



**MINISTRY OF PUBLIC WORKS AND HOUSING
REPUBLIC OF INDONESIA**

Innovation management techniques support for Indonesia's New Capital City Development

Presented by:

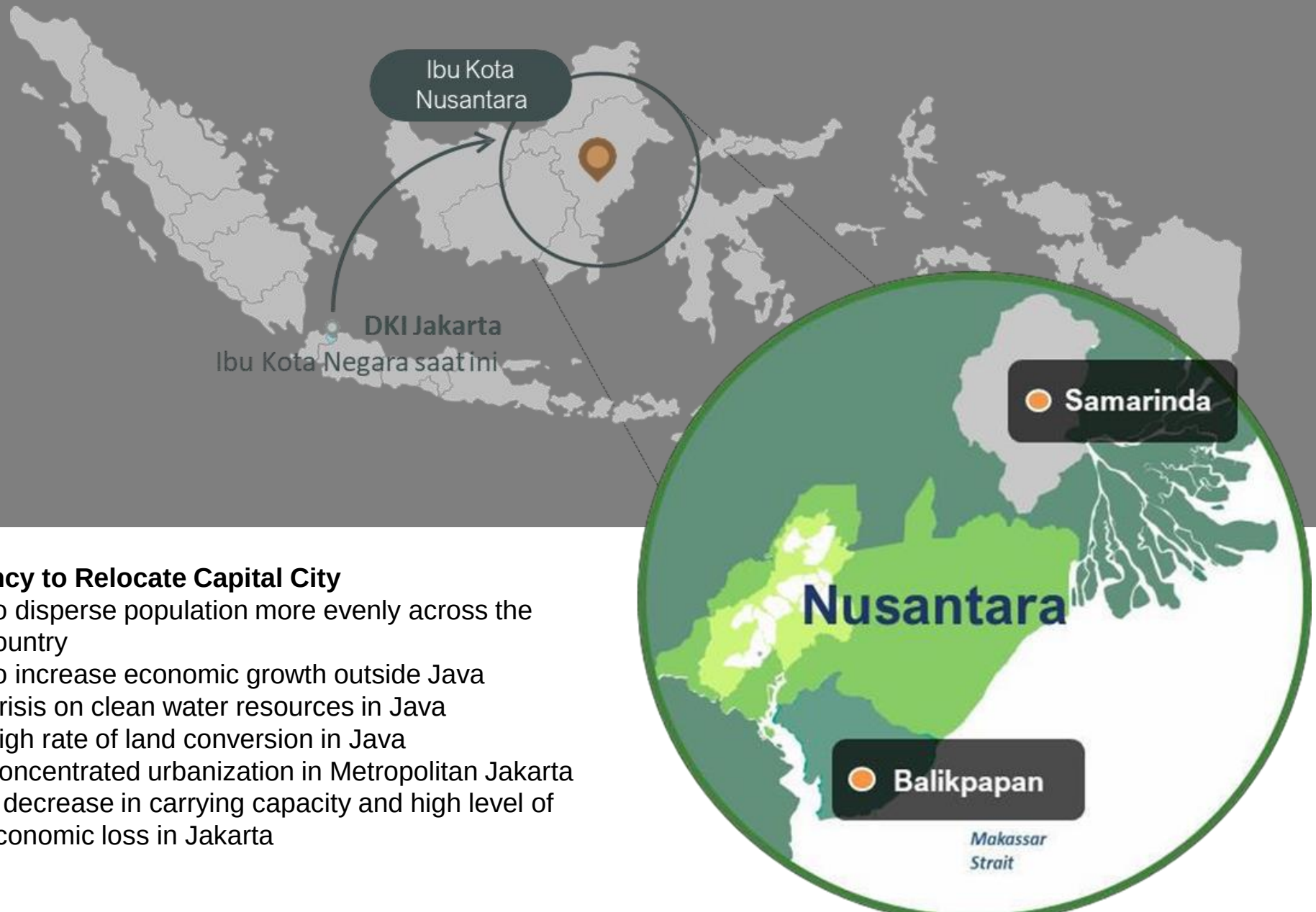
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Head of Transportation Division

Task Force of Infrastructure Development of Indonesia's New Capital City

11 APRIL 2023

Relocating Capital City



Urgency to Relocate Capital City

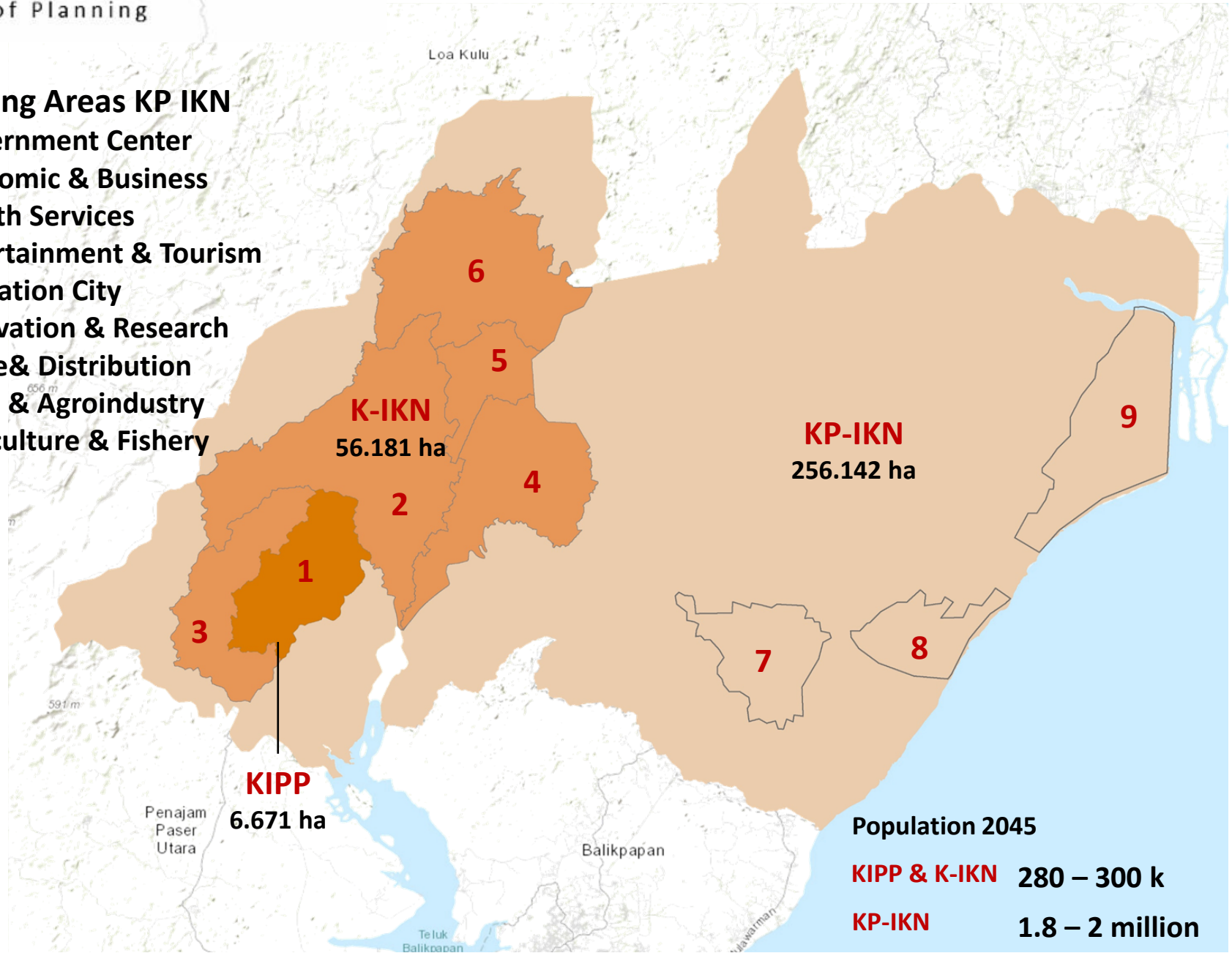
1. To disperse population more evenly across the country
2. To increase economic growth outside Java
3. Crisis on clean water resources in Java
4. High rate of land conversion in Java
5. Concentrated urbanization in Metropolitan Jakarta
6. A decrease in carrying capacity and high level of economic loss in Jakarta

IKN Constellation

3 Scale of Planning

9 Planning Areas KP IKN

1. Government Center
2. Economic & Business
3. Health Services
4. Entertainment & Tourism
5. Education City
6. Innovation & Research
7. Trade & Distribution
8. Food & Agroindustry
9. Agriculture & Fishery



Land Development Plan for KIPP



Office and Commercial Area



Presidential Palace Area

Sub WP1A

2.876 ha

Core Government Building and Facilities



Education Center Area

Sub WP1B

2.037 ha

Basic and Higher Education, MICE and Sport Facilities, Valley Multifunction Area and City Service Center

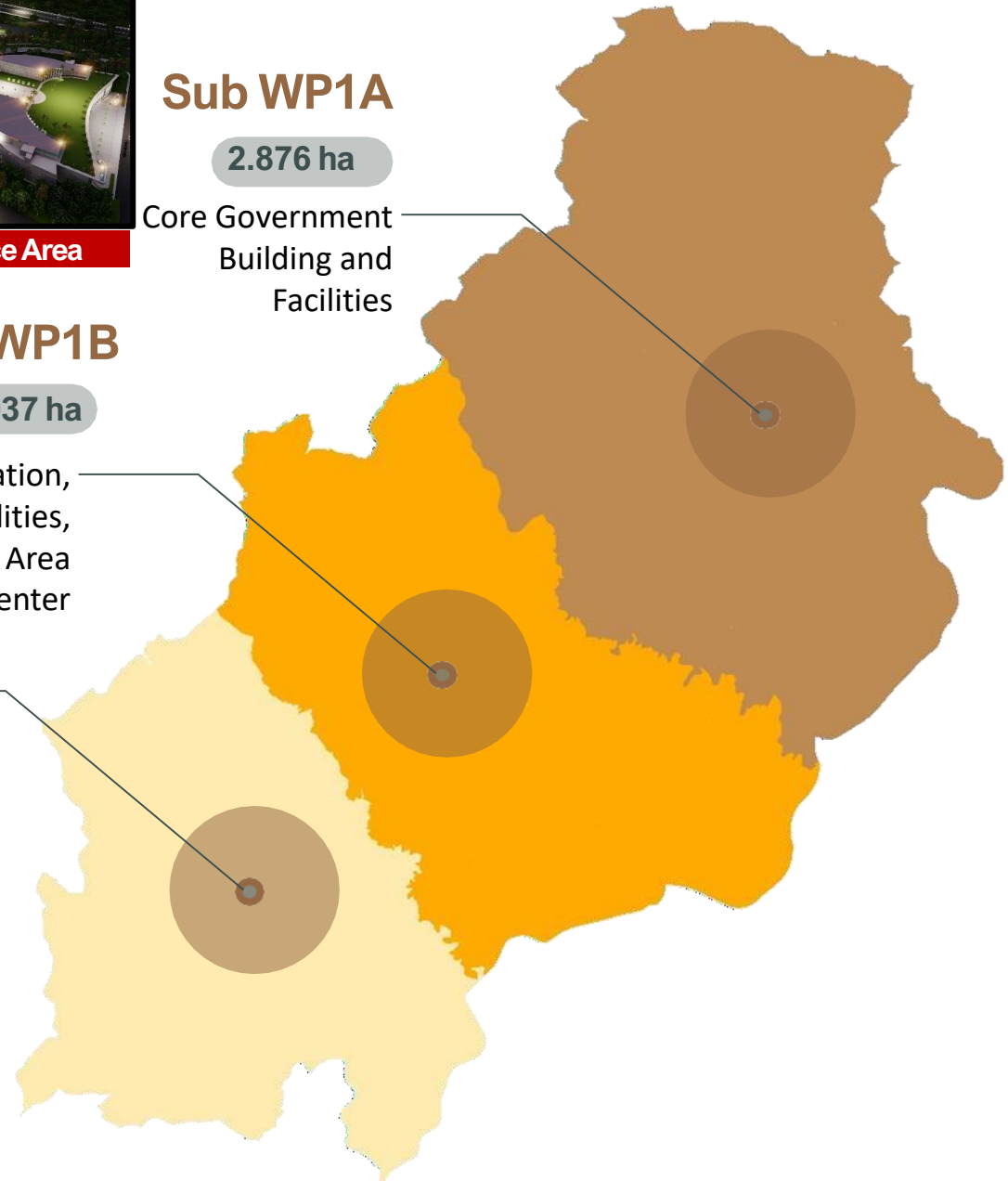
Sub WP1C

1.758 ha

Hospital Area



International Hospital



Nusantara's Development Timeline

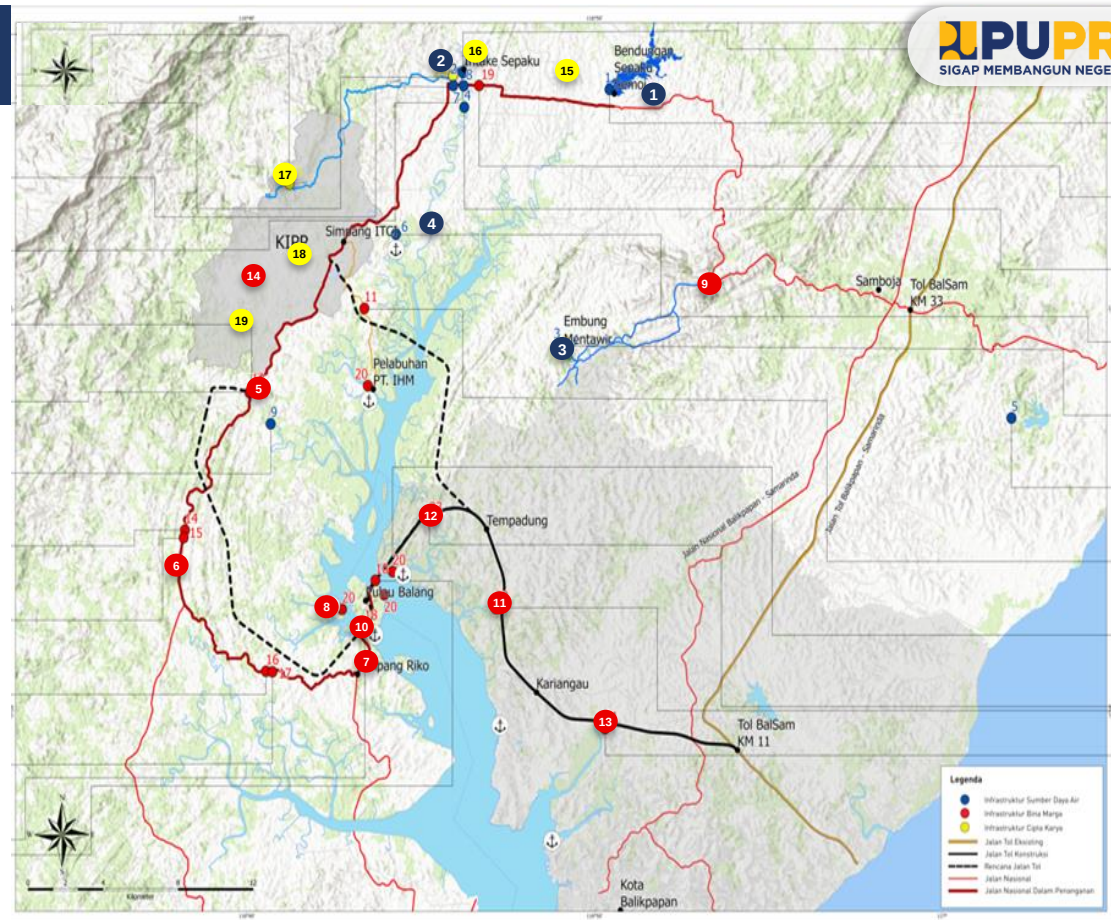


Source: Presidential Regulations of the Republic of Indonesia Num. 63/2022 on the Details of the Nusantara's Capital City Master Plan

INFRASTRUCTURE CONSTRUCTION WORKS AT IKN NUSANTARA 2022 - 2024

1	Continue of Sepaku Semoi Dam Development Penajam Paser Utara Regency
Budget Estimate : Rp 676,73 Billion	
Construction Period (MYC)	
July 2020 - December 2023	
2	Intake Infrastructure Development and Sepaku River Transmission Pipeline
Budget Estimate : Rp 364,83 Billion	
Construction Period (SYC)	
October 2021 - April 2023	
3	Nursery Raw Water of Mentawir
Budget Estimate : Rp 34 Billion	
Construction Period (SYC)	
August 2022 - December 2022	
4	Sepaku River Flood Control
Budget Estimate : Rp 275 Billion	
Construction Period (SYC)	
April 2022 - December 2022	
5*	Preservation Road Sp. ITCI - Sp. 3 Riko Segment 1
Budget Estimate: Rp 87,95 Billion	
Construction Period (SYC)	
April 2022 - December 2022	
6*	Preservation Road Sp. ITCI - Sp. 3 Riko Segment 2
Budget Estimate: Rp 85,34 Billion	
Construction Period (SYC)	
April 2022 - December 2022	
7*	Preservation Road Sp. 3 Riko - Balang Island Bridge Short Span
Budget Estimate: Rp 90,99 Billion	
Construction Period (SYC)	
April 2022 - December 2022	
8	Development of Logistic Dock Development of IKN
Budget Estimate: Rp 115,65 Billion	
Construction Period (MYC)	
Juni 2023 - July 2023	

9	Access Road To Mentawir Nursery Development
Budget Estimate : Rp 127,21 Billion	
Construction Period (MYC)	
Juni 2023 - March 2024	
10	Duplicate of Balang Island Bridge Short Span
Budget Estimate : Rp 498,43 Billion	
Construction Period (MYC)	
Juni 2023 - September 2024	
11	Development of IKN Highway Section 3B: Segment KKT Kariangau - Sp. Tempadung
Budget Estimate: Rp 2020,24 Billion	
Construction Period (MYC)	
September 2022 - June 2024	
12	Development of IKN Highway Section 5A: Segment Sp. Tempadung - Balang Island Bridge
Budget Estimate : Rp 2248,84 Billion	
Construction Period (MYC)	
September 2022 - June 2024	
13	Development of IKN Highway Section 3A: Segment Karangoang - KKT Kariangau
Budget Estimate: Rp 3478,38 Billion	
Construction Period (MYC)	
September 2022 - July 2024	
14	Road Development Sub WP 1B and 1C
Budget Estimate: Rp 540 Billion	
Construction Period (SYC)	
February 2023 - November 2023	
15	Water Treatment Installation Capacity 300L/second and Sepaku Water Treatment Installation System Supporting Building
Budget Estimate : Rp 345,7 Billion	
Construction Period (MYC)	
Juni 2023 - May 2024	
16	Sepaku Water Pipeline Water Treatment Installation System Package 1
Budget Estimate : Rp 265,1 Billion	
Construction Period (MYC)	
Juni 2023 - May 2024	



CONSTRUCTION PROJECTS OUTSIDE KIPP IN 2022-2024									
DG of Water Resources	4 Projects	Rp 1,351 Trillion	DG of Highway	10 Projects	Rp 9,253 Trillion	DG of Human Settlements	5 Projects	Rp 2,287 Trillion	
TOTAL 18 PROJECTS Rp 12,391 Trillion									
Auction Projects outside KIPP WP 1			Auction Projects outside KIPP WP 1			Auction Projects outside KIPP WP 1			
Already Contracted	4	Rp. 1,351 T	Already Contracted	7	Rp. 8,512 T	Already Contracted	3	Rp. 1,504 T	
Scheduled for Tender	-	-	Scheduled for Tender	3	Rp. 0,741 T	Scheduled for Tender	2	Rp. 0,783 T	
TOTAL	4	Rp. 1,351 T	TOTAL	10	Rp. 9,253 T	TOTAL	5	Rp. 2,287 T	
17	Sepaku Water Pipeline Water Treatment Installation System Package 2		18	Land Development Sub - WP 1B		19	Land Development Sub - WP 1C		
Budget Estimate : Rp 457,6 Billion		Budget Estimate : Rp 781,38 Billion		Budget Estimate : Rp 436,986 Billion					
Construction Period (MYC)		Construction Value (SYC)		Construction Period (SYC)					
Juni 2023 - May 2024		January - December 2023		January - December 2023					

* Package has been done in 2022

*the value of budget estimate is for planning phase

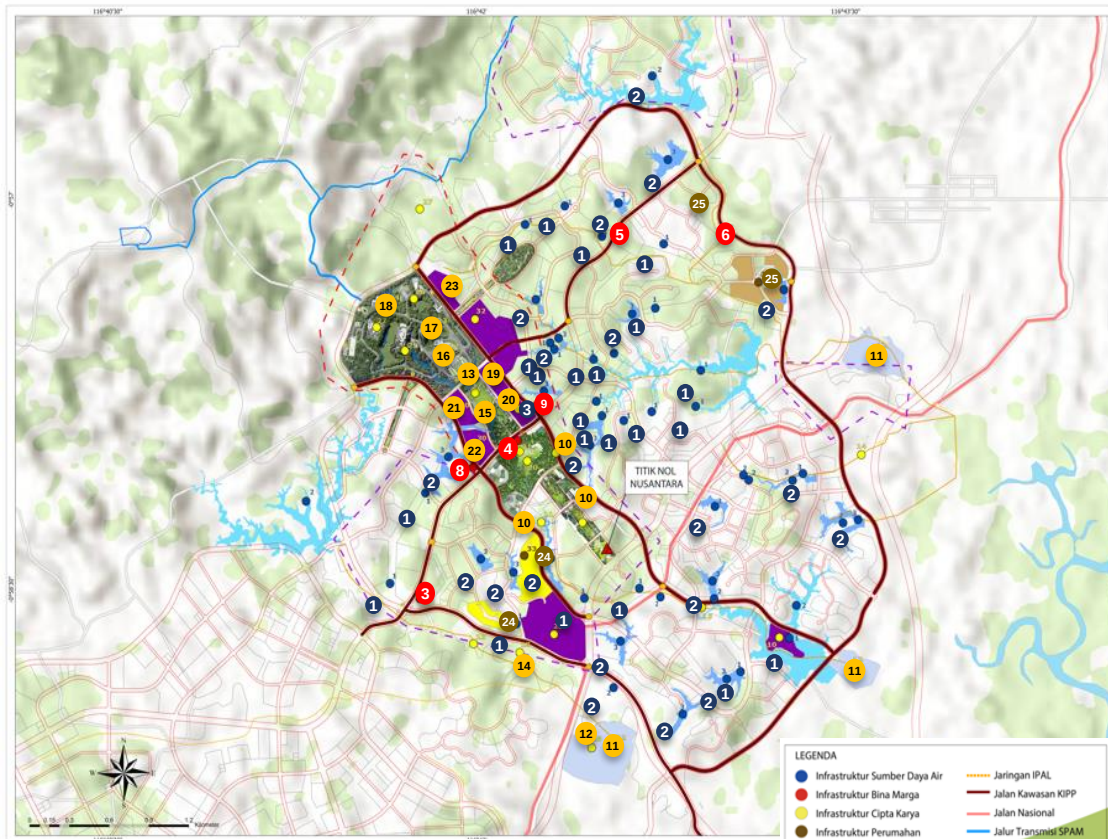
1	Sanggal 1A (KIPP) Watershed Flood Control Construction Budget Estimate : Rp 190,16 Billion Construction Period (MYC) September 2022 - December 2023
2	KIPP Retention Basin Construction (MYC) Budget Estimate : Rp 499,50 Billion Construction Period (MYC) January 2023 - January 2024
3*	Sepaku Segment 1 Ring Road Construction Budget Estimate : Rp 61,68 Billion Construction Period (MYC) 10 November 2021 - December 2022
4*	Sepaku Segment 2 Ring Road Construction Budget Estimate : Rp 66,82 Billion Construction Period (MYC) 10 November 2021 - 20 October 2022
5*	Sepaku Segment 3 Ring Road Construction Budget Estimate : Rp 60,56 Billion Construction Period (MYC) 10 November 2021 - 3 December 2022
6*	KIPP-IKN Work and Logistic Road Construction: Sepaku Segment 4 Ring Road Construction Budget Estimate : Rp 193,48 Billion Construction Period (MYC) 29 August 2022 – 13 April 2024
7*	Bridge Emergency Panel Procurement (Stage II) Budget Estimate: Rp 30,88 Billion Construction Period (SYC) November 2022 - December 2022
8	KIPP Inner Road Construction: Sumbu Kebangsaan West Side Road Construction Budget Estimate : Rp 709,90 Billion Construction Period (MYC) 16 September 2022 – 21 April 2024
9	KIPP Inner Road Construction: Sumbu Kebangsaan East Side Road Construction Budget Estimate : Rp 849,81 Billion Construction Period (MYC) December 2022 – March 2024
10	Main Distribution System and SPAM Sepaku Distribution Divider System Stage I* Budget Estimate : Rp 172,64 Billion Construction Period (MYC) March 2023 - May 2024

* Completed in 2022

11	WWTP 1, 2, 3 KIPP IKN Budget Estimate : Rp 661,97 Billion Construction Period (MYC) December 2022 - December 2024
12	Integrated Waste Processing Plant 1 Budget Estimate : Rp 463,13 Billion Construction Period (MYC) June 2023 - December 2024
13	KIPP Land Development Stage 1 Budget Estimate : Rp 110,64 Billion Construction Period (MYC) August 2022 - April 2023
14	KIPP Land Development Stage 2 Budget Estimate : Rp 374,74 Billion Construction Period (MYC) November 2022 - October 2023
15	Sumbu Kebangsaan Arrangement Stage I Budget Estimate: Rp 381,70 Billion Construction Period (MYC) December 2022-December 2023
16	National Palace and Ceremony Field Budget Estimate : Rp 1.364,08 Billion Construction Period (MYC) November 2022 - Agustus 2024
17	Presidential Office Building Budget Estimate Rp 1.598,460 Billion Construction Period (MYC) November 2022 - August 2024
18	Presidential Secretariat Office dan Supporting Buildings Budget Estimate : Rp 1.380,713 Billion Construction Period (MYC) November 2022 - August 2024
19	Coordinating Ministry 1 Building Budget Estimate: Rp 766,80 Miliar Construction Period (MYC) December 2022 - August 2024
20	Coordinating Ministry 2 Building** Budget Estimate : Rp 791,73 Billion Construction Period (MYC) June 2023 - August 2024

** Repeated Tender

MPWH's INFRASTRUCTURE CONSTRUCTION WORK AT KIPP IKN REGION IN 2022 – 2024



CONSTRUCTION PROJECTS AT KIPP YEAR 2022-2024

DG of Water Resources	2 Projects	Rp 0,689 Trillion	DG of Highway	7 Projects	Rp 1,973 Trillion	DG of Human Settlements	14 Projects	10,591 Trillion	DG of Housing	2 Projects	Rp1,093 Trillion
TOTAL 25 PROJECTS Rp 14,346 Trillion											

21	Coordinating Ministry 3 Building Budget Estimate : Rp 796,16 Billion Construction Period (MYC) December 2022 - August 2024	23	Ministry of the State Secretariat Building Budget Estimate : Rp 983,97 Billion Construction Period (MYC) December 2022 - August 2024	25	Construction Workers Housing Budget Estimate : Rp 584,24 Billion Construction Period (MYC) August 2022 - January 2023
22	Coordinating Ministry 4 Building Budget Estimate : Rp 745,33 Billion Construction Period (MYC) December 2022 - August 2024	24	Landed Housing for Minister Official Budget Estimate : Rp 509,11 Billion Construction Period (MYC) December 2022 - May 2024	*the value of budget estimate is for planning phase	

KIPP WP 1A TENDER STATUS		
Already Contracted	2	Rp. 0,689 Trillion
Scheduled for Tender	-	-
TOTAL	2	Rp. 0.689 Trillion

KIPP WP 1A TENDER STATUS		
Already Contracted	7	Rp. 1,973 Trillion
Scheduled for Tender	-	-
TOTAL	7	Rp. 1,973 Trillion

KIPP WP 1A TENDER STATUS		
Already Contracted	11	Rp. 9,164 T
Scheduled for Tender	3	Rp. 1,427 T
TOTAL	14	Rp. 10,591 Trillion

KIPP WP 1A TENDER STATUS		
Already Contracted	2	Rp. 1,093 T
Scheduled for Tender	-	-
TOTAL	2	Rp. 1,093 T

MPWH IKN NUSANTARA CONSTRUCTION PROGRESS

TOTAL 23.72T

33 CONSTRUCTION PROJECTS

REGIONAL AND KIPP-IKN INFRASTRUCTURE CONSTRUCTION PROJECT

CONSTRUCTION PROGRESS

Per 07 April 2023

14,52%

DIRECTORATE GENERAL OF
WATER RESOURCES



50,02%

6 Projects
Rp 1,846 T

DIRECTORATE GENERAL OF
HIGHWAYS



11,07%

10 Projects
Rp 10.292 T

DIRECTORATE GENERAL OF
HUMAN SETTLEMENTS



7,64%

15 Projects
Rp 10.517 T

DIRECTORATE GENERAL
OF HOUSING

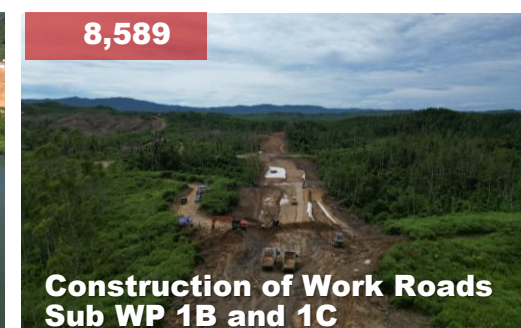
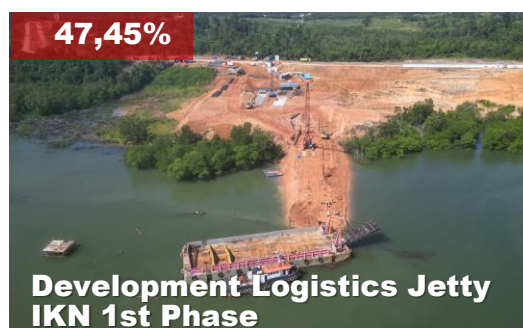
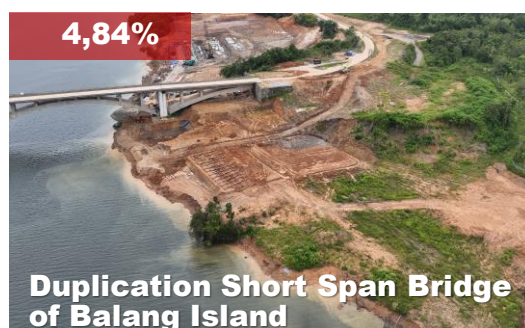


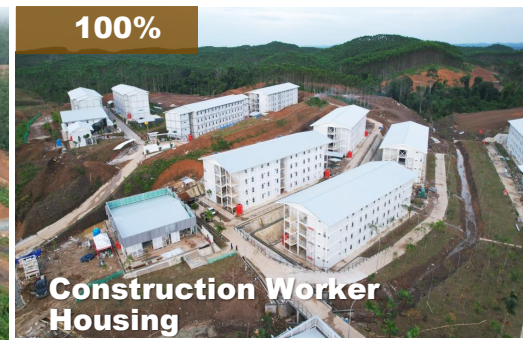
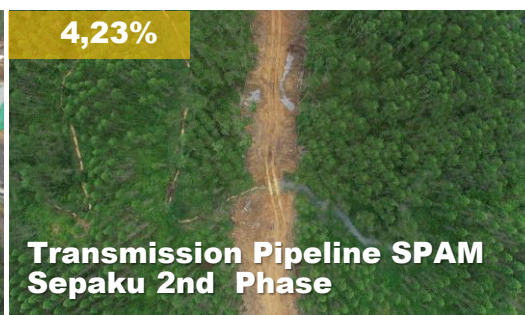
54,33%

2 Projects
Rp 1.060 T

CONSTRUCTION PROGRESS
Status 07 April 2023

* Ultimate 2024

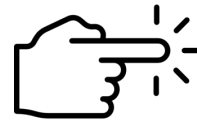




**CONSTRUCTION
PROGRESS
14,52%**

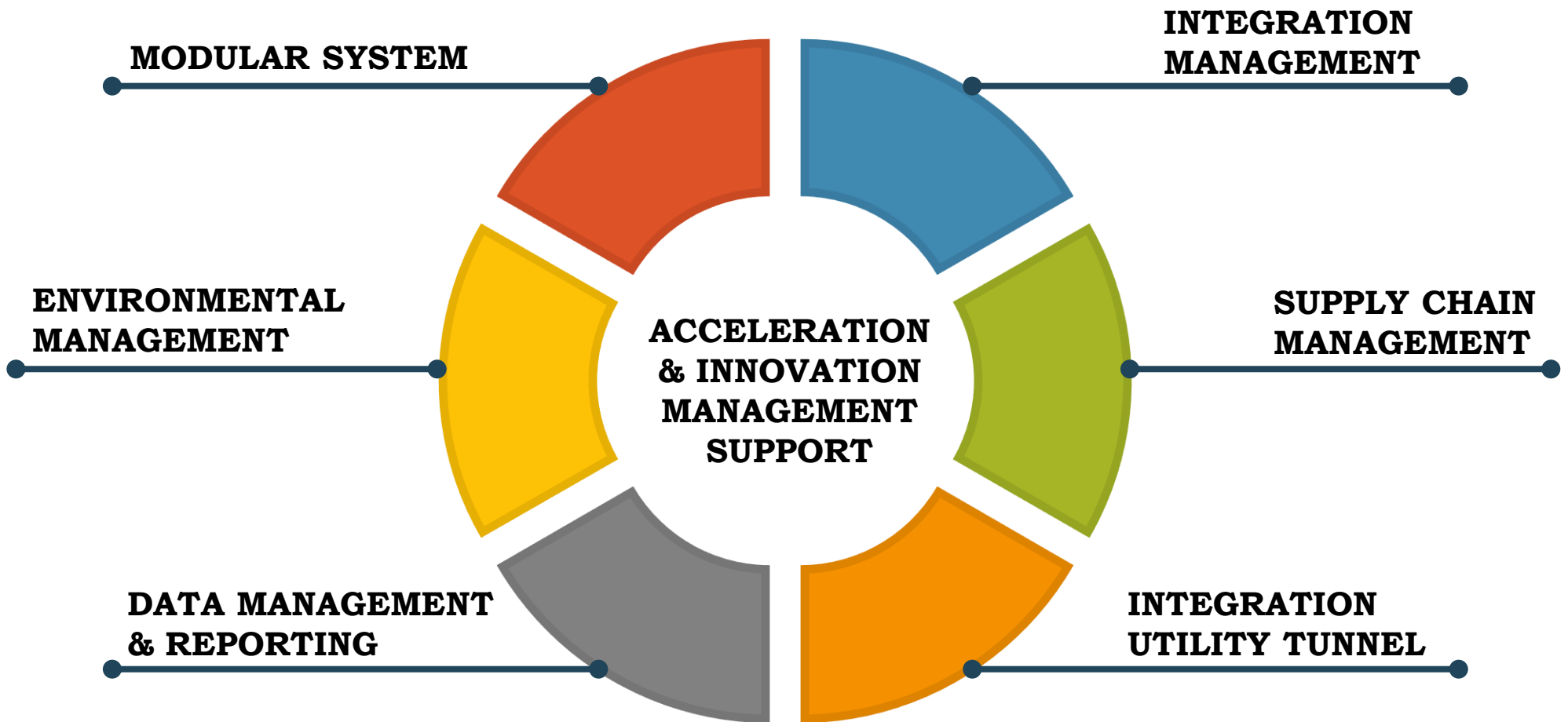
In 2024, **16.990 ASN** personnel will be transferred to IKN, and

on **17 August 2024** a state ceremony will be held



Therefore, it requires
**acceleration
strategies**



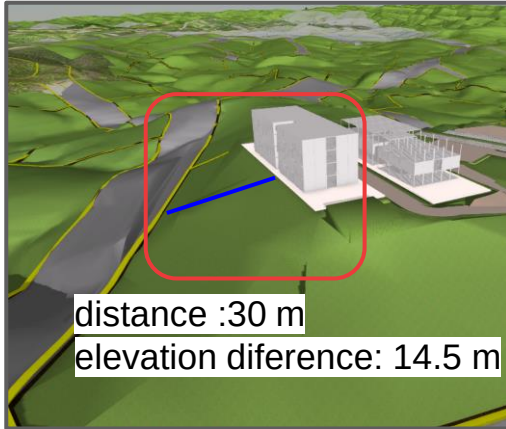
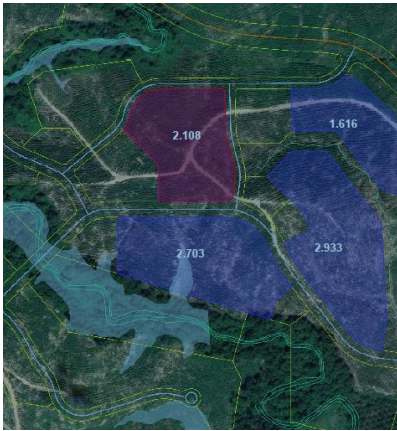


Integration Management

Extreme topographic and geological conditions



There was a clash between the construction works

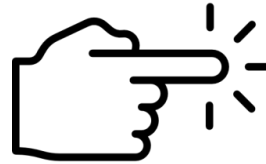


In terms of IKN's development **elevation of roads, riparians, ponds, and floods stage Q100** is a priority, for other infrastructure must adjust.

Using the same of surface reference and elevation master



Using the BIM method



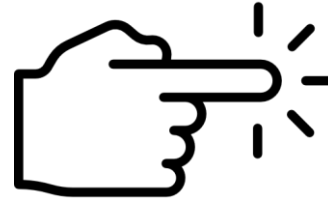
1. It is not allowed to cut down trees, except on land used for buildings and supporting infrastructure;
2. Planting endemic/original Kalimantan trees (nursery is carried out at Mentawir)
3. Installing sediment trap during construction;
4. Specific locations for disposal area;
5. Minimal cut and fill, and apply the cut and cover method to each slope;
6. Animal bridges at animal corridor locations;



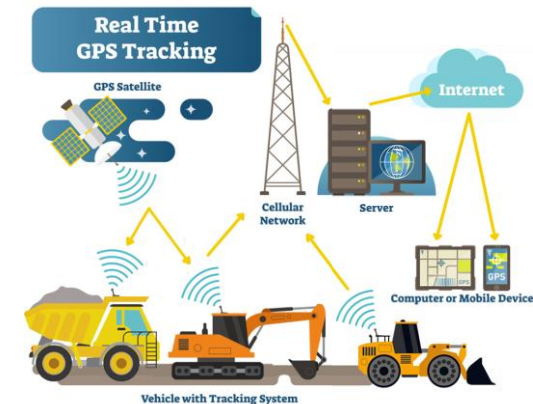
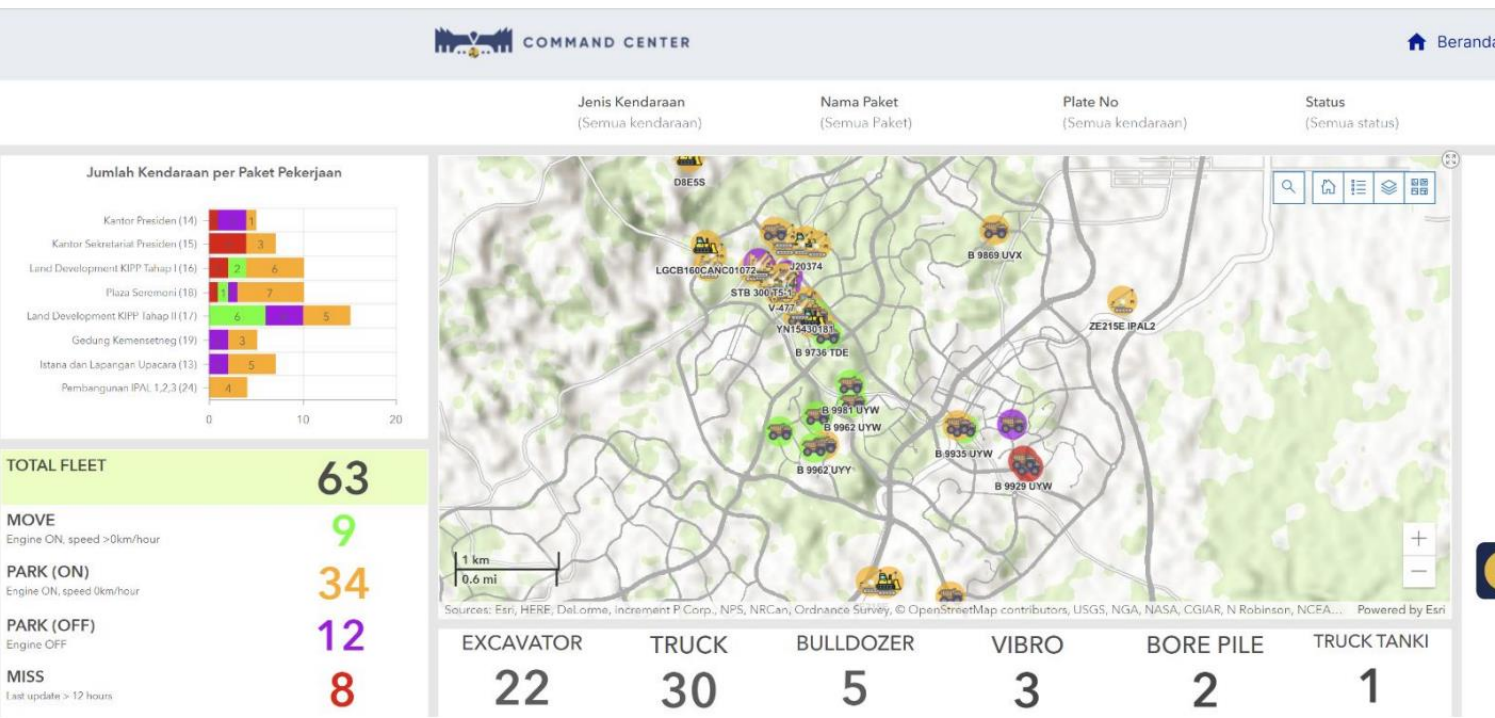
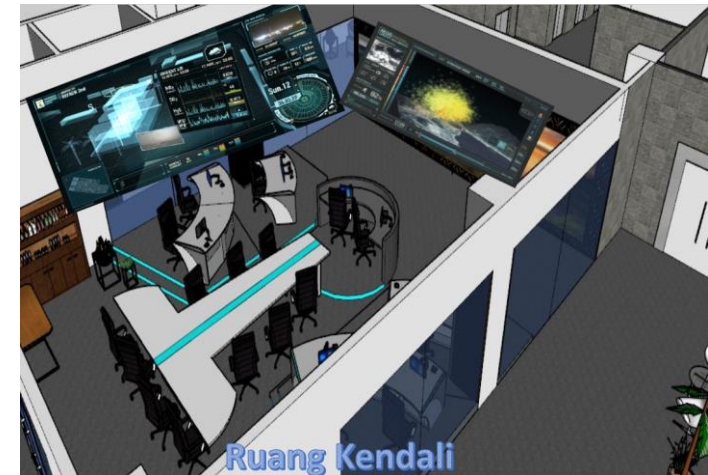
Supply Chain Management

Anticipate the peak schedule:

1. Material sources;
2. Ships and pontoons to transport materials;
3. Shipping line capacity;
4. The number and capacity of the jetty;
5. Logistic roads;
6. Traffic management/regulation.



Traffic Management System and Control Room



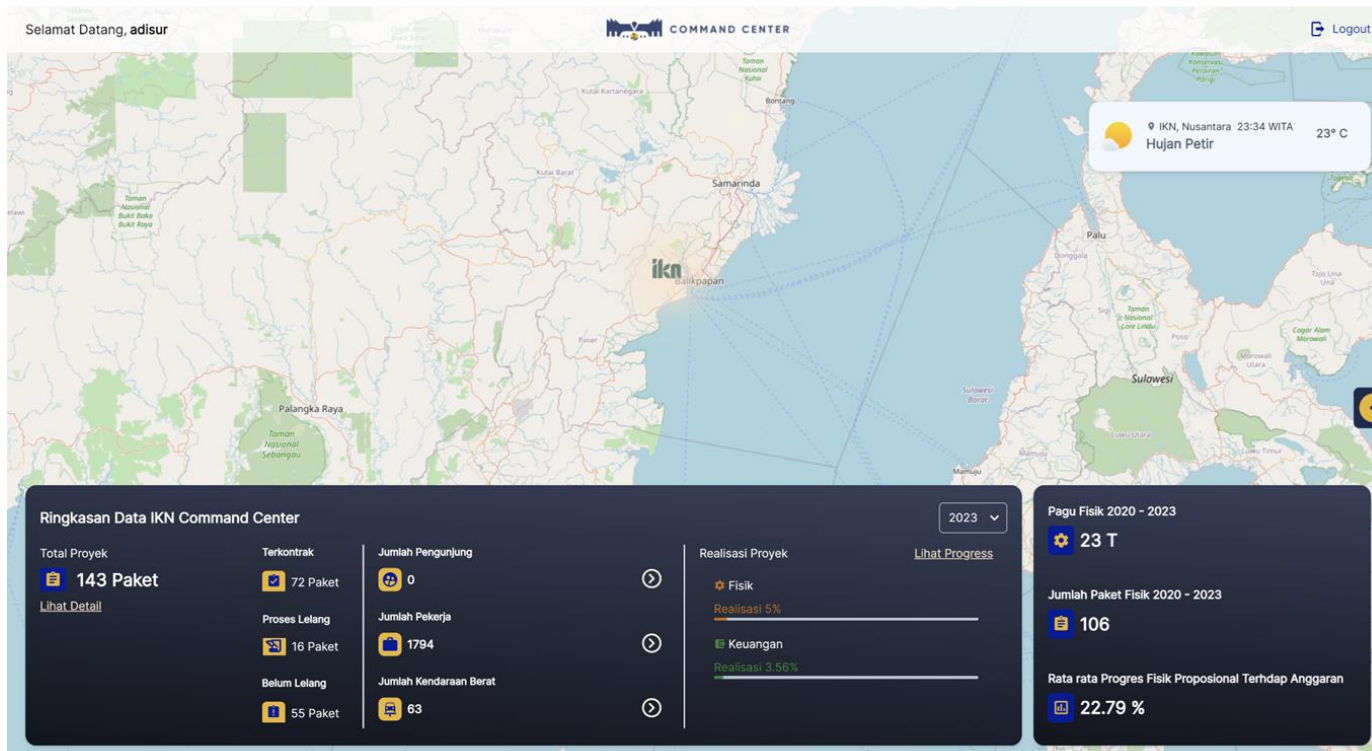
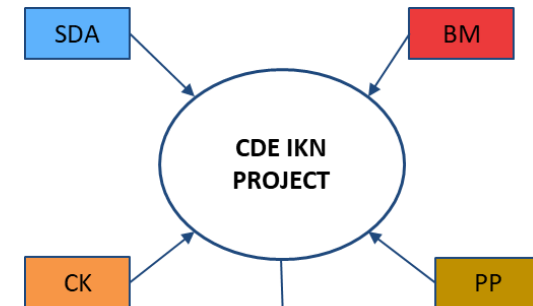
GPS Tracking/Fleet Monitoring is used to monitor the movement of project vehicles

Data Management and Reporting

Currently, there are **33 construction packages** running together, with **6,915 workers** and plans for **1,125 heavy equipment**.. It needs to be coordinated and controlled

Dashboard Command Center IKN is used for real-time monitoring and reporting implementation on the site.

IKN's Common Data Environment (CDE) is used to collect, process, and disseminate digital information to the entire project team



Strategy at the Beginning of Project Implementation

Housing construction workers with a modular system is an effort to accelerate and keep the environment.



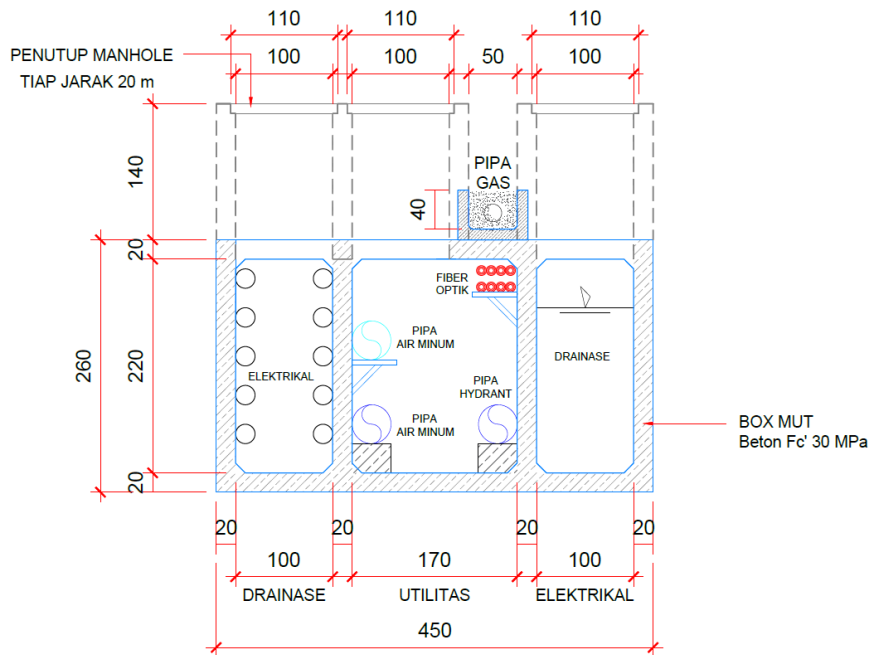
Temporary logistics road for access to construction material supplies



Temporary utilities:
internet network,
electricity, and
clean water

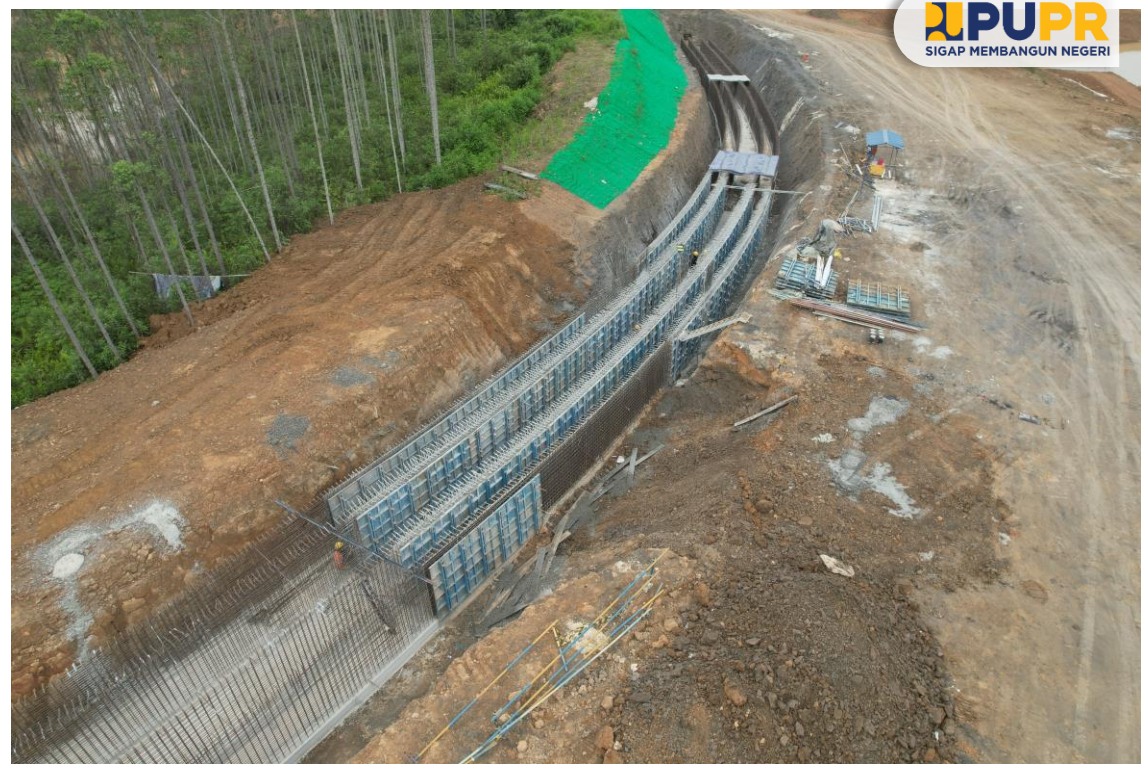
Multy Utility Tunnel (MUT)

1. Underground tunnel/utility box system;
2. Main Network (backbone utility);
3. Divider Network (distribution) to housing/buildings, parks, and presidential palaces.



MUT TIPE 1

SKALA 1 : 100



Thank You
감사합니다
Terima Kasih

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