Global Forum on Urban Resilience and Adaptation
Bonn 26-28 April 2018

AGENDA





Infrastructures Development in Jakarta



ESTIMASI TOTAL KEBUTUHAN (5 TAHUN)

RP. 279,02 TRILIUN

Meliputi, tapi tidak terbatas pada :

- KJP Plus, KJS Plus, KJMU, KJL
- Kewirausahaan (OKE-OCE)
- Penanganan Banjir dan Rob (Tanggul Laut, Sungai/Danau/Waduk/Situ, dll)
- Pembangunan Perumahan Rakyat (DP 0, Rusunawa, penataan Kampung/kumuh)
- Penyediaan RTH (Hutan, Taman & Makam)
- Pembangunan Pedestrian, FO/UP, dll
- Pengembangan RSKD dan RSUD (tipe B, C & D)
- Pembangunan dan Peningkatan Gedung Sekolah (SD, SMP, SMA, SMK)
- Penanganan Prasarana Sarana Umum (PPSU) tingkat Kelurahan
- Jasa Petugas Penunjang Kegiatan Kantor/Lapangan (Kontrak Perorangan)
- Pengembangan Kebudayaan dan Pariwisata
- Belanja Subsidi Pangan, Transportasi, dll
- Peningkatan Pencahayaan Kota
- dll

Meliputi, tapi tidak terbatas pada :

- Pembangunan LRT Fase II
- Pembangunan ITF (lokasi Sunter)



APBD

Rp. 204,88 T



**APBN/
Loan**

Rp. 29,68 T

Meliputi, tapi tidak terbatas pada :

- Pembangunan MRT (N-S) Fase I & II
- Pembangunan Sistem Pengolahan Air Limbah Terpusat (zona 1 dan 6)



KPBU

Rp. 41,57 T

Meliputi, tapi tidak terbatas pada :

- Stadion Olahraga Bertaraf Internasional
- Jakarta Sewerage System/Pengolahan Air Limbah untuk Zona 2, 5, dan 8
- Penyelenggaraan Kereta Api Ringan di wilayah Jakarta/LRT Fase II
- Penyelenggaraan MRT yang menghubungkan dengan daerah sekitar
- Fasilitas pengolahan sampah (Intermediate Treatment Facility/ITF) antara lain berupa Pembangkit Listrik Tenaga Sampah (PLTsa)/Waste To Energy (WTE) pada 3 lokasi
- Pembangunan Rumah Sakit Khusus Terpadu Penyakit Tidak Menular
- Pengoperasian dan pemeliharaan Velodrome
- Pengoperasian dan pemeliharaan Equestrian
- Penyediaan Infrastruktur Transportasi (termasuk pengembangan air strip di Pulau Panjang), Listrik dan Air Bersih untuk pengembangan Kawasan Strategis Pariwisata Nasional (KSPN) Kepulauan Seribu
- Sistem Penyediaan Air Minum (SPAM) Regional Jatiluhur 1
- Pembangunan Integrated Tunnel atau Multipurpose Tunnel

**PERLIBATAN
MASYARAKAT
SECARA
SUKARELA
(CSR, Swa-
Pendanaan)**



**Penugasan/
B to B
Rp. 2.76 T**



Obligasi



**PENDANAAN
BERSUMBER DARI
DISINSENTIF
PEMANFAATAN
RUANG**

Meliputi, tapi tidak terbatas pada :

- Pembangunan LRT Fase II***
- Pembangunan Rumah Sakit Khusus Terpadu Penyakit Tidak Menular***

Current Infrastructure Project in DKI Jakarta Related to Climate Change



**WASTE
WATER
TREATMENT**



**AFFORDABLE
HOUSING**



**NORMALIZATION
RIVERSIDE**



**MASS
PUBLIC
TRANSPORT**



**OPEN
PUBLIC
SPACE**



**ROAD
INFRASTRUCTURE**



Spatial Use Scheme



Transfer of Development Right (TDR) Zoning

The transfer of building rights is the value of the floor area ratio (FAR) that has not been utilized.



Forms of Compensation

Compensation for exceeding the FAR is set out in the form of provision of public facilities, among others (**Governor Regulation No. 210/2016**)

- a. Provide **Green Public Open Space**;
- b. Provide **Public flats**;
- c. Provide **Reservoir**;
- d. Provide **Infrastructure**;
- e. Provide a **pathway** and **improve the quality of pedestrian facilities** integrated with public transport; and
- f. Provide **bike lanes** integrated with public transport.

Provision of Public Facilities **is prioritized on land / assets owned by the Regional Government** or on land that must be submitted to the Regional Government in accordance with the priority needs of the Local Government based on the proposed needs Regional Work Unit (SKPD).



Floor Coefficient (KLB) Compensation



The DKI Jakarta's administration has a list of infrastructure projects that developers can choose from to build when they increase their KLB above the limits set in the 2014 Local Regulation on detailed spatial planning and zoning.

* compensation for KLB value exceed has been set out in DKI Jakarta Governor Regulation (Pergub) No. 175/2015 as amended by Pergub No. 119/2016. Determination of KLB value exceed is an instrument of spatial planning as stipulated in Law No. 26/2007 on Spatial Planning,

Semanggi interchanges ring roads was built using the funds of KLB compensation from PT Mitra Panca Persada, when elevating the Wisma Sudirman Building from **17 floors** to **60 floors**.

IDR 366 milliar (28 million USD)



Developers Obligation



if you requested a location **with a total area 5000 m² or more**. You have to **pay and build affordable flat** include facilities, **20% from total benefit area** as commercial or another requirement set by Governor DKI Jakarta



- Governor's Decree no. 504/1990

About guidance on the implementation letter of approval in principle of land acquisition on land for the physical construction of Jakarta



Availability Payment Scheme (PPP)



PPP Scheme → Availability Payment

- **Implementing PPP Scheme → Availability Payment (AP)**
 - availability Payment Scheme is defined as “periodical payment made by Minister/Head of Agency/Head of Local Area to the Implementing Enterprise for Infrastructure Services delivery based on the quality and/or criteria as decided in PPP Agreement”.
 - AP Scheme is a method to deliver high quality of public services while minimizing financial burden of public sector.

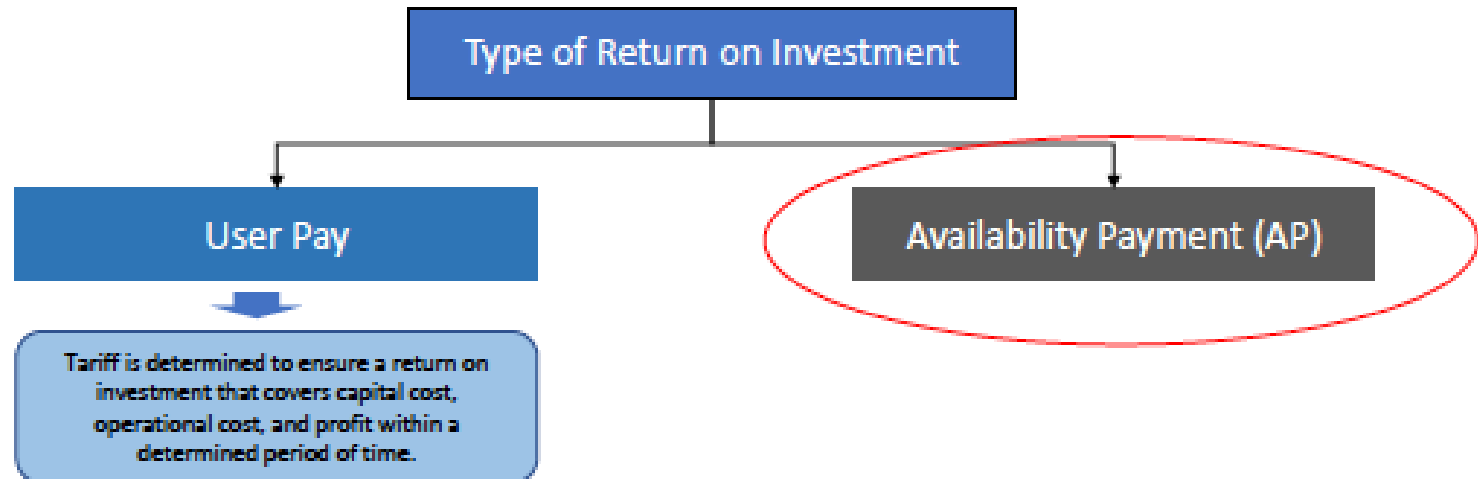
PPP Scheme → Availability Payment

- **Implementing PPP Scheme → Availability Payment (AP)**
 - transfer the risks of designing, building, financing and operating/maintaining a project to a private partner.
 - Availability Payments can be an attractive financing and project delivery alternative for project which, for reasons related to policy, public perception and/or profitability are not feasible or advisable under a user-fee based concession.

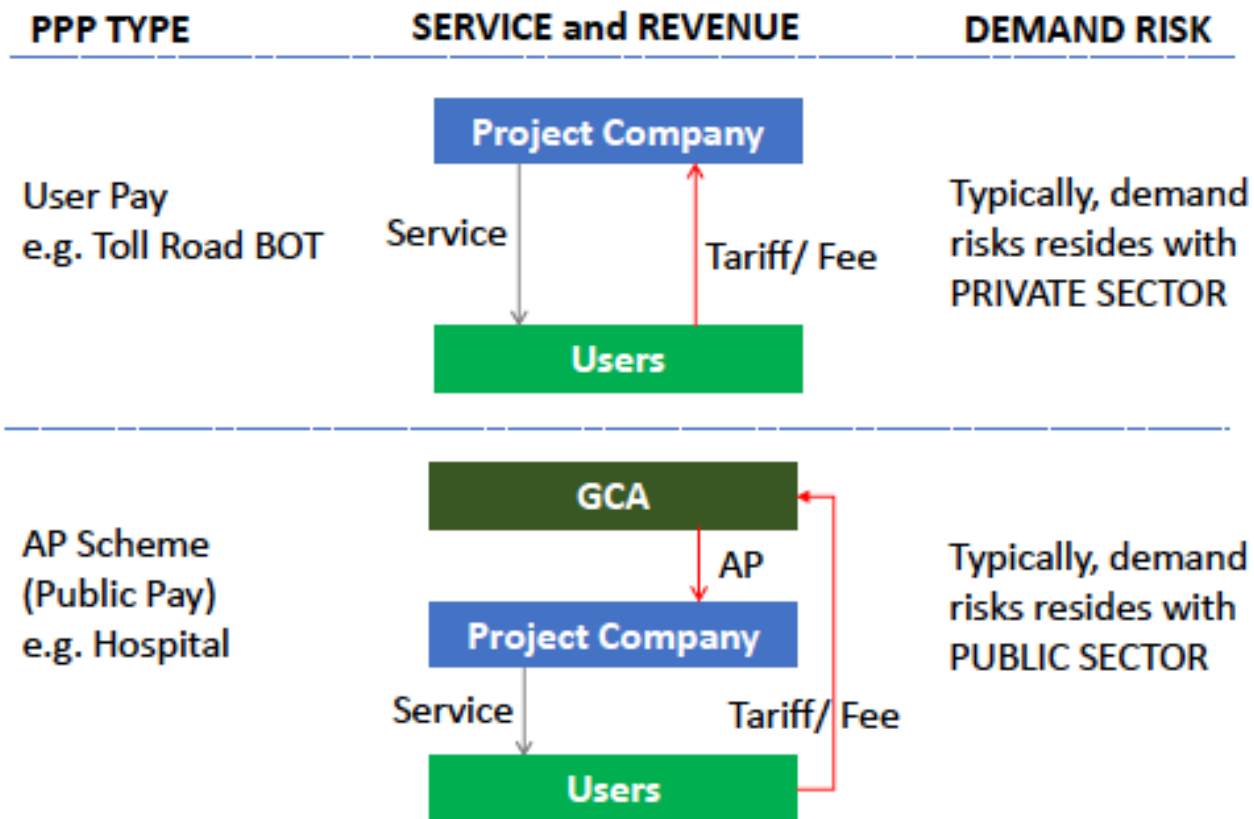
PPP Scheme → Availability Payment

What is PPP?

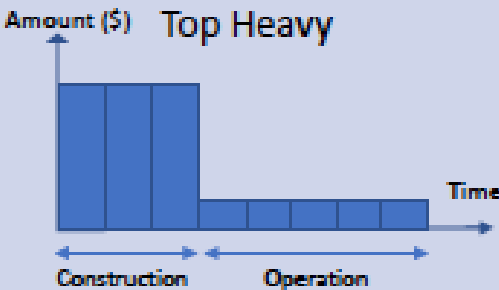
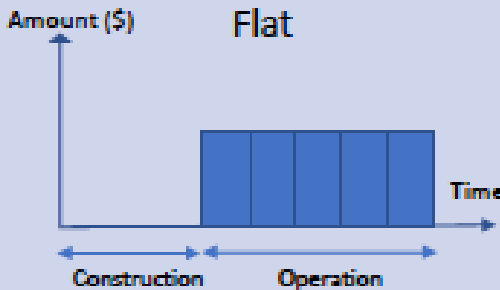
In Indonesian context, based on Perpes 38/2015, PPP is the cooperation between government and Business Entity in infrastructure provision for the public interest in accordance with the specification previously determined by the Minister/Head of Institution/Head of Region/State Owned Enterprise/Regional Owned Enterprise, which partially or fully uses Business Entity's resources, with particular regard to the allocation of risk between the parties.



Difference between PPP User Pay and AP Scheme



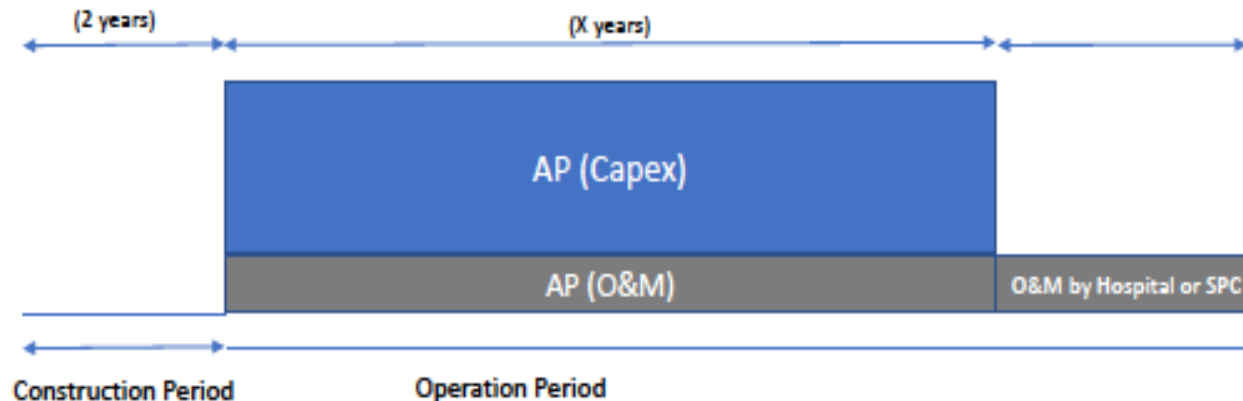
Conventional Scheme and AP Scheme

	Conventional (APBN/APBD)	AP Scheme
Fiscal Burden/ Payment Schedule	<p>Amount (\$) Top Heavy</p>  <p>The chart shows a high level of payment during the construction phase (3 bars) and a significantly lower level during the operation phase (6 bars). The y-axis is labeled 'Amount (\$)' and the x-axis is labeled 'Time'.</p>	<p>Amount (\$) Flat</p>  <p>The chart shows zero payment during the construction phase (3 bars) and a consistent level of payment during the operation phase (6 bars). The y-axis is labeled 'Amount (\$)' and the x-axis is labeled 'Time'.</p>
Typical Contract Year	Construction (1-3 years) Maintenance (Every year)	10-30 Years
Financial Source for Construction	Public	Private
Typical Risk Allocation	Public	*Risks are transferred to Private
Procurement	Several (Design, Construction, Operation)	Only One (Single PPP Contract)

*Actual figure may have fluctuation based on inflation adjustment

Image of AP Payment

- Availability payment (AP) is made from GCA to SPC as a reward of ensuring availability of the facility and providing specified services under a PPP (AP) contract.
- As AP, a fixed amount is paid throughout the operation period, with a possible deduction in case SPC fails to fulfill certain requirements.
- The AP amount essentially covers all the costs (construction cost, O&M cost, project financing cost etc.) and return for investors.
- The simple cash flow structure of SPC is shown in the figure below:



*O&M might be taken over by Hospital or continued by SPC from X+ th years of operation.

Source: JICA



Islamic Finance Scheme (Zakat)



Islamic Finance through Zakat (Alm or Tithe)

- **ZAKAT (Alms or Tithe)**
 - A term used in Islamic finance to refer to the obligation that an individual has to donate a certain proportion of wealth each year to charitable causes.
 - Zakat is a mandatory process for Muslims in order to physically and spiritually purify their yearly earnings that are over and above what is required to provide the essential needs of a person or family.
- The most common level of zakat on wealth from cash, equities and gold is 2.5% of the total value.
- For zakat funds to be used for the purpose, an additional condition need to be met, i.e. the beneficiaries must be poor.

Islamic Finance through ZAKAT (Alm or Tithe)

- Environmental protection and sustainability fits in nicely with the Islamic finance agenda that seeks to enhance the general welfare of society.
- Protection of the planet and the environment, climate management and adaptation, as organizational goals are clearly in conformity with the goals of the Shariah as well as with the SDGs.
- Islamic social funds can potentially play a significant role in absorbing the incremental costs with clean technologies where subsidies are not forthcoming to absorb the same.

Islamic Finance through others Scheme

- The institution of **waqf**, along with **zakat** and **Sadaqa**, can certainly play a role in coping with humanitarian crises resulting from climate change.
- Awqaf like foundations may directly engage in provision of goods and services related to mitigation and adaptation.
- Awqaf may also be dedicated to research and development and towards increasing consumer awareness and stronger support of action to mitigate climate change.
- Similar to SRI Funds, the **Islamic Green Funds** and similar to Green Bonds, **the Islamic Green Sukuk** can contribute significantly to the agenda of climate change.

Islamic Finance through others Scheme

- Environmental protection and sustainability fits in nicely with the Islamic finance agenda that seeks to enhance the general welfare of society.
- Protection of the planet and the environment, climate management and adaptation, as organizational goals are clearly in conformity with the goals of the Shariah as well as with the SDGs.
- Islamic social funds can potentially play a significant role in absorbing the incremental costs with clean technologies where subsidies are not forthcoming to absorb the same.

Islamic Finance through ZAKAT (Alm or Tithe)

- Environmental protection and sustainability fits in nicely with the Islamic finance agenda that seeks to enhance the general welfare of society.
- Protection of the planet and the environment, climate management and adaptation, as organizational goals are clearly in conformity with the goals of the Shariah as well as with the SDGs.
- Islamic social funds can potentially play a significant role in absorbing the incremental costs with clean technologies where subsidies are not forthcoming to absorb the same.

Islamic Finance through ZAKAT (Alm or Tithe)

- Environmental protection and sustainability fits in nicely with the Islamic finance agenda that seeks to enhance the general welfare of society.
- Protection of the planet and the environment, climate management and adaptation, as organizational goals are clearly in conformity with the goals of the Shariah as well as with the SDGs.
- Islamic social funds can potentially play a significant role in absorbing the incremental costs with clean technologies where subsidies are not forthcoming to absorb the same.

Implementing Islamic Finance through ZAKAT in Jakarta

- Amount of Zakat Collected → 13 Million USD.
- Distributed for education, health, livelihood, mosque and public facility renovation/new building and disaster
- Still an idea Need more discussion... proposal.... Feasibility study....

Thank you

Sources:

- Basic Concept of Availability Payment (AP) and Budgeting Implication, July 26, 2017. JICA Technical Assistance. KPPIP Support Facility
 - Zakat <https://www.investopedia.com/terms/z/zakat.asp#ixzz5DvxAb3pQ>
- Obaidullah, Mohammed (mObaidullah@isdb.org) (The Islamic Research and Teaching Institute (IRTI))

- Email: oswar.mungkasa63@gmail.com
- <https://pitt.academia.edu/oswarmungkasa>