Construction Industry and CM Development in Indonesia

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IAMPI
(Indonesian Society of Project Management Professional

Presentation Structure

- **Indonesia in a brief**
  - Government program
  - GOI Ambitious Infrastructure Program Since Presidence Jokowi Administration-2014
  - Public and Government Related Project
  - Private Public Partnership
  - Private Project
- **Construction Indonesia**
  - Construction In general
  - Construction in Indonesia
  - History of Indonesian Modern Construction since 1800
  - Construction law
  - Execution Infrastructure and other project
  - Project Financing and project delivery
  - Role of CPM

Construction Development in Indonesia

- Construction Practices commonly use
- CM Company
- Individual Professional Competence
- Role of LPJKN
- Role of DJBK-PUPR
- Role of IAMPI
- Cooperation With CMAK
- Expectation

- **Discussion**

Indonesia in a brief

RUSSIA
KAZAKHSTAN
Astana
Omsk
Novosibirsk
Krasnoyarsk
Bratsk
Lake Baikal
Irkutsk
Chita
Tynda
Komsomol'sk
Khabarovsk
Sea of Okhotsk
Sakhalin
Kuril Islands
Semey (Semipalatinsk)
Lake Balkhash
Ulaanbaatar
MONGOLIA
Harbin
Tashkent
UZB.
Bishkek
KYRGYZSTAN
Almaty
Ürümqi
Dushanbe
TAJIKISTAN
Kashi
AFG.
Kabul
1972 Line of Control
Indian claim
Line of Actual Control
Islamabad
PAK.
Golmud
Lanzhou
CHINA
Changchun
Shenyang
Beijing
Tianjin
Dalian
Jinan
Xi'an
Zhengzhou
Nanjing
Shanghai
Wuhan
Hangzhou
Chengdu
Lhasa
Nanchang
Fuzhou
Guiyang
Kunming
Guangzhou
Taipei
Taiwan
Hokkaido
Sapporo
Occupied by the Soviet Union in 1945, administered by Russia, claimed by Japan.
Vladivostok
NORTH KOREA
Pyongyang
Demarcation Line
Seoul
SOUTH KOREA
Sea of Japan
Yellow Sea
East China Sea
Honshu
Tokyo
JAPAN
Osaka
Kitakyushu
Shikoku
Kyushu
North Pacific Ocean
Okinawa
Tropic of Cancer
New Delhi
NEPAL
Kathmandu
BHUTAN
Thimphu
Kānpur
INDIA
Nāgpur
BANGLADESH
Dhaka
Kolkata
Mandalay
BURMA
Hyderābād
Vishākhapatnam
Rangoon
Bay of Bengal
Chennai
Jaffna
SRI LANKA
Colombo
Andaman Islands (INDIA)
Andaman Sea
Nicobar Islands (INDIA)
Phuket
Banda Aceh
Medan
Hanoi
LAOS
Vientiane
Haiphong
Chiang Mai
THAILAND
Bangkok
Da Nang
Paracel Islands
Hainan Dao
Macau S.A.R.
Hong Kong Special Administrative Region
VIETNAM
CAMBODIA
Phnom Penh
Ho Chi Minh City
Gulf of Thailand
South China Sea
Spratly Islands
Philippine Sea
Northern Mariana Islands (U.S.)
Guam (U.S.)
Luzon
Manila
PHILIPPINES
Cebu
Sulu Sea
Mindanao
Davao
Zamboanga
Koror
PALAU
FEDERATED STATES OF MICRONESIA
Bandar Seri Begawan
BRUNEI
MALAYSIA
Kuala Lumpur
Singapore
SINGAPORE
Borneo
Celebes Sea
Manado
Equator
Padang
Sumatra
Pontianak
INDONESIA
Palembang
Bengkulu
Jakarta
Bandung
Surabaya
Java
Java Sea
Makassar
Kendari
Ambon
Banda Sea
Sorong
Jayapura
Wewak
PAPUA NEW GUINEA
New Guinea
Merauke
Daru
Arafura Sea
Dili
EAST TIMOR
Kupang
Timor Sea
Indian Ocean
Christmas Island (AUSTRALIA)
Cocos (Keeling) Islands (AUSTRALIA)
Ashmore and Cartier Islands (AUSTRALIA)
Darwin
Gulf of Carpentaria
Wyndham
AUSTRALIA
Dampier
Tropic of Capricorn
Scale 1:46,000,000
Azimuthal Equal-Area Projection
0 500 1000 Kilometers
0 500 1000 Miles
Boundary representation is not necessarily authoritative.

Indonesia
International Boundary
Province Boundary
Road
River
National Capital
City or Town
Island name
0 500 KM
0 500 Miles
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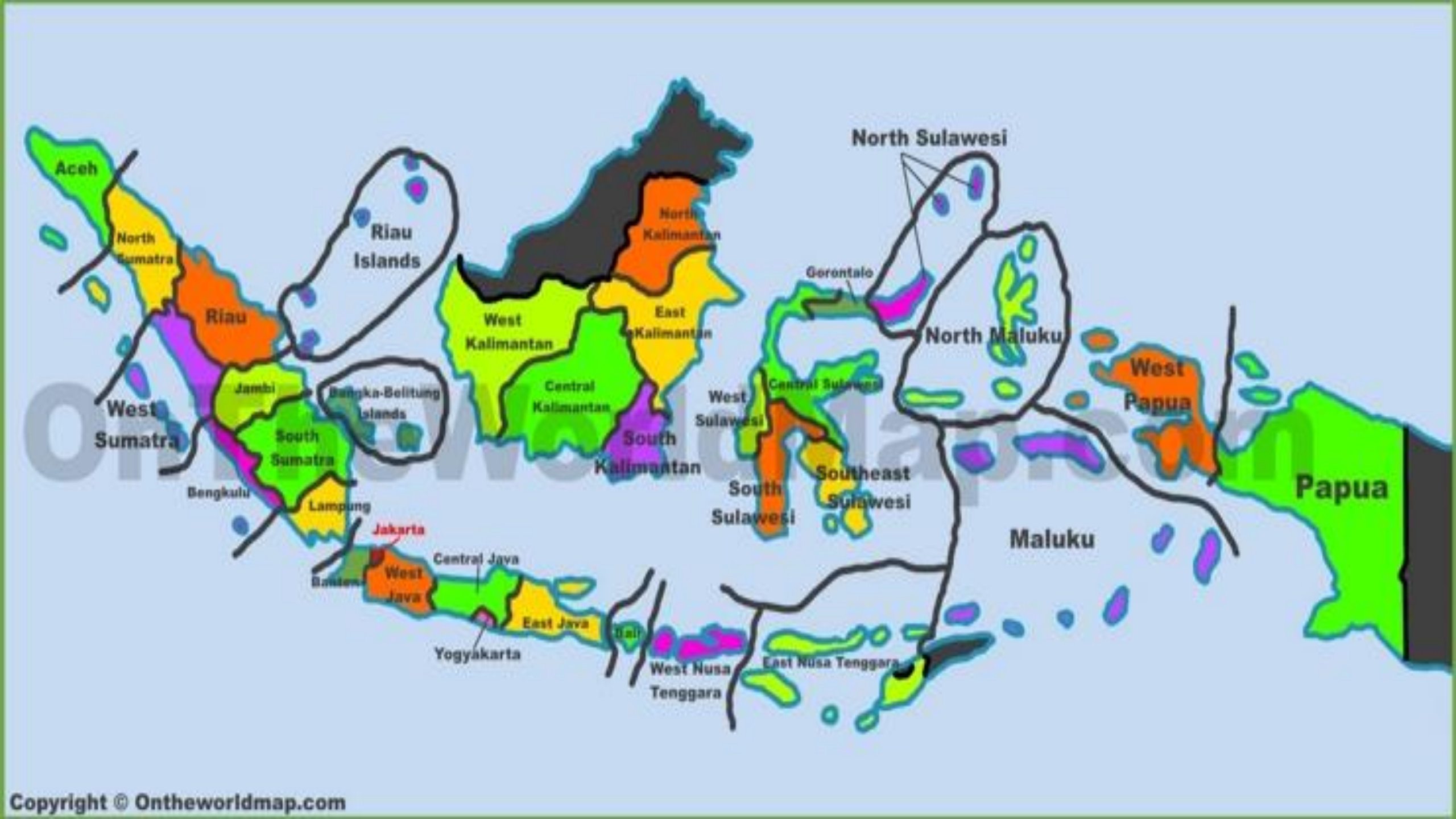
THAILAND
MALAYSIA
SINGAPORE
BRUNEI
PHILIPPINES
EAST TIMOR
AUSTRALIA
PAPUA NEW GUINEA
I N D O N E S I A
Banda Aceh
Lhokseumawe
Langsa
Medan
Kuala Lumpur
Dumai
Pekanbaru
Padang
Jambi
Sumatra
Palembang
Bengkulu
Bandar Lampung
Jakarta
Semarang
Pati
Bandung
Surabaya
Yogyakarta
Malang
Java
Bali
Lombok
Riau Islands
Bandar Seri Begawan
Tanjung Selor
Borneo (Kalimantan)
Singkawang
Pontianak
Sintang
Samarinda
Balikpapan
Kendawangan
Banjarmasin
Zamboanga
Davao
Celebes Sea
Java Sea
Indian Ocean
Pacific Ocean
Manado
North Maluku
Palu
Sulawesi
Makassar
Molucca Sea
Taliabu
Obi
Buru
Maluku
Sorong
Manokwari
West Papua
Jayapura
Papua
Wewak
Banda Sea
Trangan
Jamdena
West Nusa Tenggara
East Nusa Tenggara
Dili
Timor
Sumba
Kupang
Timor Sea
Arafura Sea
Darwin
95
100
105
110
115
120
125
130
140
5
0
10



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Key statistics

- Population: 249.9 million, the fourth highest in the world.
- Annual population growth rate: 1.2 per cent.
- Percentage of population of a working age: 66 per cent.
- GDP per capita (ppp): $12,400 world rank of 127 GDP per capita (nom) $3.789 rank 122
- Total GDP: $1,005 billion world rank of 16
- Estimated GDP growth: **5.1** per cent (2014 estimate).
- Unemployment: 6.2 per cent.
- Ease of doing business: 114th in the world.
- Ease of getting credit: 71st in the world.
- 2014 World Competitiveness Yearbook ranking: 37th.
- 2014 World Talent ranking: 25th.
- Government: Democratic Republic.
- DHL Global Connectedness Index 2014 ranking: 111th.
- Interest rate: 8.9 per cent.
- Foreign Direct Investment (FDI) into Indonesia: $6.3 billion (January-March 2015).
- Of this, $1.2 billion came from Singapore; $1.2 billion from Japan; $600 million from South Korea; $400 million from the UK; and $300 million from the US.
- Starting a business in Indonesia takes an average of 52.5 days, compared to the world average of 30.6 days.

Indonesia's Natural Resources Potential

Key Indicator	Natural Gas	Coal	Geothermal	Palm Oil	Cocoa	Tin	Nickel	Bauxite
	Reserve reaches 165 TCF within +3 TCF production level annualy	The second largest exporter in the world	Reserve 40% of resources (the largest in the world)	The largest exporter in the world > 19 million ton/year	770,000 tons/ year, the second largest producer in the world	65,000 tons/ year, the second largest producer in the world	Provide 12% world reserves (4th largest)	7th world reserves provider, 4th largest producer in the world

- Large amount of gas-based resources and petrochemical
- Exclude Non-Conventional Gas from Coal Bed Methane (CBN) and Coal Gasification

Based on the assumption that 40% of reserve feasible to be developed into 12 GW. Nowadays, it is only 1,200 MW developed

In 2013, start to be processed locally (Law No. 4 Year 2009 - Mineral and Coal Mining)

For downstream industry development purpose

- Poor logistic and distribution
- Connectivity need to be improved
- Therefore, there are an Urgent needs of Infrastructure to build
- Build Infrastructure
  - Transportation: Road, airport, interisland harbor, and international harbor
  - Energy: Oil and gas, power plant
  - Telecommunication
- National Strategic Project

The Problem of connectivity

Government Program

- GOI has an ambitious Infrastructure development Program: Since President Jokowi Administration-2014
- Public and Government Related Project
  - Function of Government Institution
    - KPPIP
    - BPJT
    - BPH Migas
  - Public Project
    - Minister of Public Works and Housing
  - Private Public Partnership
- Private Project

Construction in Indonesia

- **Pre 1945**
  - **1800 Construction of road across Java Island more less 900 km**
  - **1864 Construction of Sugar Industry, and its infrastructure, Transportaion Infrastructure: Railway**
  - **1901 First Cement factory in West Sumatra**
- **1945 – 1950**
  - 1945-1950 Wartime era, no construction activities
  - 1950, Nasionalisation Ductch ConstructionComapny :NV de Hollandshe Beton Maatschappij (PT. Hutama Karya), NV Volker Associate (PT. Adhi Karya), NV Nederlandshe Aanneming Maatschappij (PT. Nindya Karya), NV Volker Aanneming Maatschappij (PT. Waskita Karya).
- **1951 – 1959**
  - Parctically there no much construction activities, no stable Government Constrction Contract base on the Dutch regulation AV41.

Indonesia Construction History

- **1960 – 1966**
  - Construction very active in Building and infrastructure such as construction of MONAS, Monumen Irian Barat, Hotel Indonesia, Samudra Beach, Bali Beach, Wisma Nusantara, Jembatan Semanggi, Gelora Senayan dan lainnya
  - Construction of steel plant in Cilegon, Fertilizer Plant in Kalimantan, Cement Plant, most of the contract was sign base on cost plus fee
  - 1966 Cost plus fee construct was prohibited
- **1967 – 1996**
  - Five Years Plan was initiated
  - Expansion of Cilegon Steel plant, Builidng of Petrochemical and Fertilizer plant, ne w cement plant
- **1997 – 2004**
  - 1998 Heavy Economic Crisis
  - 1999 Construction Bill no 18/1999 was Sign
  - Very frequent of Government changes unstable politicak situation
- **2004-2014**
  - More Stable government, some airport port, harbour and highway was bulid
  - Private Indsutrial Plant
- **2014-2018**
  - Ambitious Infrastructure project: Highway, Rail way, Harbour, Airport, State border road way, Power plant

Indonesia Construction History

Construction Indonesia 2014-2019

- Construction In general
- Construction in Indonesia
  - History of Indonesian Modern Construction since 1800 era
  - Construction law
- Execution Infrastructure and other project
  - Government
  - PPP
  - Private
- Project Financing and project delivery
- Role of CPM

- **Government Program**
  - Government efforts to improve infrastructure, logistics and low-cost housing are big drivers for construction, while rising domestic demand and lower interest rates are fueling the private housing sector. Rapidly raising standard of living drive demand on apartment.
- **Future outlook**
  - Indonesia is a leading investment destination in Asia. With annual population growth at about four million, construction will remain a key economic enabler. Expansion in roads and infrastructure is vital with annual new vehicle registration at almost one million. However, challenges exist. Skilled labor is a concern along with problems acquiring land and project delays.

Construction In general

Construction facts

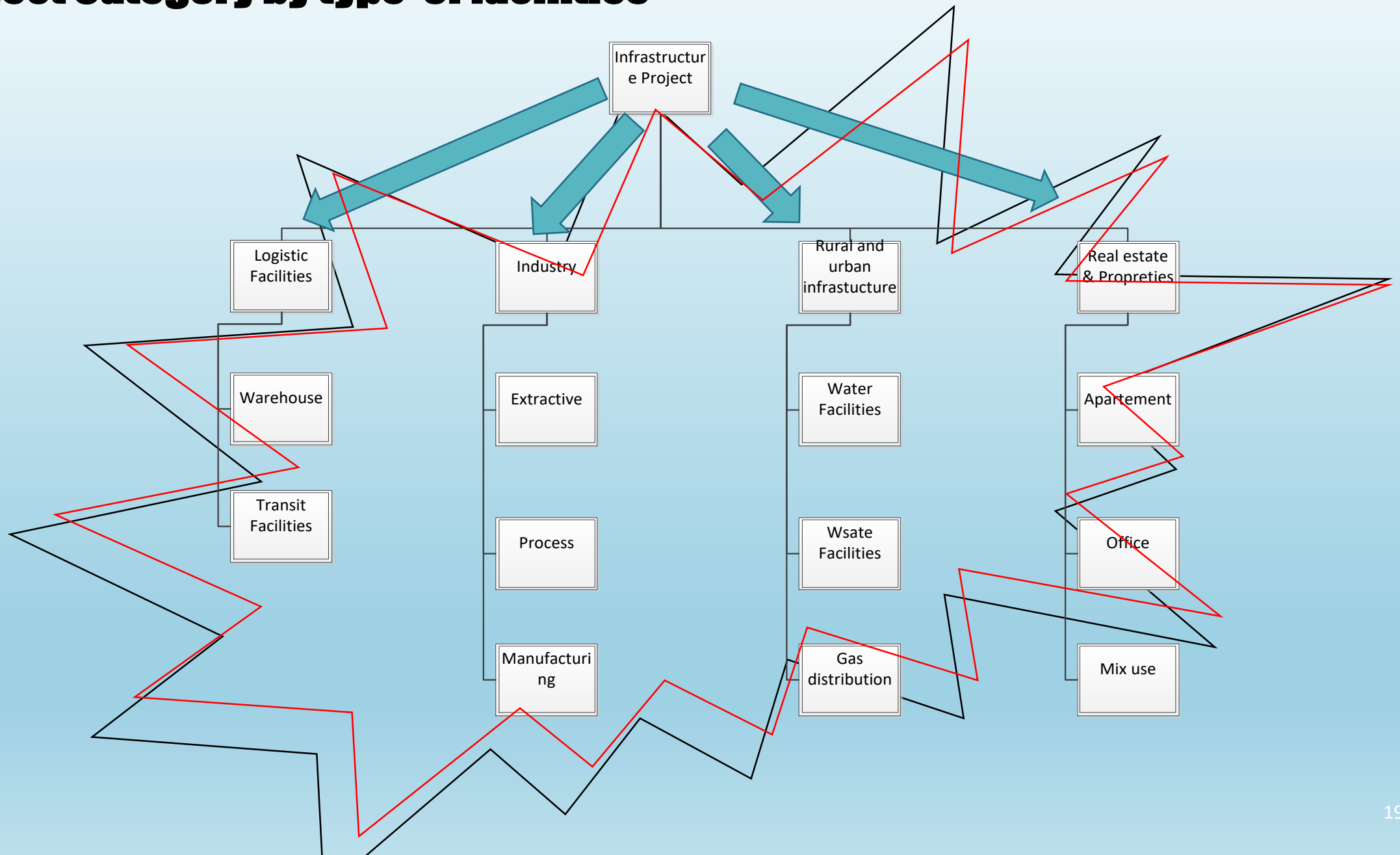
- Total construction spending: $267 billion (2013).
- Predicted construction spending growth: 5.2 per cent (2014-19).
- Size of construction workforce: 6.1 million (2012).
- In the medium term, Indonesia is expected to see the fastest construction market growth of any Asian country, according to AECOM. Jakarta is the top-rated city in terms of market growth.
- Indonesia is tipped to have the second most profitable construction market in Asia over the medium term, behind China. Jakarta is expected to be second in the list of cities or metropolitan regions with the most profitable construction market in Asia, only behind Singapore.
- The number of foreign construction companies working in Indonesia increased from 118 in 2007 to 255 in 2012.
- Bank Indonesia's Residential Property Price Survey Index rose to 181.64 in the fourth quarter of 2014, up by 1.54 per cent quarter on quarter. Regionally, the highest growth was seen in Balikpapan (4.49 per cent).

Construction National Priority Projects in Indonesia

- Government
- PPP
- Private

Execution of Infrastructure and other project

Project Category by type of facilities



- A. Toll Road Infrastructure Development
- B. National Road Infratsructure Development / National Strategic Non-Toll
- C. Infrastructure Project for Inter-City Railway
- D. Infrastructure Project for Mass Rapid Transit Development
- E. Airport Revitalization Project
- F. Construction Projects of New Airport
- G. Other Strategic Airport Projects
- H. New Seaport Development Project and Capacity Development
- I. One Million Housing Program
- J. Oil Refinery Development Program
- K. Gas Pipe Project / LPG Terminal
- L. Waste to Energy Infrastructure Project
- M. Drinking Water Supply Project
- N. Communal Wastewater System Infrastructure Project
- O. Flood Embankment Development Project
- P. Dam Project and Irrigation Network
- Q. Broadband Coverage Enhancement Program
- R. Other Strategic Science and Technology Infrastructure Projects
- S. Priority Industry Zone Development / Special Economic Zone
- T. Tourism
- U. Smelter Development Project
- V. Fishery and Maritime Project
- W. Education Infrastructure
- X. Electricity Infrastructure Development Program
- Y. Aircraft Industry Program
- Z. Economic Equality Sector

INFRASTRUCTURE AND HEAVY CONSTRUCTION :
National Strategic Project

National Priority Projects

- **PORT**
  - *Kuala Tanjung International Hub Seaport*
  - *Patimban Seaport*
  - *Bitung International Hub Seaport*
  - *Inland Waterways / Cikarang-Bekasi-Laut Jawa (CBL)*

- **OIL & GAS**
  - *Oil Refinery in Bontang*
  - *Oil Refinery in Tuban*
  - *Refinery Development Master Plan*
  - *Abadi WK Masela Field*
  - *Jambaran – Tiung Biru Gas Field Unitization*
  - *Indonesian Deepwater Development (IDD)*
  - *Tangguh LNG Train 3 Project*

- **ROAD & BRIDGE**
  - *Balikpapan – Samarinda Toll Road*
  - *Manado – Bitung Toll Road*
  - *Panimbang – Serang Toll Road*
  - *Trans Sumatera Toll Road*
  - *Probolinggo – Banyuwangi Toll Road*
  - *Yogyakarta – Bawen Toll Road*

- **WATER & SANITATION**
  - *Jakarta Sewerage System*
  - *West Semarang Drinking Water Supply System*
  - *National Capital Interated Coastal Development*
  - *Jatiluhur Drinking Water Supply System*
  - *Bandar Lampung Drinking Water Supply System*

- **RAILWAY**
  - *Sooekarno-Hatta International Airport Railway*
  - *Makassar – Parepare Railway*
  - *East Kalimantan Railway*
  - *General Railway Organization in Jakarta*

- ***ELECTRICITY***
  - Central Java Power Plant (CJPP) / PLTU Batang
  - Central – West Java Transmission Line 500 kV (4 Provinsi)
  - South Sumatera Mine-Mouth Coal-Fired Power Plant
  - Sumatera 500 kV Transmission
  - PLTU Indramayu
  - Energy From Big Cities' Waste (Semarang, Makassar, Tangerang)
  - Combined-Cycle Power Plant (16 Provinces)

- **PUBLIC TRANSPORTATION**
  - *MRT Jakarta (North – South Corridor)*
  - *Light Rail Transit (LRT) Jakarta, Bogor, Depok, Bekasi*
  - *Light Rail Transit (LRT) South Sumatera*

- **INFORMATION TECHNOLOGY**
  - *Palapa Ring Broadband*

Priority Projects up to 2019

- 1. Balikpapan-Samarinda Toll Road
- 2. Mando-BitungToll Road
- 3. Panimbang SerangToll Road
- 4. 8 Section of Trans SumateraToll Road
- 5. Express Train SHIA
- 6. MRT Jakarta North South
- 7 .Makassar-Pare Pare Railway
- 8 International Hub Kuaa Tanjung Harbor
- 9 Harbor of Hub International. Bitung NCICD
- 10 Hydro power Karangkates IV (2x50 MW)
- 11 Hydro power Kesamben (37MW)
- 12 Hydro power Lodoyo (10 MW)
- 13 Inland Waterway/Cikarang-Bekasi-Laut (CBL)
- 14 Light Rail Transit di Sum sel
- 15 LRT terintegrasi di wilayah Jakarta Bogor Depok dan Bekasi
- 16 National Capital Integrated Coastal Development (NCICD) Fase A
- 17 Waste Treat plant systemJakarta
- 18 SPAM semarang barat
- 19 High Voltage Direct Current (HVDC)
- 20 Transmisi Sumatera 500 KV
- 21. Central- West Java Transmission Line 500 KV
- 22. Central Java power plant /PLTU Batang
- 23. PLTU Indramayu
- 24. PLTU Mulut Tambang Sumatera selatan
- 25.Oil Refinery Bontang
- 26. RDMP/Revitalisasi Kilang Existing (Balikpapan,Cilacapn Balongan, Dumai, Plaju)
- 27. Harbor at North coast of Java
- 28. Tuban Oil Refinery
- 29. Palapa Ring Broadband
- 30. East Kalimantan Railway

8 Existing Special Economic Zone (SEZ)

SEI MANGKEI

- Palm Oil Processing Industry
- Rubber Processing Industry
- Fertilizer and Miscellaneous Industry
- Logistic
- Tourism

Supporting Infrastructure:
- Toll Aceh Lampung (Plan)
- Gas and electricity
- Port

MALOY BATUTA TRANS KALIMANTAN

- Palm Oil Industry
- Logistic

Supporting Infrastructure:
- Road
- Electricity
- Water and Waste Installation

BITUNG

- Fisheries Processing Industry
- Coconut Based Industrial and Medicinal Plants
- Various Industries
- Logistic

Supporting Infrastructure:
- Road
- Electricity
- Water and Waste Installation

MOROTAI

- Tourism
- Fisheries Processing Industry
- Business and Logistic

Supporting Infrastructure:
- Road
- Electricity
- Water and Waste Installation

TANJUNG API-API

- Rubber Processing Industry
- Oil Processing Industry
- Petrochemical Industry

Supporting Infrastructure:
- Road
- Electricity
- Water and Waste Installation

TANJUNGLESUNG

- Tourism

Supporting Infrastructure:
- Road
- Electricity
- Water and Waste Installation
- Marina

MANDALIKA

- Tourism

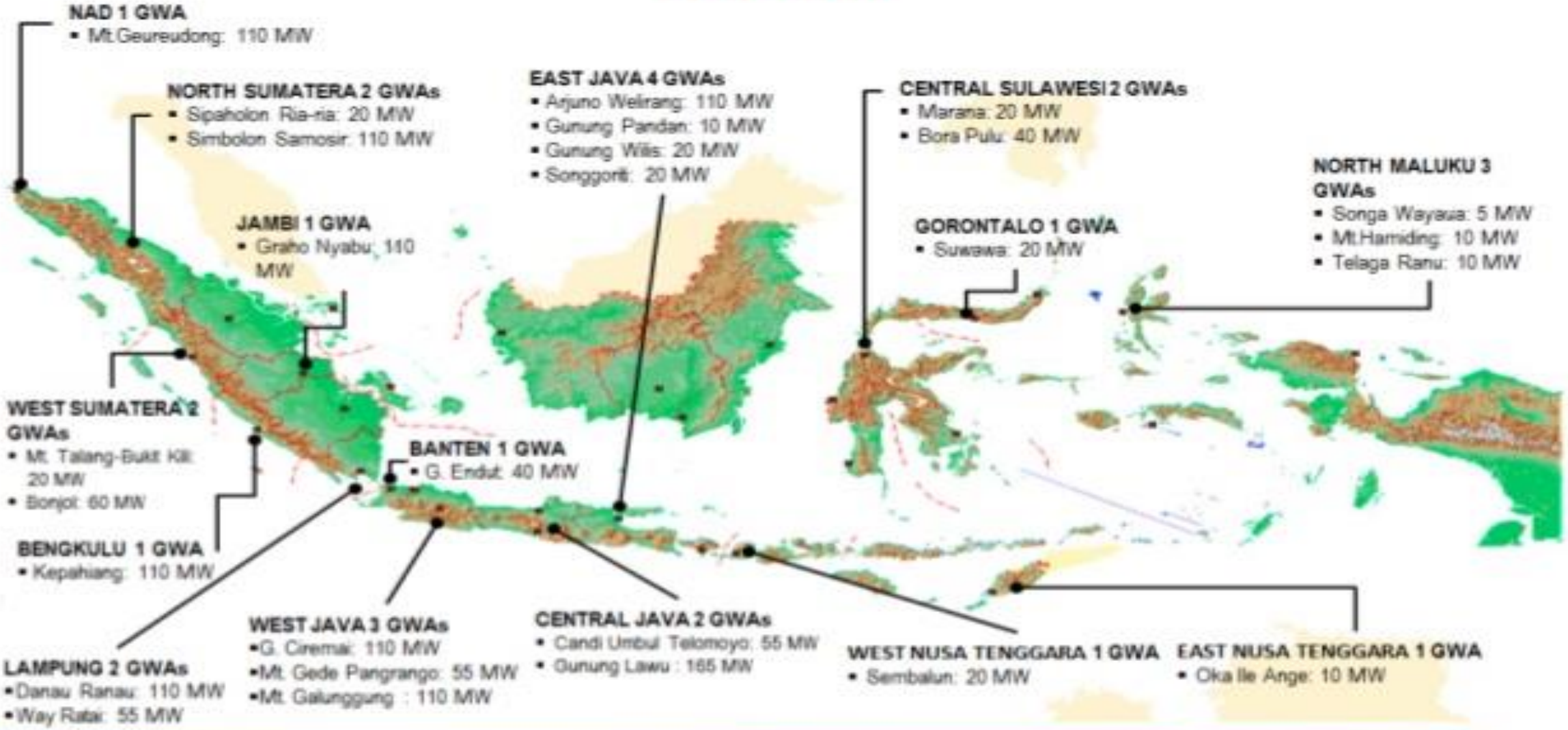
Supporting Infrastructure:
- Road
- Electricity
- Water and Waste Installation

PALU

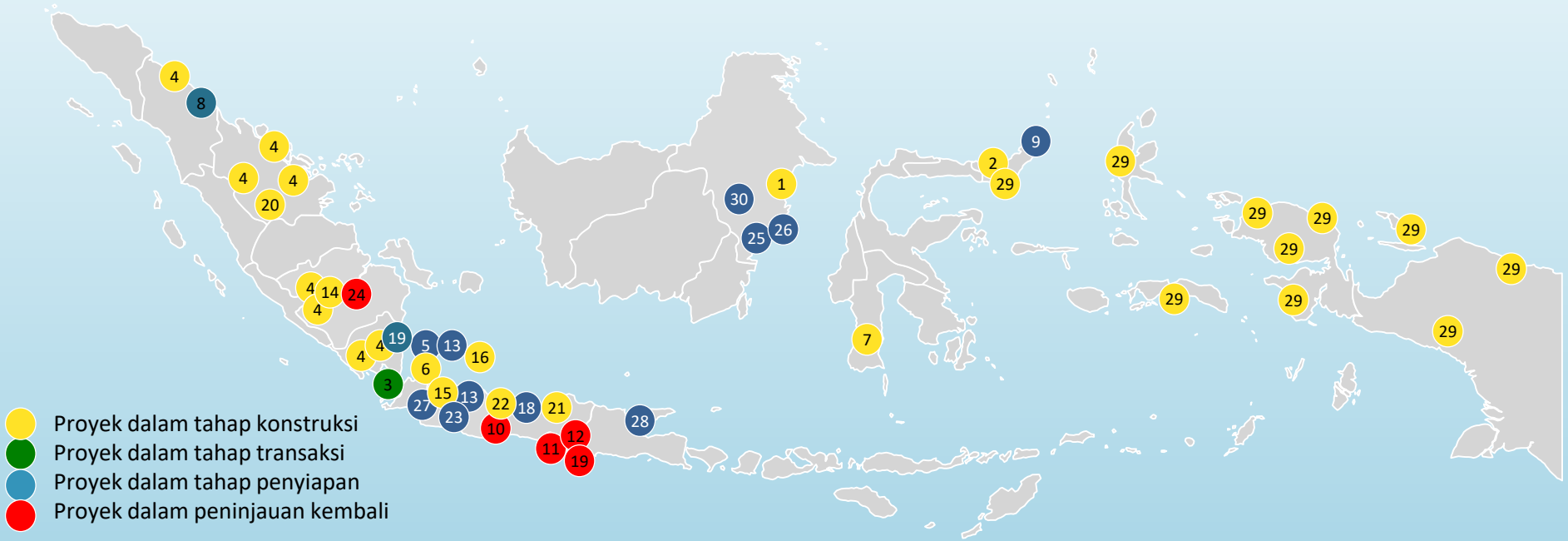
- Manufacture Industry
- Agro Based Industry Cacao, Rubber Seaweed, Rattan
- Manufacturing Nickel, Iron Ore, Gold
- Logistic

Supporting Infrastructure:
- Road
- Electricity
- Water and Waste Installation

27 GWAs TO BE TENDERED
2015 - 2017

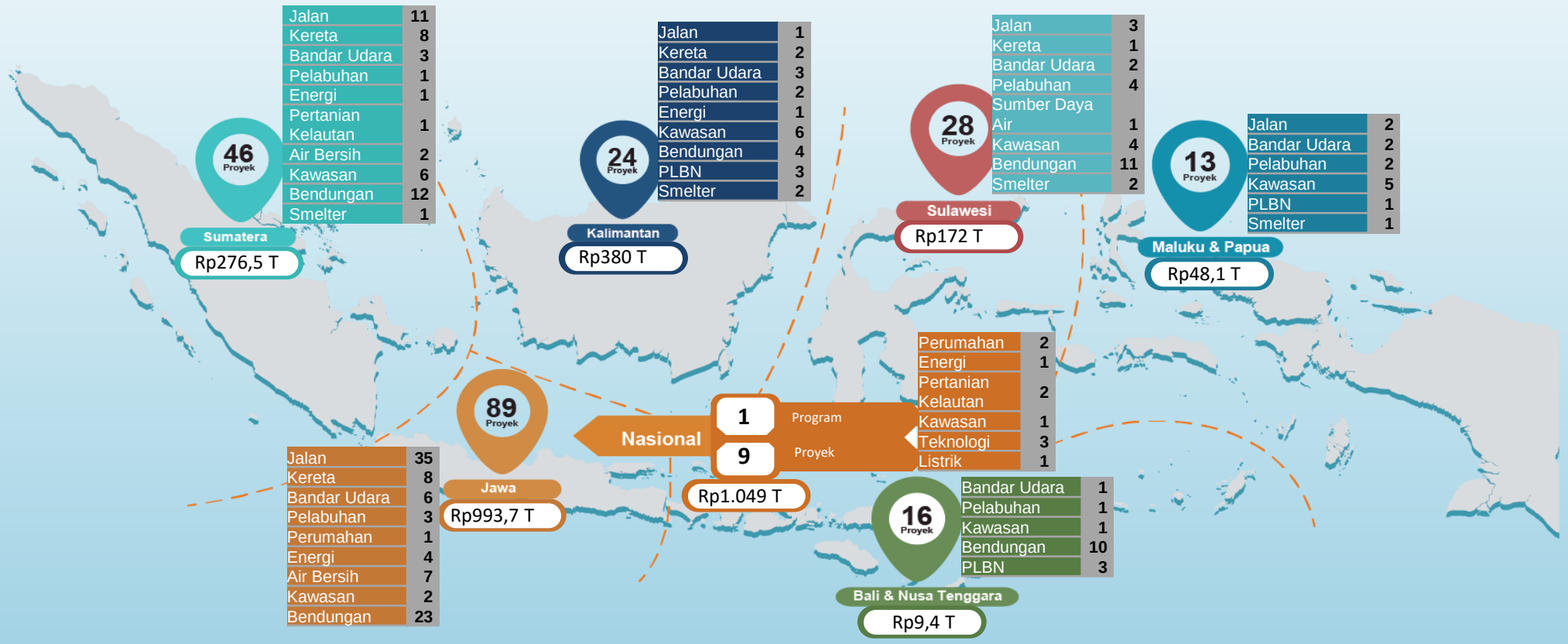


State of preparation stage and distribution of 30 Priority Projects



1. Jalan Tol Balikpapan-Samarinda
2. Jalan Tol Manado-Bitung
3. Jalan Tol Panimbang-Serang
4. 8 Ruas Jalan Tol Trans Sumatera
5. Kereta Api Ekspres SHIA
6. MRT Jakarta Jalur Selatan – Utara
7. Kereta Api Makassar – Parepare
8. Pelabuhan Hub Internasional Kuala Tanjung
9. Pelabuhan Hub Internasional Bitung
10. PLTA Karangkates IV & V (2x50MW)
11. PLTA Kesamben (37MW)
12. PLTA Lodoyo (10MW)
13. *Inland Waterways*/Cikarang – Bekasi – Laut (CBL)
14. *Light Rail Transit* (LRT) di Provinsi Sumatera Selatan
15. *Light Rail Transit* (LRT) Terintegrasi di Wilayah Jakarta, Bogor, Depok dan Bekasi
16. *National Capital Integrated Coastal Development* (NCICD) Fase A
17. Sistem Pengolahan Limbah Jakarta
18. SPAM Semarang Barat
19. *High Voltage Direct Current* (HVDC)
20. Transmisi Sumatera 500 kV
21. *Central – West Java Transmission Line* 500 kV
22. *Central Java Power Plant* (CJPP)/PLTU Batang
23. PLTU Indramayu
24. PLTU Mulut Tambang Sumatera Selatan 8, 9, 10
25. Kilang Minyak Bontang
26. RDMP/Revitalisasi Kilang Eksisting (Balikpapan, Cilacap, Balongan, Dumai, Plaju)
27. Pelabuhan Patimban
28. Kilang Minyak Tuban
29. *Palapa Ring Broadband*
30. Kereta Api Kalimantan Timur

Nasional Strategic Project (PSN) Comprising of 225 project and 1 electriciry program sprea all over Indonesia with the investment of Rp2.928 T

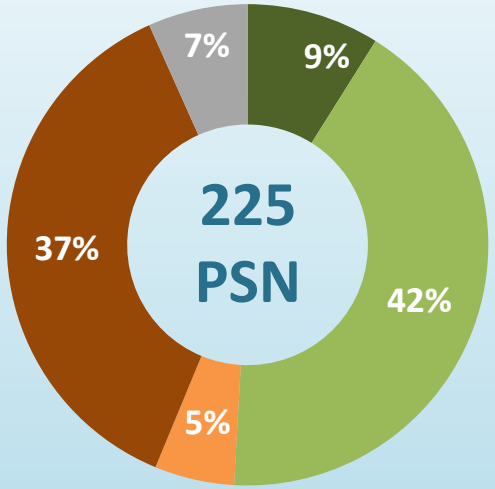


PSN *existing* covering 14 sektor:

JALAN	KERETA	BANDAR UDARA	PELABUHAN	PERUMAHAN	ENERGI	PERTANIAN/ KELAUTAN	AIR BERSIH	KAWASAN	BENDUNGAN	TEKNOLOGI	PLBN	SMELTER	LISTRIK
52 PROYEK	19 PROYEK	17 PROYEK	13 PROYEK	3 PROYEK	7 PROYEK	3 PROYEK	10 PROYEK	25 PROYEK	60 PROYEK	3 PROYEK	7 PROYEK	6 PROYEK	1 PROGRAM

Progress of 225 Nasional Strategic Projects (PSN) and Electricity Program of 35 GW

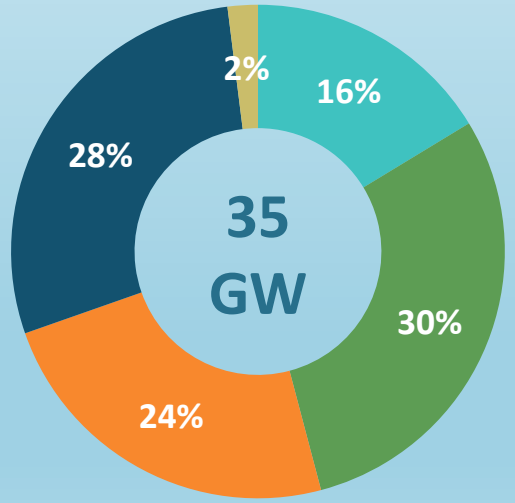
***Progress* 225 PSN per Februari 2016**



- **20** projects Completed
- **94** projects under Constructiom
- **13** projects under transaction process
- **82** project under Preparation
- **15** projects excluded [1]

Sumber: KPPIP Feb 2017

Progress Program Kelistrikan 35 GW per Desember 2016



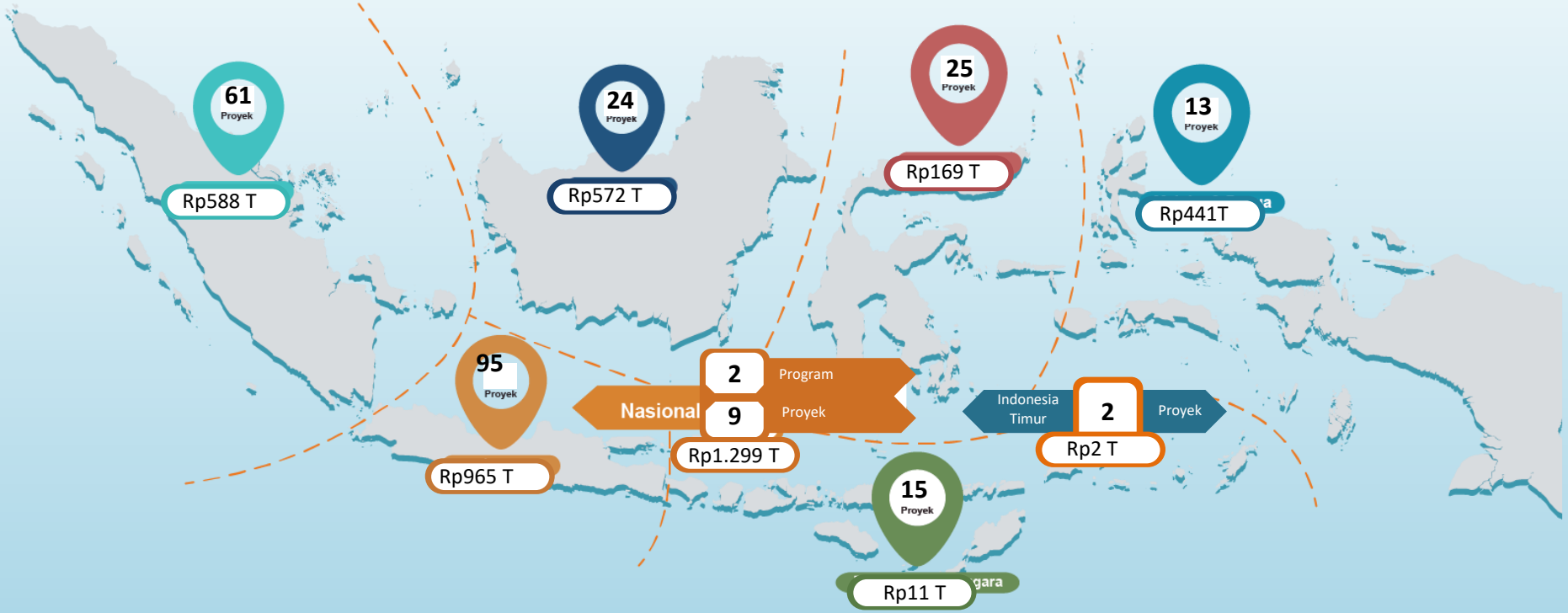
- **706 MW** in operation
- **10.141 MW** under construction
- **8.478 MW PPA done but financial close yet to be done**
- **10.560 MW** Under procurement
- **5.824 MW** under planning process

Sumber: PLN Jan 2017

[1]Projects excluded due to not fulfil NSP criteria such as no clear champion of the projects; *groundbreaking 2018;* project value under Rp100 Billion

[2]Including SPP Kalsel-1 i *Financial Close* already in January 2017

Evaluation result of 2016: NSP necome 244 NSP and 2 Program eith total investment of Rp4.047 Triliun



Projects include 13 projects sector and 2 programs

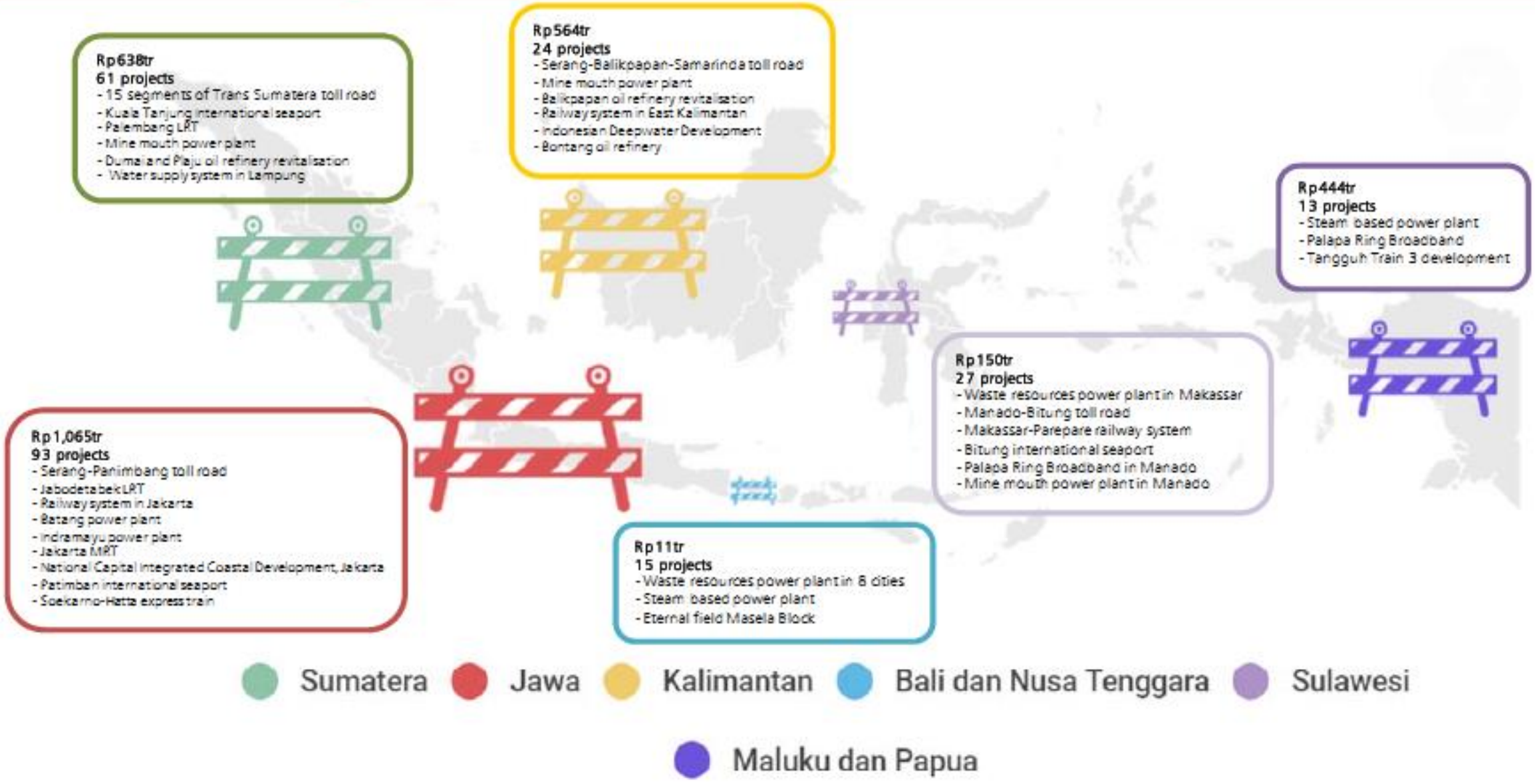
Projects Sector													
	JALAN	KERETA	PELABUHAN	BANDAR UDARA	KAWASAN	PERUMAHAN	PLBN	AIR BERSIH & SANITASI	BENDUNGAN	IRIGASI	TEKNOLOGI	SMELTER	ENERGI
	74 PROYEK	23 PROYEK	10 PROYEK	8 PROYEK	30 PROYEK	3 PROYEK	3 PROYEK	9 PROYEK	55 PROYEK	7 PROYEK	4 PROYEK	6 PROYEK	12 PROYEK

Program		
	LISTRIK	1 PROGRAM
	INDUSTRI PESAWAT	1 PROGRAM

Indonesia's RPJMN targets and realisation in the past three years

Projects	Unit	RPJMN Target	Realisation	Unrealised	% realised
Road	Km	2,650	2,623	27	99%
Toll road	Km	1,851	240	1,611	13%
Dam	Unit	65	37	28	57%
Railway	Km	3,258	2,154	1,104	66%

Indonesia's National Strategic Project distribution



Source: Tempo, DBSVI

Indonesian Deepwater Development Project/IDD (Gendalo, Maha, Gandang, Gahem, and Bangka)	-	-	-	0.1
Tanguh LNG Train 3 Project	-	-	-	0.1
Ketenagalistrikan				
High Voltage Direct Current (HVDC)	Sumatera Selatan, Lampung, Banten, Jawa Barat	2024	-	33.4
PLTU Mulut Tambang Sumsel 8	Sumatera Selatan	2023	Construction	18.0
The 500KV Sumatera Transmission	Pulau Sumatera	2019	Construction	24.4
Central-West Java Transmission Line 500kV	Jawa Barat dan Tengah	2019	Construction	7.6
PLTU Indramayu	Indramayu, Jawa Barat	2019	Preparation	27.0
Batang Power Plant/Central Java Power Plant	-	2019	Construction	40.0
Energy From Big Cities' Waste (Semarang, Makassar, Tangerang)	-	-	Construction	-
Combined-Cycle Power Plant	-	-	-	-
Jalan dan Jembatan				
Trans Sumatera Toll Road	Sumatera Utara, Riau, Sumatera Selatan dan Lampung	2016	Construction	81.0
Balikpapan-Samarinda Toll Road	Kalimantan Timur	2018	Construction	10.0
Manado-Bitung Toll Road	Sulawesi Utara	2019	Construction	5.1
Serang-Panimbang Toll Road	Banten	2019	Construction	5.3
Yogyakarta-Bawen Toll Road	Yogyakarta	2020	Preparation	12.1
Probolinggo-Banyuwangi Toll Road	Jawa Timur	2019	Transaction	11.7
Transportasi Perkotaan				
MRT Jakarta (North - South Corridor)	DKI Jakarta	2019	Construction	39.5
Light Rail Transit (LRT) South Sumatera	Palembang, Sumatera Selatan	2018	Construction	12.5
Light Rail Transit (LRT) Jakarta, Bogor, Depok, Bekasi	DKI Jakarta dan Jawa Barat	2019	Construction	23.0
Kereta Api	Potensi KPBU	2018	Preparation	24.5
Soekarno-Hatta International Airport (SHIA) Express Railway	DKI Jakarta dan Banten	2022	Preparation	24.5
Makassar - Parepare Railway	Sulawesi Selatan	2018	Construction	8.3
East Kalimantan Railway	Kalimantan Timur	2021	Preparation	53.3
General Railway Organization in Jakarta	Tangerang, Banten	2019	Construction	4.0
Pelabuhan				

FINANCING

- P3
- PRIVATE
  - DOMESTIC
  - INTERNATIONAL
- PUBLIC

International investment

- Foreign direct investment (FDI) into Indonesia totalled $23.3 billion in 2014, up from $20.5 billion in 2013.
- The most popular sectors for FDI were mining ($4.7 billion), food ($3.1 billion), transportation, warehouse and telecommunication ($3.0 billion), metal, machinery and electronics ($2.5 billion), and chemicals and pharmaceuticals ($2.3 billion).
- West Java ($6.6 billion) was the region to attract the largest amount of FDI, followed by the Special Territory of Jakarta ($4.5 billion), East Kalimantan ($2.1 billion), Banten ($2.0 billion) and East Java ($1.8 billion).
- The greatest FDI contribution came from Singapore ($5.8 billion), with the remainder of the top five rounded out by Japan ($2.7 billion), Malaysia ($1.8 billion), the Netherlands ($ 1.7 billion) and the UK ($1.6 billion).

Development States of Indonesian Construction and CM

- Construction Practices commonly use in Indonesia
- CM Company
- Individual Professional Competence
- Agency related with construction project
  - KPPIP
  - LPJKN
  - Role of DJBK-PUPR
  - BPJT, BPH Migas
- Role of IAMPI
- Cooperation With CMAK
- Expectation

Construction Practice Commonly use Indonesia

Project Delivery Method		Project Management	Construction Technology						Production Theory	Tools and technic of production	Engineering and Information Technology
			Earth works	Foundation	Structures	Façade	Partition	Roofing			
Traditional		Traditional	in situ	in situ	in situ		in situ	in situ	Lean Construction	Manual	2D CAD
CM Professional		Agile		instated	assemble	assemble	assemble	assemble		Mechanical	3D CAD
Integr	Design Build				installed	installed	installed	installed		Automation	4D BIM
ated	EPC									Robotics	5D BIM
Alliance											6D BIM
IPD											

Past Performance of Construction Industry in Indonesia

HSSE

Environmental Issue & Health And Safety

SAFETY

- The Employment Law and the Construction Law contain provisions related to health and safety requirements for workers. Work health and safety requirements can also be found in the following regulations:
- Law No. 1 of 1970 regarding Work Safety.
- Government Regulation No. 50 of 2012 regarding Implementation of Work Safety and Health Management System.
- There are also various implementing regulations of these laws that govern in further detail the health and safety requirements and the implementation of the work safety and health management system.
- These include:
  - Ministry of Manpower Regulation No. PER.01/MEN/1980 of 1980 regarding Work Safety and Health in Building Construction.
  - Ministry of Public Works Regulation No. 05/PRT/M/2014 regarding Work Safety and Health Management System for Public Works Construction.

- Despite the regulation accident and fatal accident still happen around 16 fatal accident within 3 years in various laocation

ENVIRONMENT

- Law No 32 of 2009 regarding Environmental Protection and Management (Environmental Law) is a general law related to the environment. In addition to the Environmental Law, the following further laws and regulations may also be relevant.
  - **Air**
    - Government Regulation No. 41 of 1999 regarding Air Pollution Control.
  - **Water**
    - Law No. 11 of 1974 regarding Water and Government Regulation No. 121 of 2015 regarding Water Resources Utilisation.
  - **Waste**
    - Law No. 18 of 2008 regarding Waste/Garbage Management and Government Regulation No. 101 of 2014 regarding Hazardous and Poisonous Waste Management, specifically if the waste is hazardous or poisonous.
  - **Environmental impact assessments (EIAs)**
    - Government Regulation No. 27 of 2012 regarding Environmental Permits, and Minister of Environment Regulation No. 5 of 2012 regarding Business Lines and/or Activities that Require an Environmental Impact Assessment (*Analisis Mengenai Dampak Lingkungan Hidup*) (AMDAL).
  - **Sustainable development**
    - Presidential Regulation No. 59 of 2017 regarding Implementation of Sustainable Development Goals.

LEGAL REQUIREMENT

- Procurement arrangements
- Transaction structures
- Contractual issues
- Security and contractual protections
- Standard forms of contracts
- Payment for construction work
- Subcontractors
- Licensing
- Projects insurance
- Architects, engineers and construction professionals
- Employment laws
- Prohibiting corrupt practices
- Bankruptcy or insolvency
- Public private partnerships
- Dispute resolution
- Tax
- Other requirements for international contractors
- Reform

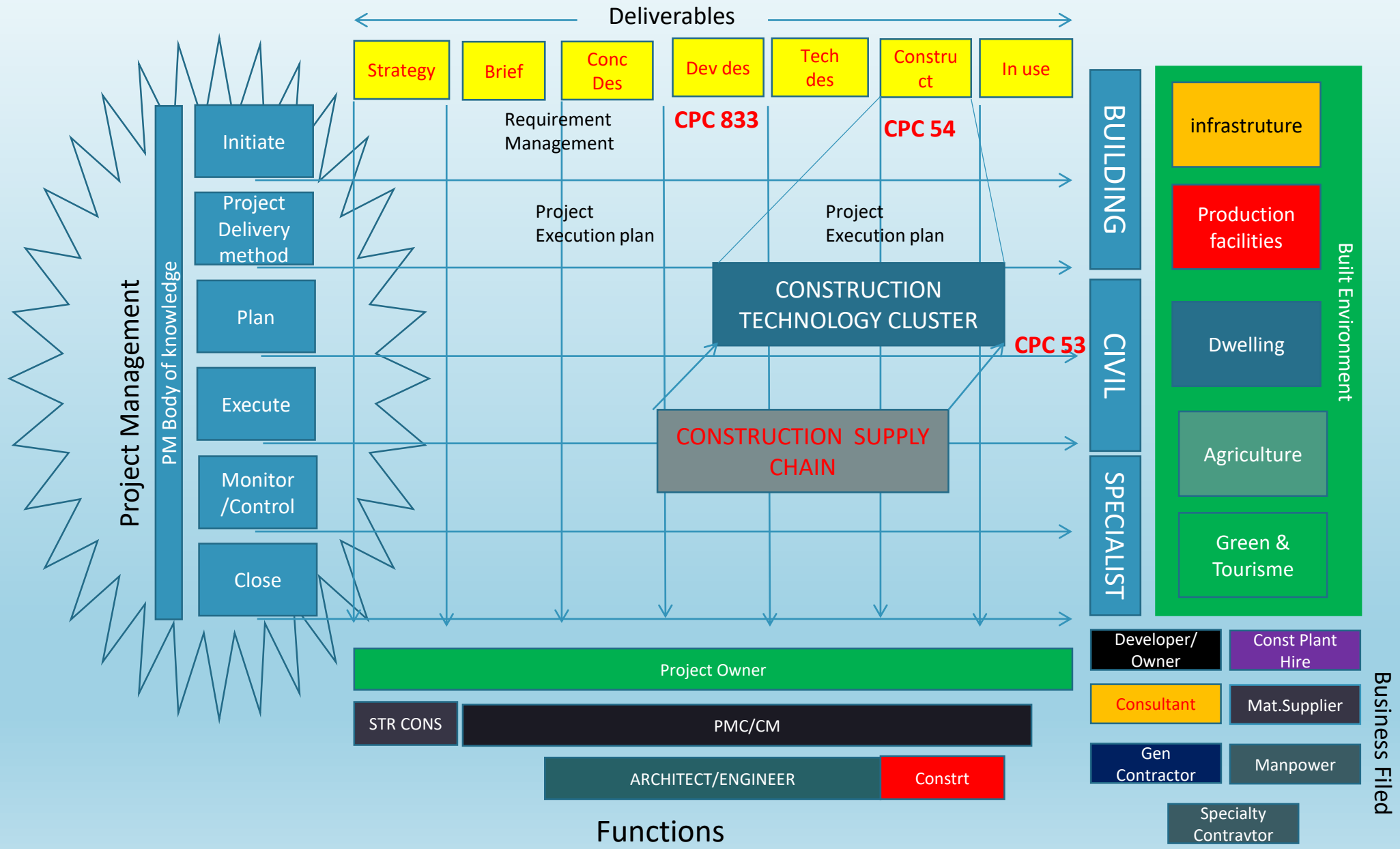
No	Construction Works	Unit	Man-Minute
01	Steel cutting for reinforce concrete	M^3	21.90
02	Steel fixing for reinforce concrete	M^3	28.50
03	Concreting for sloof foundation	M^3	16.56
04	Formwork dismantling	M^3	4.10
05	Soil stabilisation under floor	M^2	36.10
06	Concrete work	M^3	17.11

Source: Wuryanti (2005)

Construction Trade Productivity

ROLE OF CPM WITHIN ARCHITECTURE OF CONSTRUCTION INDUSTRY IN GENERAL

Architecture of Construction Industry



Project Management
- Coordination
- Integration
- Interfacing
- Syncroniztion

Construction Production
- Productivity
- Quality Performance

CM DEVELOPMENT IN INDONESIA

- **ROLE OF CONSULTANT**
  - ENGINEERING
  - **PM/CM**
  - OPPORTUNITY FOR PM/CM CONSULTANT

- **ROLES OF CM**
  - SUPPLY SIDE
    - Prepare project execution plan before execution, and monitor during execution, and suggest corrective action the course of execution
  - DEMAND SIDE
    - Within owner realm CM should plan and control better and more accurate then the contractors so that they can guide and direct the contractor or contractors, provide more assurance that project will within scope, reach the quality required, finish on time, and within budget, safe construction and less dispute

- CAN WORKS IN SUPPLY SIDE FOR CONTRACTORS OR IN DEMAND SIDE FOR PROJECT OWNER
- NOT FUNCTIONING WELL YET:
  - THE ROLE AND FUNCTION NOT YET WIDELY RECOGNIZE
  - SOME OWNER STILL DO NOT BELIEVE THAT THEY WILL PROVIDE VALUE TO THEM
- THEREBY THE PROFESSION IS NOT YET WELL DEVELOPED
  - NO RECOGNIZED AND ACCEPTED STANDARD GUIDANCE FOR THEIR PRACTICE
  - IAMPI PURSUE THE DEVELOPMENT OF THE GUIDANCE TRY TO GET THE INPUT FROM THE PRTACTICE IN OTHER COUNTRY, HAS WORKED IN COOPERATION WITH CMAK
- WITH THE ABOVE SITUATION **CM** WILL EXPERIENCE THE DOOMS CYCLE, THE BENEFIT IS DOUBTFUL, OWNER WILL PAYLESS, PROFESSION CAN NOT FLOURISH

ROLES OF CM: Current Situation in Indonesia

- GENERALLY PRODUCTIVITY IS STIIL LOW
- NOT YET USING A SOPHISTICATED METHOD IN PLANNING THE CONSTRUCTION METHOD
- CONSTRUCTION METHOD AND PRACTICE FOR MANUAL LABOR
  - ROLES OF WORKERS-WORKERS PROVIDED BY ONE COMPANY PERSON CALLED MANDOR
- CONSTRUCTION METHOD USING MECHANICAL EQUIPMENT
  - BY SUBCONTRACTOR SPECIALIST

LEVEL OF CONSTRUCTION METHOD USED AND PRODUCTIVITY DEVELOPMENT

- There 3400 engineering company all over Indonesia, In Jakarta alone 548 Engineering Company but not categorize in which specialty and what size.
- Some of them provide a Construction Management Service, but there is no data specifically address which consulting company are practicing or providing the Construction Management service
- We try to collect the data from our own source they are around 60 Consulting company active in tender participation in sizable projects
- It shows that the Construction Management Consulting Company is not regarded a specialization, few of them, we know that they are specialized in Construction Management Services

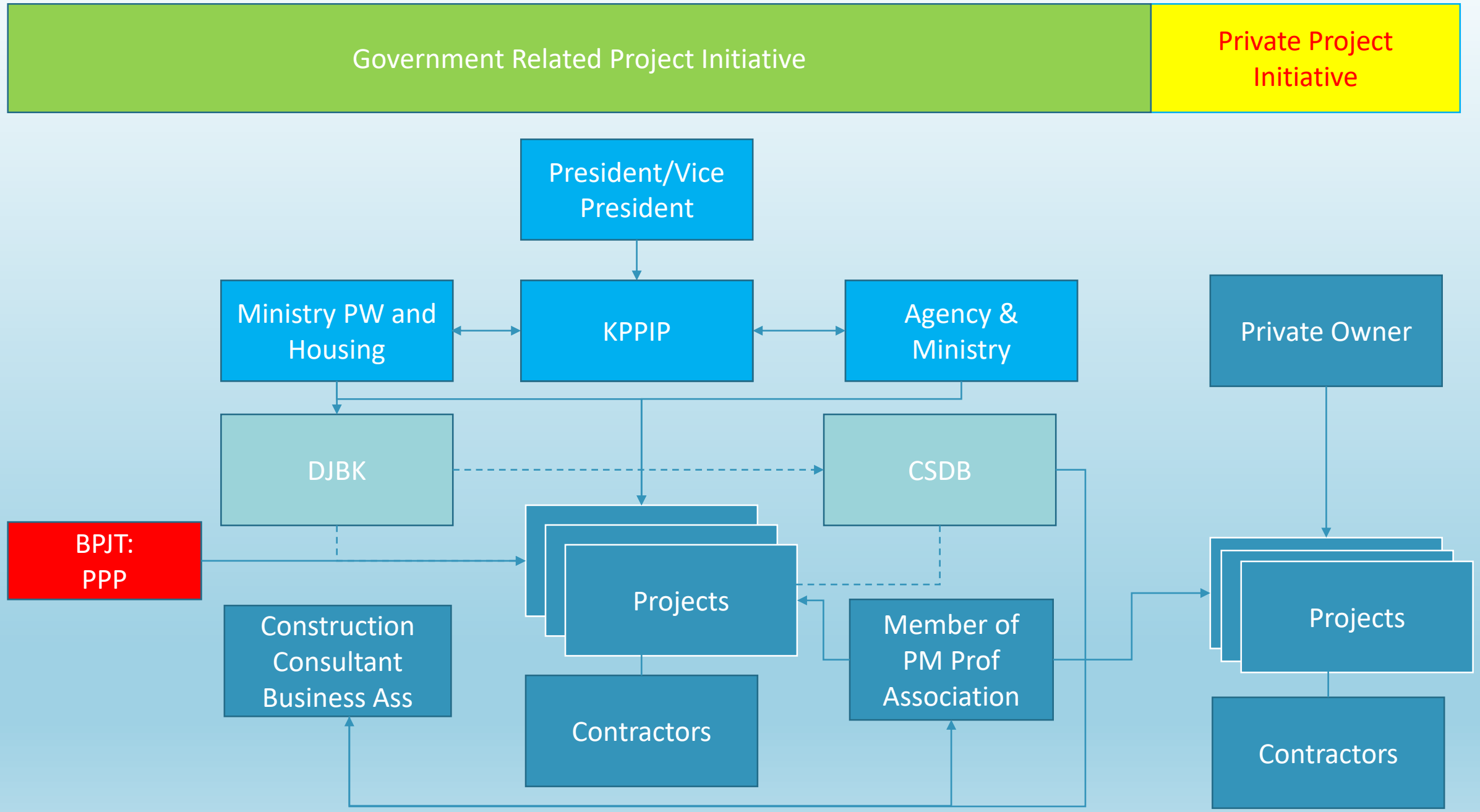
CM Company in Indonesia

Classification of CPM Related Consultant In Indonesia

No	Kode	Sub Bidang	
1	AR201	Jasa Pengawas Administrasi Kontrak	Contract Administration
		Pengawasan Rekayasa	Engineering Supervision
No	**Kode**	**Sub Bidang**	
1	RE201	Jasa Pengawas Pekerjaan Konstruksi Bangunan Gedung	Supervision of Builidng Construction
2	RE202	Jasa Pengawas Pekerjaan Konstruksi Teknik Sipil Transportasi	Supervisiion for Civil Eng. Transpotation
3	RE203	Jasa Pengawas Pekerjaan Konstruksi Teknik Sipil Air	Supervision of Water System construction
4	RE204	Jasa Pengawas Pekerjaan Konstruksi dan Instalasi Proses dan Fasilitas Proses dan Fasilitas Industri	Supervision for Process & Facility Installation
		Konsultansi Lainnya	
No	**Kode**	**Sub Bidang**	
1	KL401	Jasa Konsultansi Lingkungan	Environment
2	KL402	Jasa Konsultansi Estimasi Nilai Lahan dan Bangunan	Quantity Surveyor
3	KL403	Jasa Manajemen Proyek Terkait Konstruksi Bangunan	Project Management for Building
4	KL404	Jasa Manajemen Proyek Terkait Konstruksi Pekerjaan Teknik Sipil Transportasi	Project Management for Civil Eng.: Trnasportation
5	KL405	Jasa Manajemen Proyek Terkait Konstruksi Pekerjaan Teknik Sipil Keairan	Project Management for Civil Eng.: Water system
6	KL406	Jasa Manajemen Proyek Terkait Konstruksi Pekerjaan Teknik Sipil Lainnya	Project Management for Civil Eng.: Others
7	KL407	Jasa Manajemen Proyek Terkait Konstruksi Pekerjaan konstruksi proses dan fasilitas industrial	Project Management for Process and Facilities
8	KL408	Jasa Manajemen Proyek Terkait Konstruksi Pekerjaan Sistem Kendali Lalu Lintas	Project Management for Traffic Control System

- Role of KPPIP-Infrastructure Priority Acceleration Development Committee
- Roles of Toll Road Project Management Agency-For P3 Project
- Role of DJBK-PUPR-Directorate General of Construction Inprovement-Ministry of Public Works
- Role of LPJKN-Construction Service Develolpent Board
- Role of Construction Consultant Business Association
- Role of Professional Project Management Association

Role of Institution Related to Construction


Government Related Project Initiative
Private Project Initiative
President/Vice President
Ministry PW and Housing
KPPIP
Agency & Ministry
Private Owner
DJBK
CSDB
BPJT: PPP
Projects
Construction Consultant Business Ass
Member of PM Prof Association
Contractors
Projects
Contractors

Role of IAMPI

MISSION

- Facilitate exchange of knowledge and experience among its members
- Offer know-how, products and services to the benefit of individuals, projects and organizations across public, private and community sectors
- Participate to build a network of project managers globally to develop their capabilities
- To advocate project management as a profession discipline and advancing it

ViSION

- Promoting competence throughout society to enable project in Indonesia to succeed.
- To be a home for all peoples interested in project management to exchange knowledge and experience In order to improve and enhance Indonesian project performance

- IAMPI and CMAK has signed a MOU since 26-6-2018
- Has agreed to select projects to be studied together thanks to the kindness of Ministry of Public works and Housing
- Final report are under preparation
- IAMPI develop standard guidance for Indonesian construction project implementation base on the result of joint study
- B to B MOU: has been signed between Topec and Prosys

Cooperation With CMAK

- Closer relation between to organization (CMAK-IAMPI) for the benefit of both parties are expected
- Business relation between Korean CM Company and Indonesian CM Company including Cooperation between Korean and Indonesian CM in international projects are promoted
- Performance Improvement of Indonesian Construction Industry is also expected

Expectation

Discussion

Thank you

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IAMPI

CAPAIAN PEMBANGUNAN BIDANG PEKERJAAN UMUM DAN PERUMAHAN RAKYAT

KEMENTERIAN PEKERJAAN UMUM DAN PERUMAHAN RAKYAT
SEKRETARIAT JENDERAL
PUSAT DATA DAN TEKNOLOGI INFORMASI

SASARAN PEMBANGUNAN INFRASTRUKTUR PUPR
2015 – 2019

KONEKTIVITAS

1.000 km
Pembangunan jalan tol (pemerintah & swasta)

2.650 km
Pembangunan jalan baru

30 Km
Pembangunan jembatan baru

PERUMAHAN

PROGRAM SATU JUTA RUMAH

- Fasilitasi PSU untuk Rumah Tapak Layak Huni
- Rumah Khusus
- Rumah Susun untuk MBR
- Rumah Swadaya

KETAHANAN AIR & PANGAN

65
Pembangunan waduk

1 juta hektar
Pembangunan jaringan irigasi baru

INFRASTRUKTUR PERMUKIMAN

Akses Air Minum Layak	100 %
Kawasan permukiman kumuh perkotaan	0 ha
Akses Sanitasi Layak	100 %

CAPAIAN 4 TAHUN RPJMN 2015 – 2019

a. Bidang Sumber Daya Air:

- 9 bendungan selesai, 26 on-going, 14 baru
- 949 embung
- 22,24 m^3/detik sarana dan prasarana air baku
- 860,015 Ha jaringan irigasi
- 1.011,7 km sarana dan prasarana pengendali daya rusak
- 256 buah pengendali sedimen dan lahar

b. Bidang Jalan dan Jembatan

- 3.432 km pembangunan jalan baru
- 39.798 m jembatan bentang panjang
- 164 unit jembatan gantung
- 1.693 km jalan perbatasan kalimantan tembus
- 176,2 km jalan perbatasan NTT tembus
- 919 km jalan perbatasan Papua tembus
- 4.176 km trans papua (papua dan papua barat) tembus
- 1.171 km jalan pansela tembus
- 582,92 km jalan tol beroperasi

c. Bidang Permukiman:

- 20.438 liter/detik pembangunan SPAM
- 13.556 Ha penanganan kawasan permukiman kumuh
- 9.616.334 KK penanganan sanitasu dan persampahan
- 4.365 Ha pengelolaan drainase
- 7 pembangunan Pos Lintas Batas Negara
- 33 pembangunan dan renovasi venue Asian Games 2018 Jakarta – Palembang

d. Bidang Perumahan

- 44.893 unit pembangunan rumah susun
- 22.358 unit pembangunan rumah khusus
- 496.165 unit pembangunan & peningkatan rumah swadaya
- 781.782 unit FLPP & SSB/SSM
- 627.229 unit Bantuan SBUM
- 1.464.680 unit oleh Swasta & Masyarakat

KONEKTIVITAS
JALAN & JEMBATAN
(TARGET & CAPAIAN)

2015	2016	2017	2018	2019
1.286 km	559 km	776 km	•811 km	556 km

Target Pembangunan 2015-2019 :
2.650 km

Capaian 2015-2018 :
3.432 km

CAPAIAN 2015-2018: 39.798 M

2015	2016	2017	2018	2019
10 Unit	7 Unit	13 Unit	134 Unit	166 Unit
7.970 m	6.982 m	9.473 m	15.373 m	10.029 m

Target Pembangunan Jembatan 2015-2019
29.859 m

Total Panjang Jembatan:
Pembangunan Jembatan Baru, Duplikasi Jembatan dan Jembatan Gantung

JALAN PERBATASAN KALIMANTAN

PANJANG: 1.906 KM

Target Tembus 2019

Total Tembus
1.693 km

Belum Tembus
213 km

PROVINSI	JALAN BARU	TEMBUS	BELUM TEMBUS
Kalimantan Barat (850 km)	60 km	803 km	47 km
Kalimantan Timur (244 km)	35 km	202 km	41 km
Kalimantan Utara (850 km)	96,9 km	688 km	125 km

JALANPERBATASAN NTT

Penghubung PLBN Mota'ain dan PLBN Motamassin :

- Mota'ain – Turiskain (57,20 km)
- Haekesak – Sp. Henes (20,8 km)
- Nualain – Dafala (49,75 km)
- Dafala – Motamasin (48,44 km)

Target Tembus 2018

Total Panjang 176,2 km

	Pembangunan Jalan baru	Tembus	Belum Tembus
TA 2017	110,6 km	157,6 km	18,6 km

	Pembangunan Jalan baru	Tembus	Belum tembus
TA 2018	18,6 km	176,2 km	-

JALAN PERBATASAN PAPUA

SEGMEN 1
Jayapura-Arso-Waris-Yeti
128 km

SEGMEN 2
Yetti – Ubrub – Oksibil
302 km

SEGMEN 3
Oksibil – Tanah Merah – Muting – Merauke
668 km

Total Panjang
TOTAL PANJANG
1.098 km

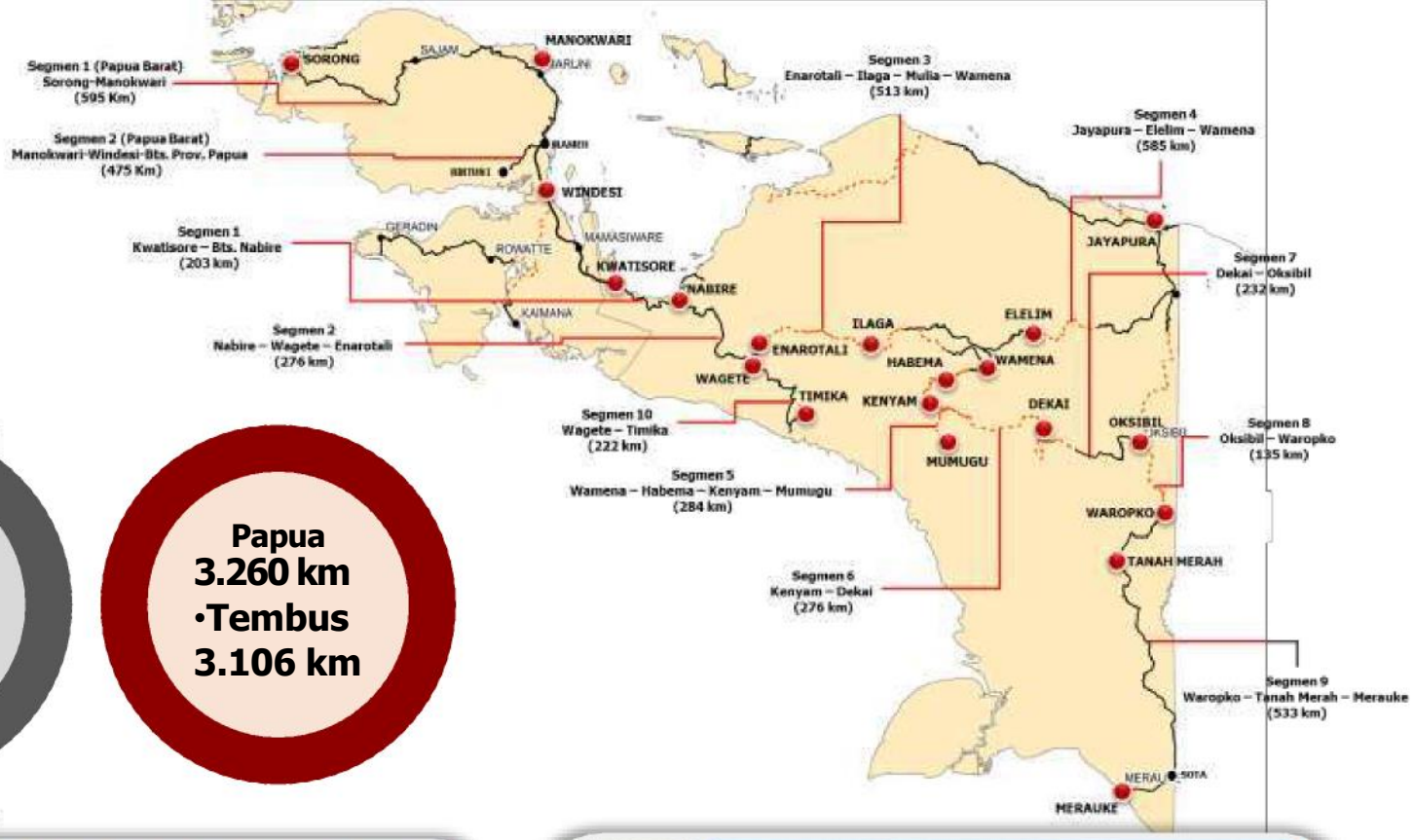
Jalan embus
LANTEMBU
919 km

Jalan Belum Tembus
179 km

SEGMEN 1 DAN 3 MASUK DALAM PENANGANAN JALAN TRANS PAPUA

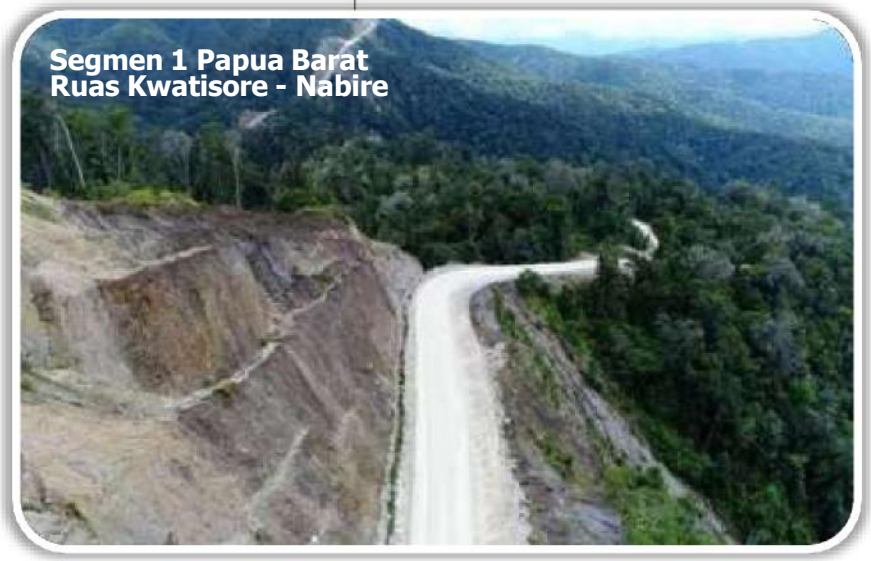
JALANPERBATASANPAPUA

JALAN TRANS PAPUA



Papua Barat
1.070 km
Tembus 100%

Papua
3.260 km
•Tembus 3.106 km



JEMBATAN HOLTEKAMP

Jalan Akses Arah Hamadi
2,4 km
Progres
17,7 %

Jalan Akses Sisi Hamadi
320 m
PROGRES
65%
(Pemkot)

Bentang Utama
400 m
Jembatan Pendekat hamadi
33 m
(Selesai)

Jalan Akses Arah Holtekamp
7,55 km
Progres
17,7 %

Jembatan Pendekat
66 m
Dalam proses lelang
(Kementerian PUPR)

Jembatan Pendekat
99 m
Progres
70%
(Pemprov)

JEMBATAN WEAR-ARAFURA

Jembatan ini menghubungkan Pulau Ya
di Kabupaten Maluku Tenggara Barat (MTB), Provinsi Maluku

JEMBATAN GANTUNG

•KALIGALEH,JAWATENGAH

PANSELAPULAUJAWA

Total Panjang: 1.595 km

Tembus 1.171 km

Belum Tembus 423,94 km

No	Provinsi	Panjang (km)	Sudah Tembus (km)	Belum Tembus (km)
1	Banten	169,45	169,45	-
2	Jawa Barat	417,40	417,40	-
3	Jawa Tengah	211,95	165,88	46,07
4	DI Yogyakarta	116,07	98,17	17,90
5	Jawa Timur	680,13	378,24	301,89
	Total	1.595,00	1.171,06	423,94

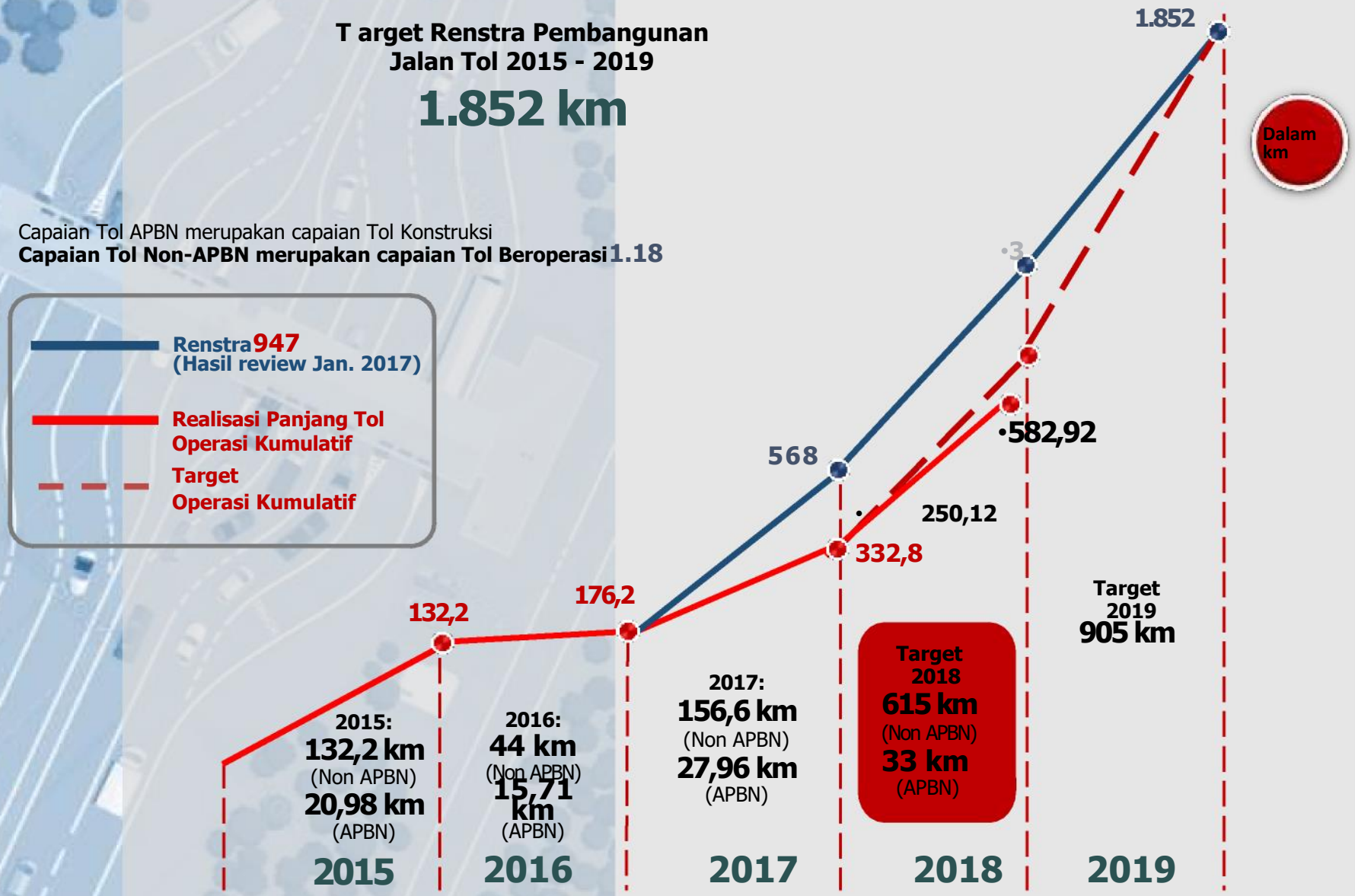
CAPAIAN KONEKTIVITAS

PEMBANGUNAN JALAN TOL

T arget Renstra Pembangunan Jalan Tol 2015 - 2019

1.852 km

Capaian Tol APBN merupakan capaian Tol Konstruksi
Capaian Tol Non-APBN merupakan capaian Tol Beroperasi



•JALAN TOL BEROPERASI 2015 – DESEMBER 2018

2015

•Panjang 132,2 km

No Ruas Jalan Tol Panjang (Km) Operator Mulai Operasi
•1 Gempol – Pandaan 12 PT Jasa Marga Pandaan Tol 12 Juni 2015
•2 Porong – Gempol (Kejapanan – Gempol) 3,5 PT Jasa Marga (Persero) Tbk 6 Mei 2015
•3 Cikampek - Palimanan 116,7 PT Lintas Marga Sedaya 13 Juni 2015
•JUMLAH 132,2

2016

•Panjang 44 km

•No Ruas Jalan Tol	Panjang (Km)	•Operator Mulai Operasi
	[illegible]	
	[illegible]	
	[illegible]	
JUMLAH 44		

2017

•Panjang 156 km

No	Ruas Jalan •Tol	•Panjang (Km)	•Operator	•Mulai Operasi
1	Akses Tanjung Priok	11,4	Belum ada Operator	13 April 2017
2	Gempol – Pasuruan Seksi 1 – 2A	7,9	PT. Trans Marga Jatim Pasuruan	6 April 2017
3	Gempol – Pasuruan Seksi 1 – 1A	7,8	PT. Trans Marga Jatim Pasuruan	3 Agustus 2017
4	Kertosono – Mojokerto Seksi 2	19,9	PT. Marga Harjaya Infrastruktur	10 September 2017
5	Semarang – Solo Seksi 3	17,6	PT. Trans Marga Jateng	25 September 2017
6	Palembang – Indralaya Seksi 1	7,78	PT. Hutama Karya (Persero)	12 Oktober 2017
7	Medan - Binjai Seksi 2-3	10,6	PT. Hutama Karya (Persero)	13 Oktober 2017
8	Medan – Kualanamu – Tb. Tinggi Seksi 2 – 6	41,6	PT. Jasamarga Kualanamu Toll	13 Oktober 2017
9	Bekasi-Cawang-Kampung Melayu Seksi IB & IC	8,4	PT Kresna Kusuma Dyandra Marga	3 November 2017
10	Soreang – Pasirkoja	8,15	PT. Citra Marga Lintas Jabar	4 Desember 2017
11	Surabaya Mojokerto Seksi 1 & 2	15,47	PT. Jasamarga Surabaya Mojokerto	19 Desember 2017
	•JUMLAH 156,6			

2018

•Panjang 250,12 km

No	Ruas Jalan Tol	Panjang (Km)	Operator	Mulai Operasi
1	Bakauheni – Terbanggi Besar Seksi 1A & 2B	13,9	PT Jasa Marga Surabaya Mojokerto	21 Januari 2018
2	Ngawi – Kertosono Seksi 1 – 3	47,95	PT Ngawi Ketosono Jaya	29 Maret 2018
3	Solo – Ngawi Seksi SS Ngawi - Ngawi	4	PT. Jasamarga Solo Ngawi	29 Maret 2018
4	Bogor Outer Ring Road Seksi 2B	2,65	PT Marga Sarana Jabar	7 Juni 2018
5	Medan – Kualanamu – Tb. Tinggi Seksi 1	10,75	PT. Jasamarga Kualanamu Toll	8 Juni 2018
6	Gempol – Pasuruan Seksi 2	6,6	PT Jasamarga Gempol Pasuruan	22 Juni 2018
7	Solo – Ngawi Segmen Kartasura – Sragen	35,22	PT. Jasamarga Solo Ngawi	15 Juli 2018
8	Palembang – Indralaya Seksi 2 & 3	14,2	PT. Hutama Karya (Persero)	14 September 2018
9	Depok – Antasari Seksi 1	5,8	PT. Citra Waspphutowo	27 September 2018
10	Pejagan – Pemalang Seksi 3 & 4	37,3	PT Pejagan Pemalang Toll Road	9 November 2018
11	Pemalang – Batang (Segmen Sewaka – SS Pemalang)	5,4	PT Pemalang Batang Toll Roas	9 November 2018
12	Solo – Ngawi Segmen Sragen - Ngawi	51	PT. Jasamarga Solo Ngawi	28 November 2018
13	Bogor – Ciawi – Sukabumi Seksi 1	15,35	PT. Trans Jabar Tol	1 Desember 2018
	•JUMLAH 250,12			

RENCANA RUAS JALAN TOL BARU BEROPERASI 2018 - 2019

TOTAL: 359,1 km

2018 *

No	Ruas Jalan Tol	Panjang (km) Rencana
1	Pemalang – Batang Seksi 1 & 2 (SS Pemalang – Batang)	33,8
2	Semarang – Solo Seksi 4 & 5 (Salatiga – Kartasura)	32,5
3	Batang – Semarang Seksi 1 - 5	75
4	Ngawi – Kertosono Segmen Wilangan – Kertosono (APBN)	39,1
5	Kertosono – Mojokerto Seksi 4	0,9
6	Relokasi Porong – Gempol (Porong – Kejapanan)	6,3
7	Gempol – Pasuruan Seksi 3 (Pasuruan – Grati)	12,2
8	Pasuruan – Probolinggo Seksi 1 – 3 (Grati – Probolinggo Timur)	32,4
9	Bakauheni – Terbanggi Besar paket 1 – 4	126,9

•* Diresmikan setelah bulan November 2018

Total 1.095,1 km

TOTAL: 736 km

2019

No	Ruas Jalan Tol	Panjang (km) Rencana
	Pandaan – Malang Seksi 1 – 3	31
	Medan – Kualanmu – Tb. Tinggi	9,3
	Cimanggis – Cibitung Seksi 1A	3,2
	Pandaan – Malang Seksi 4	5,1
	Cinere – Serpong Seksi 1	6,5
	Cinere – Jagorawi Seksi 2	5,5
	Cileunyi – Sumedang – Dawuan Seksi 2	17,1
	Balikpapan – Samarinda Seksi 1 – 4A	81
	Kunciran - Serpong	11,1
	Cengkareng – Kunciran Seksi 1	2
	Krian – Legundi – Bunder – Manyar Seksi 2 - 3	14,7
	Kayu Agung – Palembang – Betung Seksi 1	33,5
	Balikpapan – Samarinda Seksi 5	11,1
	Cibitung – Cilincing Seksi 1	8,4
	Manado – Bitung Seksi 1 – 2A	25,5
	Pandaan – Malang Seksi 5	2,4
	Cinere – Serpong Seksi 2	3,6
	Cibitung – Cilincing Seksi 2	9,1

No	Ruas Jalan Tol	Panjang (km) Rencana
	6 Ruas Tol DKI Jakarta Seksi 1A	9,3
	Depok – Antasari Seksi 2	6,3
	Cileunyi – Sumedang – Dawuan Seksi 3	4,1
	Balikpapan – Samarinda Seksi 4B	7,5
	Krian – Legundi – Bunder – Manyar Seksi 1	10,6
	Bekasi – Kp. Melayu 1A dan 2A	8,1
	Pekanbaru – Dumai Seksi 1	9,2
	Medan – Binjai Seksi 1	6,3
	Jakarta – Cikampek II Elevated	36,4
	Pekanbaru – Dumai Seksi 2	23,6
	Cibitung – Cilincing Seksi 3 – 4	15,3
	Cengkareng – Kunciran Seksi 2 – 4	12,2
	Cimanggis – Cibitung Seksi 1B – 2A	19,8
	Kayu Agung – Palembang – Betung Seksi 2 & 3	78,2
	Manado – Bitung Seksi 2B	13,5
	Serang – Panimbang Seksi 1	10
	Terbanggi Besar – Pematang Panggang – Kayu Agung	185

JALAN TOL BAKAUHENI – TERBANGGI BESAR

Seksi 1A Pelabuhan Bakauheni – Bakauheni (9,5 km)

Seksi 2B SS Lematang – SS Kotabaru (5 km)

- Merupakan jalan tol pertama di Provinsi Lampung sebagai jalur logistik utama yang menghubungkan Pulau Sumatera & Pulau Jawa

Diresmikan oleh Presiden RI Sepanjang **14,5 km** pada **21 JANUARI 2018**

Total Panjang **140,9 km**

•Masa Pelaksanaan **2015 – 2018**

JALAN TOL MEDAN – KUALANAMU – TEBUNG TINGGI
Seksi 1-6 (Kualanamu – Seirampah)

BIAYA INVESTASI
Rp. 4,02 T
•BIAYA KONSTRUKSI
Rp. 1,76 T

TOTAL PANJANG
61,7 KM
JUMLAH SEKSI
7

Diresmikan oleh
Presiden RI Sepanjang
41,6 km
pada **13 OKTOBER 2017**

JALAN TOL GEMPOL – PASURUAN
Seksi 2 Rembang - Pasuruan

Diresmikan oleh Presiden RI Sepanjang **6,6 km** pada **22 JUNI 2018**

BIAYA INVESTASI
Rp. 4,03 T
•BIAYA KONSTRUKSI
Rp. 1,68 T

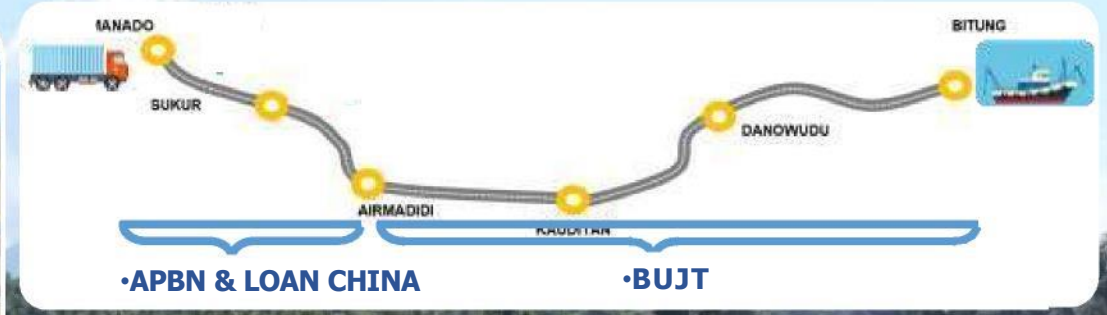
TOTAL PANJANG
34,15 KM
JUMLAH SEKSI
3

JALANTOLBOGOR–CIAWI–SUKABUMI
SEKSI1CIAWI-CIGOMBONG

Diresmikan oleh Presiden RI Sepanjang **15,35 km** pada **1 DESEMBER 2018**

BIAYA INVESTASI
Rp. 7,77 T
•BIAYA KONSTRUKSI
Rp. 4,17 T

TOTAL PANJANG
54 KM
JUMLAH SEKSI
4



Biaya
Rp. 3,27 T
Target Opersi
2019

Panjang
39,3
km

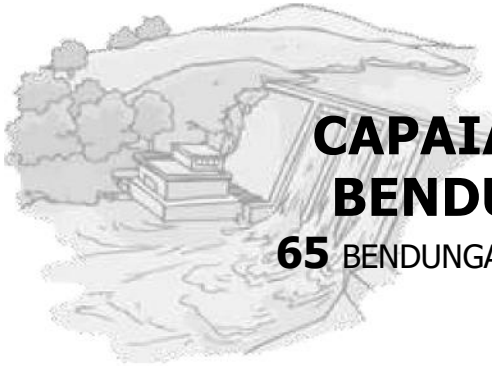
JALANTOLMANADO-BITUNG

•JALANTOLBALIKPAPAN–SAMARINDA

•Target Operasi
•2019

•Panjang
• 99,3 5 km

•Biaya Investasi
•Rp. 9,97 T
•Biaya Konstruksi
•Rp. 6,54 T



CAPAIAN PEMBANGUNAN BENDUNGAN & EMBUNG

65 BENDUNGAN (49 BARU/16 LANJUTAN) & **1.088** EMBUNG

TAMBAHAN MANFAAT 2015-2019

Layanan Irigasi Waduk **160 ribu ha**

Kapasitas Tampung **2,11 Miliar** m^3

Air Baku **3,02 m³/detik** Potensi

Energi **145 MW**

2015	2016	2017	•PERKIRAAN •2018	•TARGET •2019
16 Bendungan Lanjutan				
11 On-going **13** Baru **5** Selesai	**22** On-going **8** Baru **7** Selesai	**28** On-going **6** Baru 9 Selesai	**26** On-going **14** Baru **17** Selesai	**28** On-going **8** Baru **29** Selesai
29 BENDUNGAN	**37** BENDUNGAN	**43** BENDUNGAN	**57** BENDUNGAN	**65** BENDUNGAN
342 EMBUNG	**387** EMBUNG	**117** EMBUNG	**103** EMBUNG	**120** EMBUNG

•14 BENDUNGAN BARU 2018

1. SIDAN, BALI
2. KOMERING/TIGADIHADJI, SUMSEL
3. BENER, JATENG
4. BERINGIN SILA, NTB
5. RANDUGUNTING, JATENG
6. MBAY, NTT MANIKIN, NTT
7.
8. SADAWARNA, JABAR
9. BOLANGO HULU, GORONTALO
10. BAGONG, JATIM
11. DIGOEL, PAPUA
12. RUKOH, ACEH
13. JLANTAH, JATENG
14. TAMBLANG, BALI

•BENDUNGAN SELESAI

9 2015 – OKT. 2018

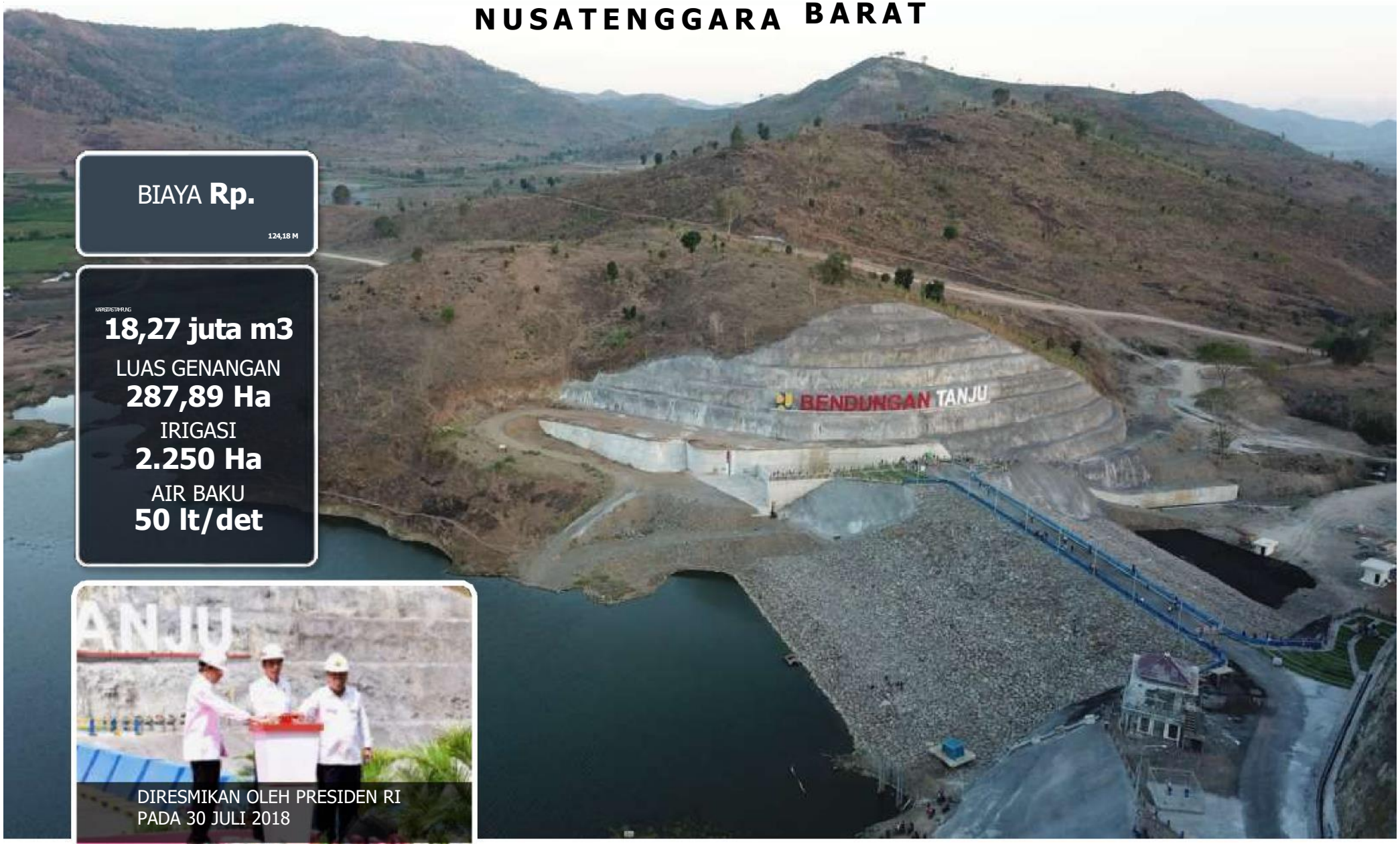
1. PAYASEUNARA, ACEH
2. RAJUI, ACEH
3. JATIGEDE, JABAR
4. BAJULMATI, JATIM
5. NIPAH, JATIM
6. TITAB, BALI
7. TERITIP, KALTIM
8. RAKNAMO, NTT
9. TANJU,NTB

KETAHANAN AIR DAN PANGAN
(TARGET DAN CAPAIAN)

	Target Air Baku 67,52 m³/detik	Target Jaringan Irigasi 1,000,000 ha: Jaringan Irigasi Permukaan, Rawa Air Tanah (Pusat & Daerah)	Target Jaringan Irigasi 1,000,000 ha: Jaringan Irigasi Tambak	Target Sapras Pengendali Daya Rusak 3.620 km	Target Pengendali Sedimen dan Lahar 306 buah
2015	6,97	269.294	4.238	371	150
2016	6,15	136.811	1.850	247	44
2017	4,34	225.993	1.750	182	31
2018	4,78	217.418	2.661	211	31
PERKIRAAN CAPAIAN 2015-2018	22,24	849.516	10.499	1.011,7	256
2019	5,00	137.410	2.000	43	13

BENDUNGAN TANJU

NUSATENGGARA BARAT



BIAYA **Rp.**

124,18 M

KAPASITAS TAMPUNG

18,27 juta m3

LUAS GENANGAN

287,89 Ha

IRIGASI

2.250 Ha

AIR BAKU

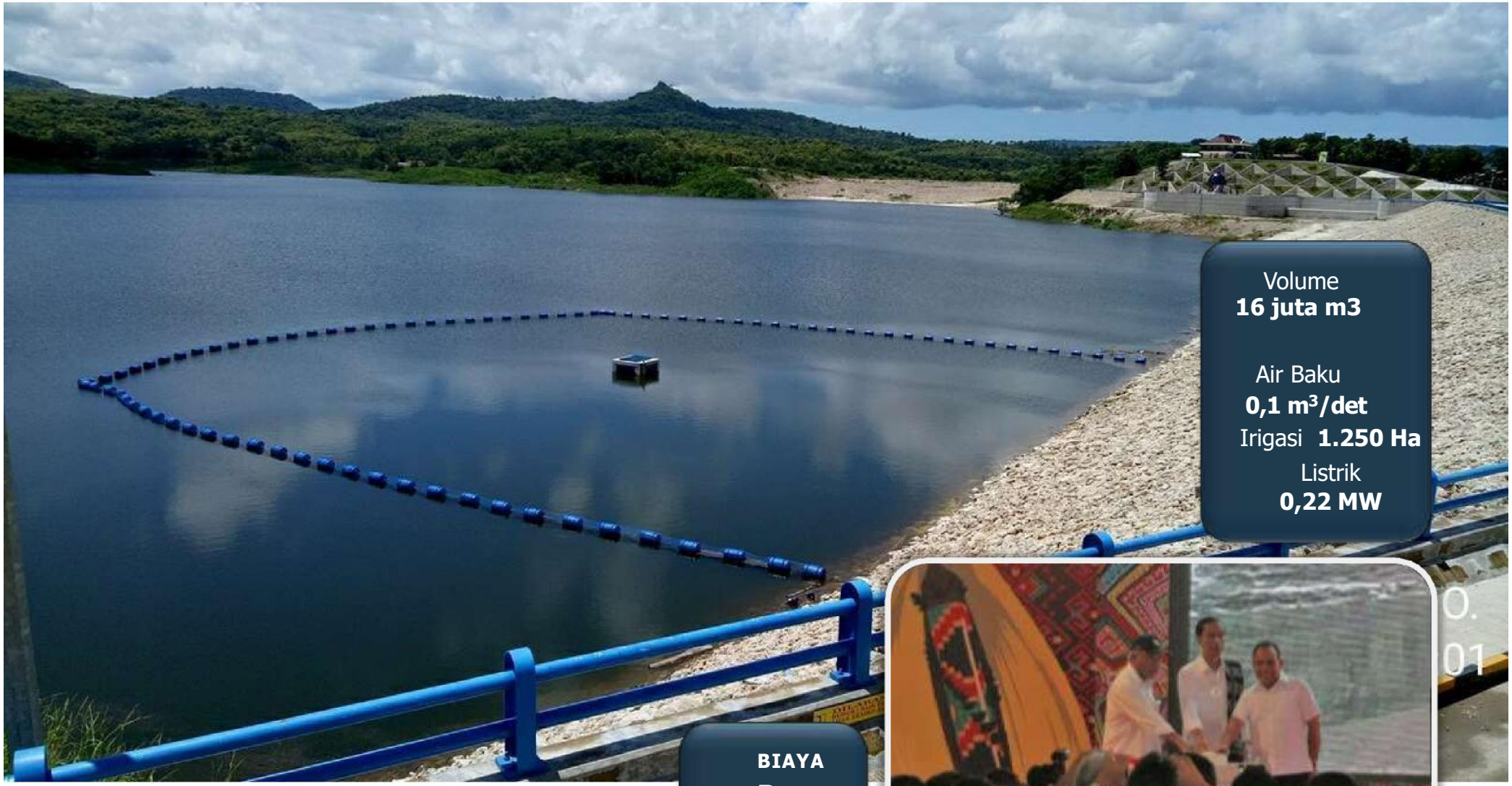
50 lt/det

DIRESMIKAN OLEH PRESIDEN RI
PADA 30 JULI 2018

BENDUNGAN RAKNAMO

NUSATENGGARA TIMUR

DIRESMIKAN 9 JANUARI 2018



Volume
16 juta m3

Air Baku
0,1 m^3/det
Irigasi **1.250 Ha**
Listrik
0,22 MW

BIAYA
Rp. 760
Miliar

PERTAMA YANG DIBANGUN DARI 49 BENDUNGAN. PERTAMA DILAKUKAN GROUNDBREAKING OLEH PRESIDEN RI & PERTAMA YANG DIRESMIKAN (IMPOUNDING) DI TAHUN 2018

BENDUNGANPASSELORENG
SULAWESISELATAN

BIAYA
Rp 701 M
MASA
PELAKSANAAN
2015 –2019

Kapasitas Tampung:
138 juta m3
Luas Genangan:
169,64 Ha
Irigasi :
7.000 Ha
Air Baku:
305 l/det
Listrik
2,5 MW

BENDUNGAN KARIAN

K A B . L E B A K

•Bendungan ini merupakan bendungan terbesar ke-3 setelah Bendungan Jatigede dan Jatiluhur

Biaya
Rp 436,97 M
Masa pelaksanaan
2016-2019

Kapasitas Tampung
1,68 Juta M3
Reduksi Banjir
29 M3/detik

KUNJUNGAN PRESIDEN KE BENDUNGAN SUKA MAHI

12 DESEMBER 2017

BENDUNGAN KUWIL KAWANGKOAN

BIAYA
Rp 1,42 T
MASAPELAKSANAAN
2016 – 2020

Kapasitas Tampung:
23,37 juta m^3
Luas Genangan:
139 Ha
Penyediaan air baku:
4,50 m^3/det
Listrik
1,4 MW

8 BENDUNGAN SELESAI 2018

Bendungan Rotiklot di NTT, Bendungan Mila, Bendungan Kuningan di Jabar, Bendungan Gondang dan Logung di Jateng, Bendungan Sei Gong di Kep. Riau, Bendungan Sindang Heula di Banten, serta Bendungan Paselloreng di Sulsel.

PEMBANGUNAN EMBUNG
DI KAMPUS INSTITUT TEKNOLOGI SUMATERA

Pembangunan tujuh embung sebagai konservasi air tanah yang menampung air hujan dan nantinya dimanfaatkan pada musim kemarau. Pembangunan dilaksanakan sejak tahun 2016 dan direncanakan selesai
seluruhnya pada 2019 dengan total anggaran sebesar Rp 43,73 miliar

PEMBANGUNAN 5 EMBUNG
DI KAB. ROTENDAO, NTT

"...Mendukung Nawacita dengan membangun daerah terluar, terdepan, dan tertinggal..."

JUMLAH LAYANAN
2500
orang & peternak

5 Embung:
- Embung Haladale
- Embung Lene Ana
- Embung Safetafa
- Embung Saina
- Embung Rau Oen

•PENANDATANGANAN 10 PRASASTI

·D.IKOMERING,SUMSEL

D.IBAJAYU,SUMUT

DAERAH IRIGASI &EMBUNG

EMBUNG MERONGGARAYA SULTRA

EMBUNG NGASINAN

JATENG

•PENGAMANPANTAIJAKARTA
•TAHAPII

PANTAI PENGAMANPANTAI PANJANG,KOTABENGKULU

•NORMALISASISUNGAICILIWUNG

•PENGENDA
•LI
•BANJIR&P
•ENGAMANP
•ANTAI

PENGEMBANGAN INFRASTRUKTUR PERMUKIMAN

(T ARG E T & C A P A I A N)

	PEMBANGUNAN SPAM 34.319 lt/dt	PENANGANAN KAWASAN PERMUKIMAN KUMUH 38.431 Ha	SANITASI DAN PERSAMPAHAN 12.163.334 KK	PENGELOLAAN DRAINASE 4.500 Ha
2015	7.350 lt/dt	3.140 Ha	3.866.700 KK	2.650 Ha
2016	3.780 lt/dt	2.463 Ha	984.450 KK	850 Ha
2017	5.873 lt/dt	5.962 Ha	2.670.121 KK	533 Ha
2018	3.435 lt/dt	1.991 Ha	2.095.063 KK	332 Ha
PERKIRAAN CAPAIAN 2015-2018	20.438 lt/dt	13.556 Ha	9.616.334 KK	4.365 Ha
2019	5.700 lt/dt	2.564 Ha	2.564.549 KK	691 Ha

KAWASAN PERMUKIMANNELAYAN

KAMPUNGBETING, PONTIANAK

BIAYA
Rp. 88
Miliar

MASA PELAKSANAAN
2017 – 2018

POSLINTAS BATAS NEGARA(PLBN)

PLBNWINI,NTT

7 PLBN:

1. PLBN MOTAAIN, NTT
2. PLBN MOTAMASSIN, NTT
3. PLBN WINI, NTT
4. PLBNSKOUW, PAPUA
5. PLBN NANGA BADAU, KALBAR

•7. PLBN 6. PLBN

•[illegible]

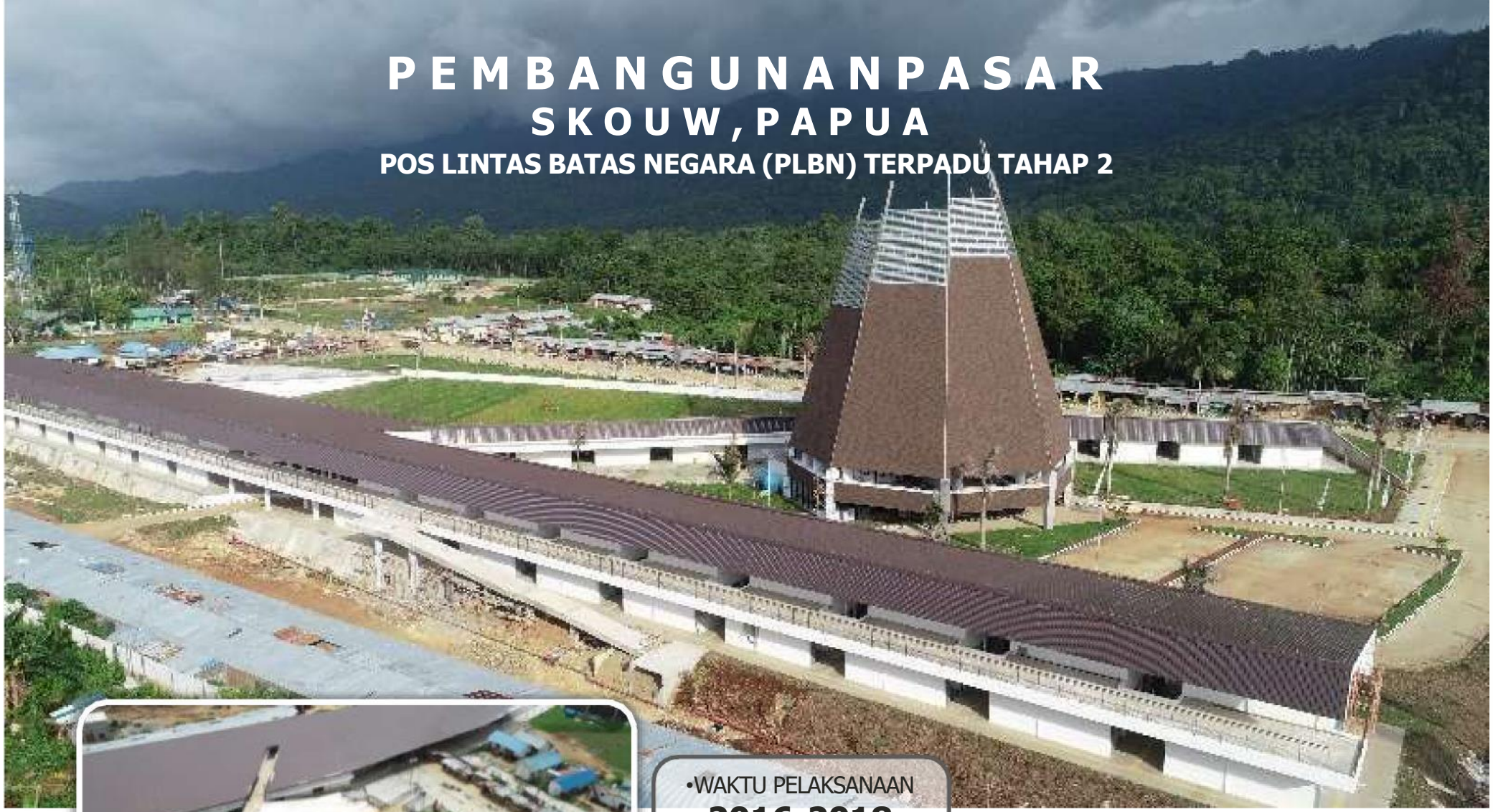
•PLBNMOTAMASSIN,NTTPLBNSKOUW,PAPUA

PLBN NANGA BADAU, KALBAR

PEMBANGUNAN PASAR
WINI, NUSA TENGGARA TIMUR
POS LINTAS BATAS NEGARA (PLBN) TERPADU TAHAP 2

PEMBANGUNAN PASAR SKOUW, PAPUA

POS LINTAS BATAS NEGARA (PLBN) TERPADU TAHAP 2



PEKERJAAN LANDSCAPE PASAR PERBATASAN

•WAKTU PELAKSANAAN

2016-2018

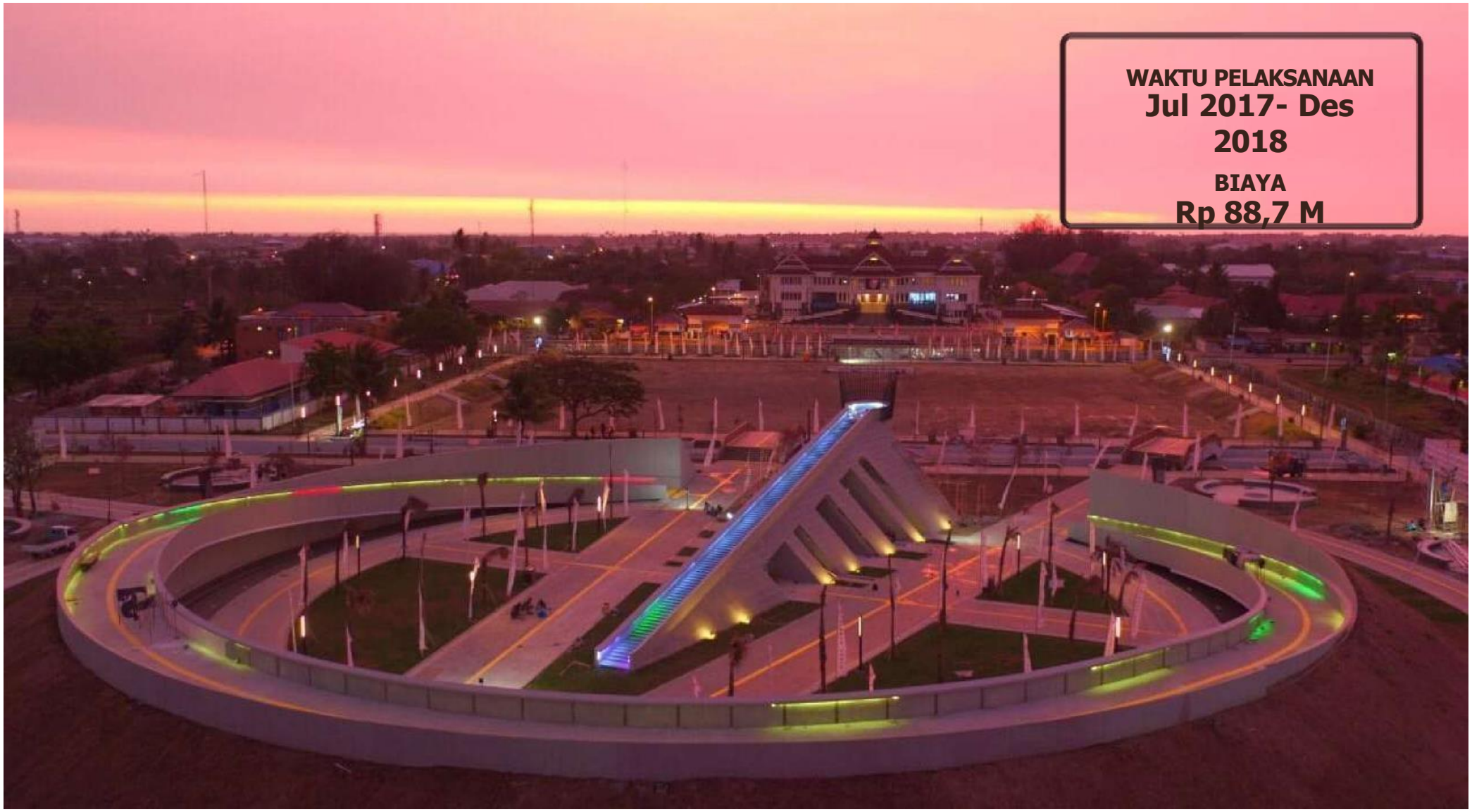
BIAYA

Rp. 70,24 M

LUAS

5.614 m^2

MONUMEN KAPSUL WAKTU
KAB. MERAUKE, PAPUA



•DIRESMIKAN OLEH PRESIDEN RI PADA 16 NOVEMBER 2018

JUMLAH VENUE

PUPR

18 DKI JAKARTA

4 SUMSEL

11 JAWA BARAT

PEMDA

DKI JAKARTA, JAWA BARAT, SUMATERA SELATAN

27 TOTAL

INASGOC

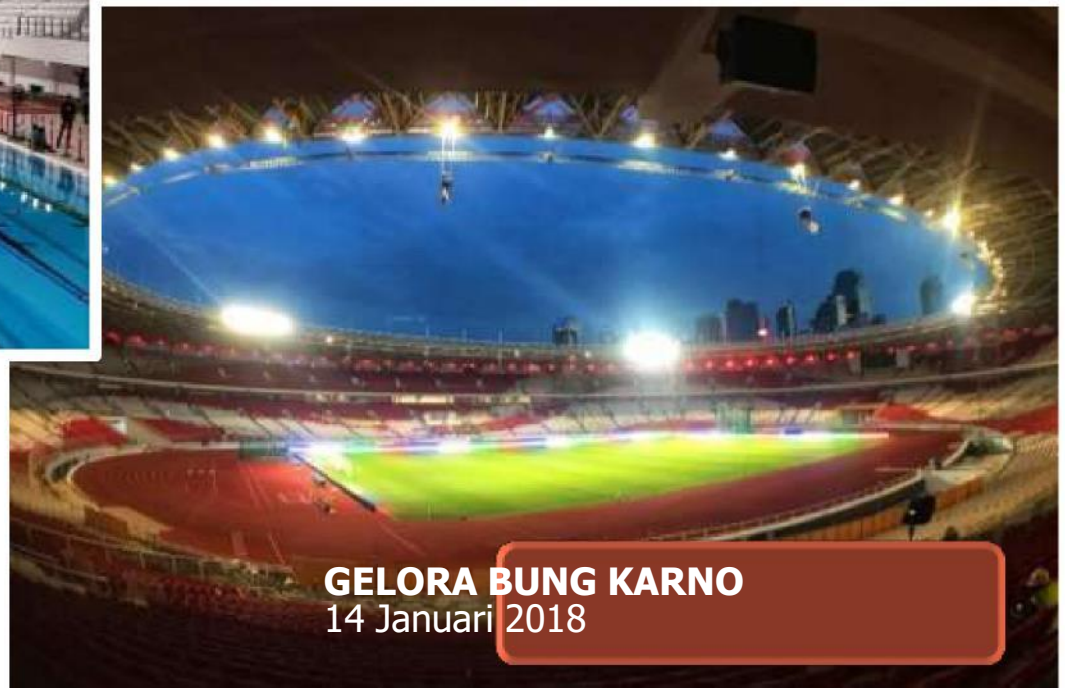
19

79

VENUE ASIAN GAMES YANG SUDAH DIRESMIKAN PRESIDEN

ISTORA
23 Januari 2018

GELANGGANG AKUATIK
30 November 2017



GELORA BUNG KARNO
14 Januari 2018

6 Venues GBK sudah

diresmikan oleh Presid

PERUMAHAN

(TARGET & CAPAIAN)

	Rumah Susun 550.000 unit	Rumah Khusus 50.000 unit	Rumah Swadaya 1.750.000 unit	FLPP & SSB/SSM 1.350.000 unit	SBUM 476.000 unit	NON APBN (SWASTA & MASYARAKAT)	TOTAL
2015	10.497	6.713	82.245	89.641	200	510.474	699.770
2016	7.740	6.048	97.888	170.054	75.933	447.506	805.169
2017	13.251	5.047	112.732	255.087	206.596	312.045	902.026
PERKIRAAN 2018	13.405	4.550	203.300	267.000	344.500	194.655	1.027.410
PERKIRAAN CAPAIAN 2015-2018	44.893	22.358	496.165	781.782	627.229	1.464.680	3.437.107
2019	7.512	3.230	200.000	184.000	237.000		

*) termasuk capaian peningkatan kualitas

PEMBANGUNAN

RUMAH SUSUN & RUMAH KHUSUS

•RUMAH SUSUN PONPES, LAMPUNG

•RUMAH KHUSUS POKJA KEAGAMAAN, PAPUA

•RUMAH •KHUSUS TNI, PAPUA

KABUPATEN ASMAT

•RUMAH KHUSUS TIPE 36