Recent Progress in Indonesia Infrastructure Development and Focus on Public Private Partnership
PSN includes 15 sectors at project level and 3 sectors at program level.
Progress of 223 Projects and 3 Program PSN per September 2018

Progress of PSN per September 2018¹

- 3 projects already **completed**
- 51 projects and 1 Electricity Program in **construction and partial operation phase**
- 23 projects in **construction and will start operation in 2018**
- 52 projects in **construction and will start operation in 2019**
- 37 projects in **construction and will start operation after 2019**
- 6 projects in **transaction phase**
- 51 projects and 1 Aircraft Industry Program in **preparation phase**

Progress of Electricity Program per September 2018

- 2.614 MW **already in operation**
- 18.457 MW in **construction phase**
- 11.117 MW **already signed power purchase agreement** but not yet reached financial close
- 2.153 MW in **procurement phase**
- 958 MW in **preparation phase**

¹ Excluding the economic equality program that will be reported separately
In total there are 79 projects estimated to be completed and 84 projects + 2 programs estimated to be partially operating by Q3 2019.

<table>
<thead>
<tr>
<th>Year</th>
<th>Accumulation of PSN Progress Realization</th>
<th>Estimation of PSN Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>20 projects</td>
<td>79 projects</td>
</tr>
<tr>
<td></td>
<td>96 projects + 1 35 GW electricity program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13 projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>81 projects</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>30 projects</td>
<td>84 projects + 1 35 GW program</td>
</tr>
<tr>
<td></td>
<td>37 projects + 1 35 GW program</td>
<td>1 economy equality program</td>
</tr>
<tr>
<td></td>
<td>119 projects</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>48 projects</td>
<td>89 projects + 1 35 GW program</td>
</tr>
<tr>
<td></td>
<td>59 projects + 1 35 GW program + 1 economy equality program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>110 projects + 1 airplane industry program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60 projects</td>
<td></td>
</tr>
<tr>
<td>Q3 2019</td>
<td>79 projects</td>
<td>1 projects</td>
</tr>
<tr>
<td></td>
<td>84 projects + 1 35 GW program + 1 economy equality program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>89 projects + 1 airplane industry program</td>
<td></td>
</tr>
</tbody>
</table>

**LEGEND**
- **Completed Projects**
- **Projects in construction and partial operation**
- **Projects in construction**
- **Projects in transaction**
- **Projects in Preparation**
- **Projects ousted of PSN list**

First Revision: Addition of 55 projects + 1 and 1 aircraft Industry program

Second Revision: Addition of 2 projects + 1 economy equality program
In 2016 – September 2018, there are total 36 PSNs that have been completed with total investment value of USD 8.8 Billion

2016

1. Gempol – Pandaan Toll Road, East Java (14km)
2. Sentani Airport, Jayapura, Papua
3. Juwata Airport, Tarakan, North Kalimantan
4. Fatmawati Soekarno Airport, Bengkulu
5. Mutiara Airport, Palu
6. Matahora Airport, Wakatobi, South East Sulawesi
7. Labuan Bajo Airport, Pulau Komodo, East Nusa Tenggara
8. Soekarno Hatta Airport Development (Including Terminal 3), Banten
9. Kalibaru Port, DKI Jakarta
10. Belawan-Sei Mengkei Gas Pipe, 75 mmscfd Capacity, North Sumatera
11. PLBN* Entikong, Sanggau, West Kalimantan
12. PLBN* Mota’ain, Belu, East Nusa Tenggara
13. PLBN* Motamassin, Kab. Malaka, East Nusa Tenggara
14. PLBN* Skouw, Jayapura, Papua
15. Paya Seunara Dam, Sabang, Nanggroe Aceh Darussalam
16. Rajui Dam, Pidie, Nanggroe Aceh Darussalam
17. Jatigede Dam, Sumedang, West Java
18. Bajulmati Dam, Banyuwangi, East Java
19. Nipah Dam, Madura, East Java
20. Titab Dam, Buleleng, Bali

Jan - Nov 2018

21. Soreang – Pasirkoja Toll Road, West Java (11km)
22. Mojokerto – Surabaya Toll Road, East Java (36.3km)
23. Tanjung Priok Access Road, DKI Jakarta (16.7km)
24. Raden Inten II Airport, Lampung
25. Jangkrik and Jangkrik North East Field Development, East Kalimantan
26. PLBN* Nanga Badau, Kapuas Hulu, West Kalimantan
27. PLBN* Aruk, Sambas, West Kalimantan
28. PLBN* Wini, East Nusa Tenggara
29. Teritip Dam, East Kalimantan
30. Umpu Irrigation Sistem (Way Besai), Lampung
31. Prabumulih – Kertapati Railway
32. Raknomo Dam
33. Tanju Dam
34. Palembang - Simpang Indralaya Toll Road (22km)
35. Pejagan - Pemalang Toll Road(57.5km)
36. Solo – Ngawi Toll Road (90.1km)

*Cross-Border Post
Private sector has the potential to contribute up to 59% of the total investment value required to deliver PSN.

The estimated investment value for 223 Projects + 3 Programs 1 PSN:

<table>
<thead>
<tr>
<th>Total Investment</th>
<th>State Budget</th>
<th>USD 31.6 Billion</th>
<th>SOE</th>
<th>USD 96.6 Billion</th>
<th>Private</th>
<th>USD 179.2 Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD 307.4 Billion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1Excluding 7 projects with unknown investment value.

<table>
<thead>
<tr>
<th>Source of Fund (USD Billion)1,2</th>
<th>Funding Realization</th>
<th>Funding Requirement</th>
<th>n/a3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤20163</td>
<td>2017</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>1. State Budget</td>
<td>4.49</td>
<td>5.44</td>
<td>4.96</td>
<td>4.22</td>
</tr>
<tr>
<td>2. SOE</td>
<td>4.00</td>
<td>5.24</td>
<td>6.31</td>
<td>13.02</td>
</tr>
<tr>
<td>3. Private</td>
<td>21.08</td>
<td>15.34</td>
<td>13.02</td>
<td>21.36</td>
</tr>
<tr>
<td>TOTAL</td>
<td>29.57</td>
<td>26.02</td>
<td>24.29</td>
<td>38.59</td>
</tr>
</tbody>
</table>

Exchange rate: US$ 1 = IDR 13,500

1Excluding 7 projects which investment value have not been identified
2Fund realization is the fund allocated by the GCA up to 2017
3Fund allocations for each year have not been identified

Assumptions on the grouping of funding allocations:

1. For PPP projects without information of the State/Regional Budget supports, total fund is allocated to Private
2. For SOE Assignment projects without information of the State/Regional Budget supports, total funds is allocated to SOEs
3. Accumulation of funding requirements from 2020 forward (including projects which fund-disbursement timeline have not been determined)
From the PSN list, KPPIP has selected 37 Priority Projects out of the PSN stipulated in Coordinating Minister of Economic Affairs Regulation No. 5/2017

1. Balikpapan-Samarinda Toll Road (US$ 738.5 M)
2. Manado-Bitung Toll Road (US$ 379.3 M)
3. Panimbang-Serang Toll Road (US$ 394.8 M)
4. 15 Segments of Trans Sumatera Toll Road (US$ 16,243.9 M)
5. Probolinggo-Banyuwangi Toll Road (US$ 1,560 M)
6. Yogyakarta-Bawen Toll Road (US$ 899M)
7. SHIA Express Railway (US$ 1,814 M)
8. MRT Jakarta North – South Line (US$ 2,930 M)
9. Makassar – Parepare Railway (US$ 611 M)
10. Light Rail Transit (LRT) of Jakarta, Bogor, Depok and Bekasi (US$ 2,214.8 M)
11. Light Rail Transit (LRT) of South Sumatera (US$ 925M)
12. East Kalimantan Railway (US$ 3,948 M)
13. Light Rail Transit (LRT) of DKI Jakarta (US$ 544M)
14. Kuala Tanjung International Hub Seaport (US$ 2,222 M)
15. Bitung International Hub Seaport (US$ 2,518 M)
16. Patimban Port (US$ 3,201 M)
17. Inland Waterways/Cikarang – Bekasi – Laut (CBL) (US$ 253 M)
18. Palapa Ring Broadband (US$ 571.3M)
19. Central Java Power Plant (CJPP) (US$ 2,963 M)
20. Central – West Java Transmission Line 500 kV (US$ 565.9 M)
21. Indramayu Coal-fired Power Plant (US$ 2,000 M)
22. Sumatera 500 kV Transmission (4 Provinces) (US$ 1,807 M)
23. Mine Mouth Coal-fired Power Plant (6 Provinces) (US$ 15,619 M)
25. Bontang Oil Refinery (US$ 14,636 M)
26. Tuban Oil Refinery (US$ 14,763 M)
27. RDMP/Revitalization Development Master Plan (Balikpapan, Cilacap, Balongan, Dumai, Plaju) (US$18,239 M)
28. Abadi WK Masela Field (US$ 21,474 M)
29. Unitization Field Gas Jambaran-Tiung Biru (US$ 1,979M)
30. Indonesian Deepwater Development (IDD) (US$ 9,244M)
31. Tangguh LNG Train 3 Development (US$ 7,703M)
32. West Semarang Drinking Water Supply (US$ 75.3M)
33. Jakarta Sewerage System (US$ 5,155.6M)
34. National Capital Integrated Coastal Development (NCICD) Phase A (US$ 225.5M)
35. Jatiluhur Drinking Water Supply (US$ 142.2 M)
36. Lampung Drinking Water Supply (US$ 82.1 M)
37. Waste to Energy Program in 8 Cities (US$ 1,462.7 M)

Exchange rate: US$ 1 = IDR 13,500
Progress Status of 37 Priority Projects as per November 2018

**Progress Status of 37 Priority Projects**
- 4 projects in **construction and partial operation phase**
- 3 projects in **construction and will start operating in 2018**
- 12 projects in **construction and will start operating in 2019**
- 6 projects in **construction and will start operating after 2019**
- 4 projects in **transaction**
- 8 projects in **preparation**

**Funding Scheme of 37 Priority Projects**
- **State/Regional Budget**: US$16.1 Billion
- **SOE/Regional SOE**: US$49.46 Billion
- **Private**: US$125.4 Billion

**Total estimated investment value USD 190.96 Billion**

Exchange rate: US$ 1 = IDR 13,000
Kuala Tanjung International Hub Port
North Sumatra

**Description**

- This projects acts as a trans-shipment and gateway the in Western Indonesia Hub Port as well as providing connectivity to Eastern Indonesian Hub Port.
- Based on study conducted by the Ministry of Transportation in 2015, this port will increase container volumes to 12.4 million TEUs by 2039.
- Trans-shipment to commence in 2029 and grow to 63%, while potential trade is projected in excess of 180Mtpa by 2065.

**Investment Value**

| US$2.2 Billion |

**Funding Scheme**

| SOE Assignment (Potential partnership with Private) |

**Project Owner**

| Ministry of Transportation |

**Construction Commencement Plan**

| 2015 (Phase I); 2019 (Phase II) |

**Commercial Operation Date**

| 2018 (Phase I); 2022 (Phase II) |

**Outline Business Case (OBC) of Kuala Tanjung International Hub Port has been completed in 2016.**

- Multipurpose Terminal (Phase I) operational in 2018.
- Based on the OBC and stakeholders discussion, the development of the International Hub Port will be integrated with the development of the Industrial Zone.
- Presidential Regulation 81/2018 stipulated in September 2018
- Working with related stakeholders, Pelindo I is currently preparing for land acquisition for Phase II development

**Latest Status**

Note: USD 1 = IDR 13,500
As the main logistic gateway to Sumatra Island, Kuala Tanjung is expected to reduce logistics costs and boost regional economy.

Kuala Tanjung is also expected to form synergistic relations with several key economic centers in North Sumatera.

**Surrounding Key Economic Centers**

1. Medan Industrial Zone/KIM (128 km)
2. Belawan Port (137 km)
3. Kuala Namu International Airport (104 km)
4. Sei Mangkei SEZ (40 km)
Milestones of KPPIP supports for Kuala Tanjung

Kula Tanjung Outline Business Case

Dec’16
- Commercial aspects
- Legal aspects
- Implementation scheme alternatives

KPPIP Committee Meeting

Jun’17
- OBC socialization
- Implementation scheme agreement

Presidental Regulation 81/2018

Sep’18
- Stakeholders alignment
Economic/Financial Analysis

- Cost estimates (Construction cost and operation cost)
- FIRR/EIRR calculation (calculation as a whole project)

### Financial Summary

<table>
<thead>
<tr>
<th>Summary Cash-Flows (USD)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital cost</td>
<td>$1.0bn</td>
</tr>
<tr>
<td>Capital replacement cost</td>
<td>$5.4bn</td>
</tr>
</tbody>
</table>

### Financial Assumptions

<table>
<thead>
<tr>
<th>Financial Assumptions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Debit/Equity mix (%)</td>
<td>70% debt</td>
</tr>
<tr>
<td>Debt repayment period (years)</td>
<td>15 years from construction (excluding grade period)</td>
</tr>
<tr>
<td>Debt interest rate (%)</td>
<td>7.4% base + 2% to 2.5% margin</td>
</tr>
<tr>
<td>Annual inflation rate (average %)</td>
<td>6-6.5% CPI, 7-7.5% wages</td>
</tr>
<tr>
<td>Taxes (%)</td>
<td>25%</td>
</tr>
</tbody>
</table>

### Sensitivity Analysis

Returns (nominal) – Post Tax IRR

<table>
<thead>
<tr>
<th></th>
<th>Small Port</th>
<th>Large Port</th>
<th>Large Port Excl Wall</th>
<th>Large Port Including Land Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Case</td>
<td>15.24%</td>
<td>15.50%</td>
<td>15.42%</td>
<td>14.51%</td>
</tr>
<tr>
<td>Construction Costs +10%</td>
<td>14.78%</td>
<td>15.30%</td>
<td>15.23%</td>
<td>14.30%</td>
</tr>
<tr>
<td>Maintenance Costs +10%</td>
<td>14.27%</td>
<td>15.10%</td>
<td>15.05%</td>
<td>14.10%</td>
</tr>
<tr>
<td>Increase to Industrial Development Cost +10%</td>
<td>14.90%</td>
<td>15.50%</td>
<td>15.16%</td>
<td>14.30%</td>
</tr>
<tr>
<td>Forecast Demand +5%</td>
<td>15.97%</td>
<td>16.10%</td>
<td>16.10%</td>
<td>14.60%</td>
</tr>
<tr>
<td>Forecast Demand -5%</td>
<td>14.48%</td>
<td>14.70%</td>
<td>14.74%</td>
<td>14.40%</td>
</tr>
</tbody>
</table>

### Demand Forecast Scenario

- Torrs (millions)
- Year
- IRR (blended - post tax): 14 to 18%
- NPV US$: Up to $1.2 Billion

**Preferred Scheme**

- Small Port
- Large Port
- Large Port (Excl Willmar and Inalum)
**KPPIPs Outline Business Case Results (2/2)**

**Project Funding Scheme**

- Assess appropriate funding scheme (APBN/ODA, PPP/Annuity, Hybrid) based on project characteristics. Utilize simplified VfM checklist tool by sector.
- Conduct preliminary sounding to investors in case PPP scheme is recommended.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>B2B Port + Industrial Estate</th>
<th>B2B Port only</th>
<th>PPP Port Only</th>
<th>B2B (Comp Tender) Port + Industrial Estate</th>
<th>B2B (Comp Tender) Port Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability of Public Sector to control the structure of the development contract</td>
<td>Government has very limited ability to control or influence the development contract between the SOE and the private sector partners.</td>
<td>Government has very limited ability to control or influence the development contract between the SOE and the private sector partners.</td>
<td>Government has the responsibility to setup the development contract and specify relevant performance standards.</td>
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<td>Government has limited ability to control or influence the development contract between the SOE and the private sector partners.</td>
</tr>
<tr>
<td>Ability to deliver Value for Money</td>
<td>Reduced ability as the private sector partner has limited incentives to introduce efficiency drivers. No competitive tender may not result best outcome in terms of selecting private sector partners.</td>
<td>Reduced ability as the private sector partner has limited incentives to introduce efficiency drivers. No competitive tender may not result best outcome in terms of selecting private sector partners.</td>
<td>PPP Agreement provides ability to include VFM drivers and incentives. A competitive and transparent tender enables selection of most effective private sector operators.</td>
<td>PPP Agreement provides ability to include VFM drivers and incentives. A competitive and transparent tender enables selection of most effective private sector operators.</td>
<td>Reduced ability; however, competitive tender results in enhanced opportunity compared to Options 2a/b to select most effective private sector partners.</td>
</tr>
<tr>
<td>Ability of Public Sector to deliver procurement model responsibilities</td>
<td>Public Sector has limited responsibilities in terms of managing procurement process. B2B is an established model.</td>
<td>Public Sector has limited responsibilities in terms of managing procurement process. B2B is an established model.</td>
<td>Public sector would need to ensure the implementing agency has sufficient capabilities to manage its obligations under the PPP agreement.</td>
<td>Public sector would need to ensure the implementing agency has sufficient capabilities to manage its obligations under the PPP agreement.</td>
<td>Public Sector has responsibility to manage procurement process of the private sector partner for the SOE. Limited involvement post selection.</td>
</tr>
<tr>
<td>Ability to provide guarantees/VGF/other support</td>
<td>SOEs are not eligible for receiving guarantees or VGF. Any equity injections have to be approved by Parliament.</td>
<td>SOEs are not eligible for receiving guarantees or VGF. Any equity injections have to be approved by Parliament.</td>
<td>SPV can receive guarantees and VGF in line with international practice on PPP procurement.</td>
<td>SPV can receive guarantees and VGF in line with international practice on PPP procurement.</td>
<td>SOEs are not eligible for receiving guarantees or VGF. Any equity injections have to be approved by Parliament.</td>
</tr>
<tr>
<td>Ability to accelerate project implementation</td>
<td>Assignment of SOEs is a standard procurement route. As it involves two developments assignment may be prolonged compared to Option 2b.</td>
<td>Assignment of SOEs is a standard procurement route. As the development only involves the port it is assumed to be the fastest procurement route.</td>
<td>PPPs are complex contractual structures and have a prolonged implementation period, particularly as the project combines two separate developments (port and industrial estate).</td>
<td>PPPs are complex contractual structures and have a prolonged implementation period. Implementation may be slightly quicker compared to Option 3a.</td>
<td>Option 4a does not present a significant option 4a does not present a significant advantage over Options 2 and 3. While a competitive tender is run the B2B arrangement with the SOE would still result in limited ability to control the project result in limited ability to control the project and any efficiency benefits.</td>
</tr>
</tbody>
</table>

**Conclusion**

- Not recommended
- Retain
- Preferred Option
- Retain
- Not recommended
- Not recommended

**Legend**

- Criteria fully achieved: ![Green](image)
- Criteria partially achieved: ![Yellow](image)
- Criteria not achieved: ![Red](image)
Kuala Tanjung under Presidential Regulation 81/2018

Development Scope
- Funding
- Planning
- Land acquisition
- Construction
- O&M
- Commercials

Funding Aspects
- Internal fund
- Commercial Loan
- Multilaterals
- Govt investments

Government Supports
- Concession (MoT)
- SOE synergy (MoSOE)
- Industry-related (MoI)
- Land acquisition, spatial-plan (The MoAASP)
- Related infrastructure (MoPW, Regional Govt)
- Local permits (Regional Govt)

*Kuala Tanjung Outline Business Case, not stipulated under Presidential Regulation 81/2018
As one of the initiatives to drive the alternative funding scheme, the Government of Indonesia has issued end-to-end regulations and provided supports to attract investors in PPP projects.

**GOVERNMENT OF INDONESIA**

**Preparation**
- Project Development Facility (PDF)
  - Project development facility assists the Government Contracting Agency (GCA) in PPP project preparation (PDF&TA)
  - Managing entity: KPPiP, PT SMI and PT IIF, Ministry of Finance

- Viability Gap Funding (VGF)
  - A facility which contributes to construction cost in order to increase project financial feasibility
  - Managing entity: Ministry of Finance based on GCA proposal
  - Govt’s commitment: Max 49% per project cost

- Guarantee Scheme
  - Guaranteeing govt. contractual obligations under infra. concession agreements and MoF Reg. No. 130/PMK.08 /2016 re: Govt. guarantee for electricity project acceleration
  - Managing entity: Indonesia Infra. Guarantee Fund (IIGF) and MoF
  - Govt’s commitment: US$ 450 Mil

- Tax Facilities
  - MoF Reg. No.35/2018 allowed 100% Tax Holiday for 17 Pioneering Industries for 5 – 20 years depending on the investment value. After the expiration period, there is a two-year period of transition with 50% reduction of income tax. The incentive is also applied for existing investors that will do expansion
  - Managing entity: Ministry of Finance

- Availability Payment
  - A scheme in which concessionaires receive periodic payments from central or regional government if the service standard is fulfilled. The MoF Regulation and MoHA Regulation on Availability Payment have been stipulated.
  - Managing entity: Ministry of Finance, Ministry of Home Affairs

- Land Acquisition
  - A facility to support land acquisition for infrastructure projects particularly projects that involve private sector
  - Managing entity: Ministry of Finance; Ministry of Agrarian and Spatial Planning/BPN, and BLU-LMAN
THANK YOU

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