



Balikpapan, 7 November 2023

“National Spatial Planning Focusing on Economic Infrastructure Development and Management Systems in Indonesia”

6th Spatial Planning Platform (SPP) Conference

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Ministry of Agrarian Affairs and Spatial Planning/
National Land Agency, Republic of Indonesia



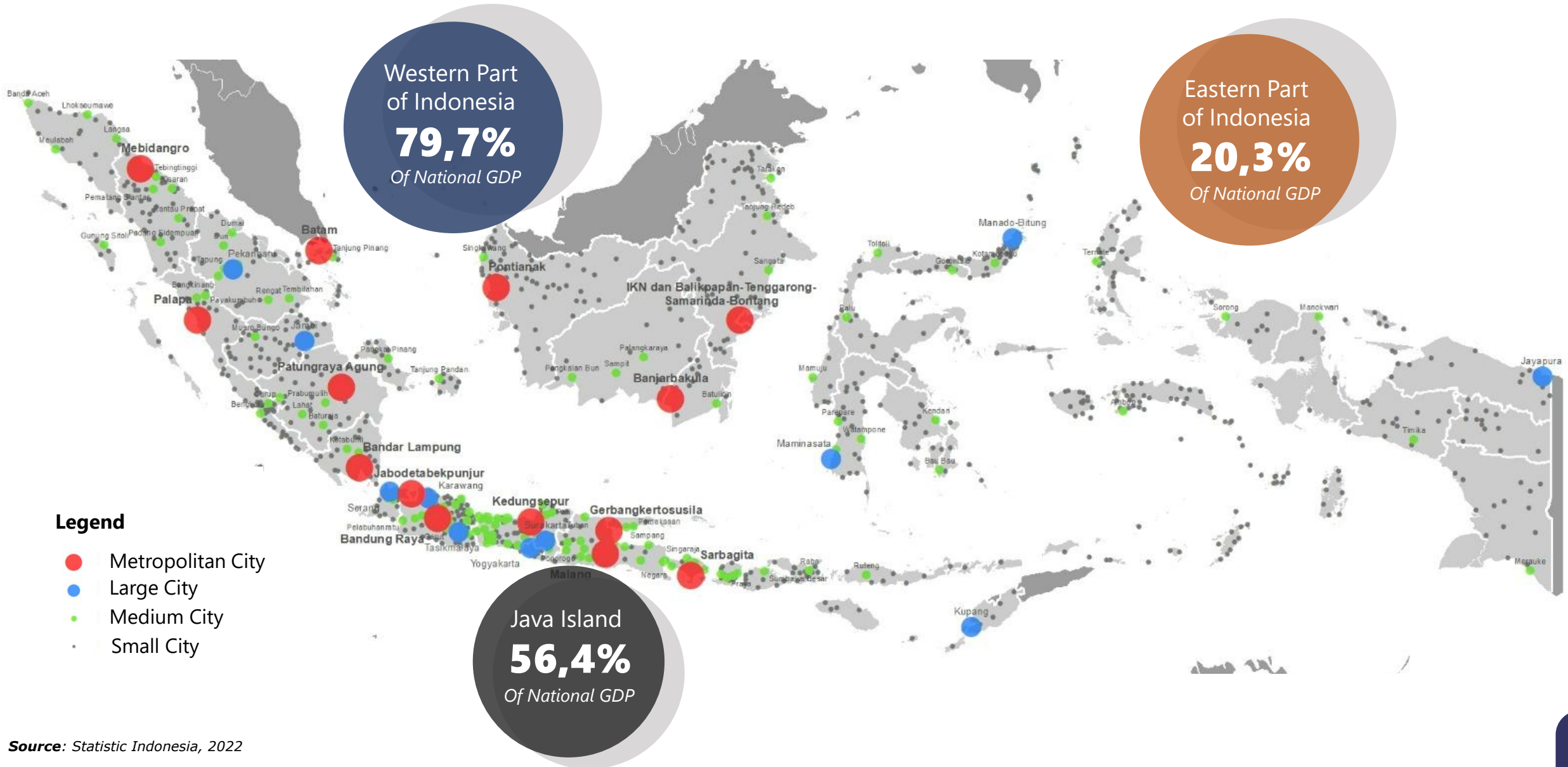
- 1 ▶ Challenges of Spatial Planning in Indonesia from an Economic Perspective**
- 2 ▶ National Spatial Plan as a Basis for National Infrastructure Development**
- 3 ▶ Digitalization of Spatial Planning and the Acceleration of the Investment Licensing Process**



1 ▼

Challenges of Spatial Planning in Indonesia from an Economic Perspective

Regional Inequality: Between Western and Eastern Parts of Indonesia, Between Java and Outer Islands, Between Urban and Rural Areas

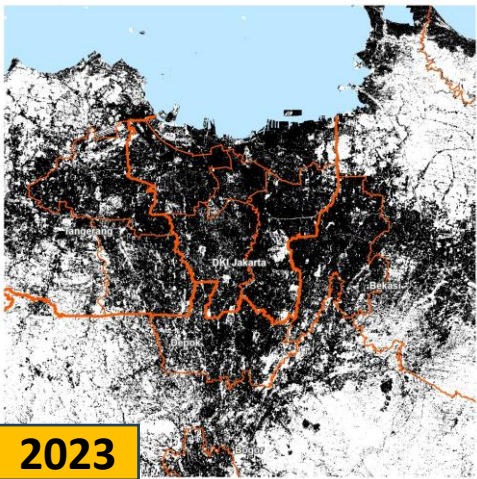
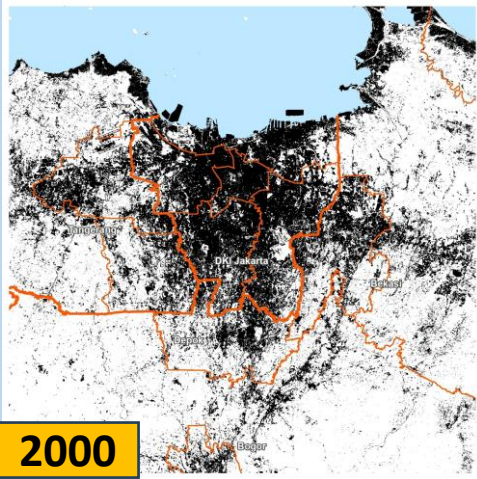


Source: Statistic Indonesia, 2022

Rapid Urbanization

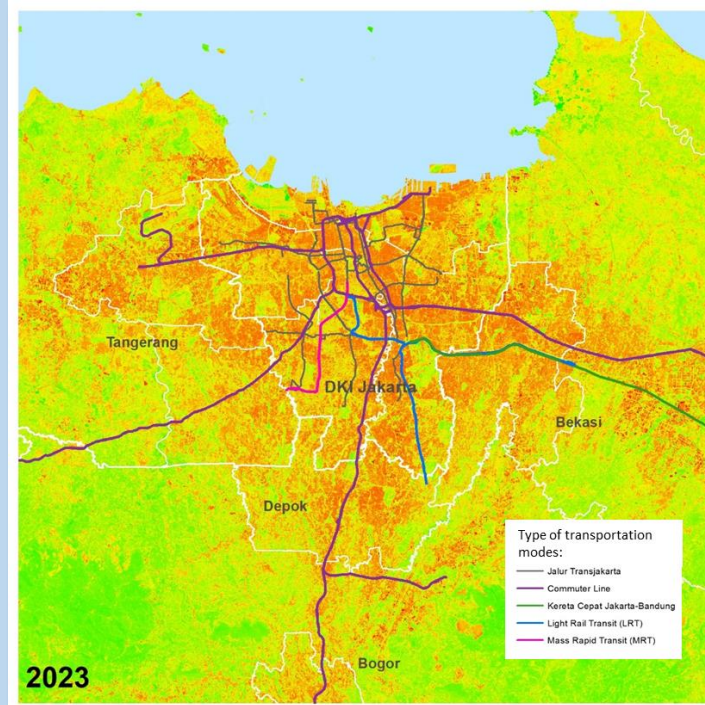


Urban Agglomeration Jakarta Metropolitan Area



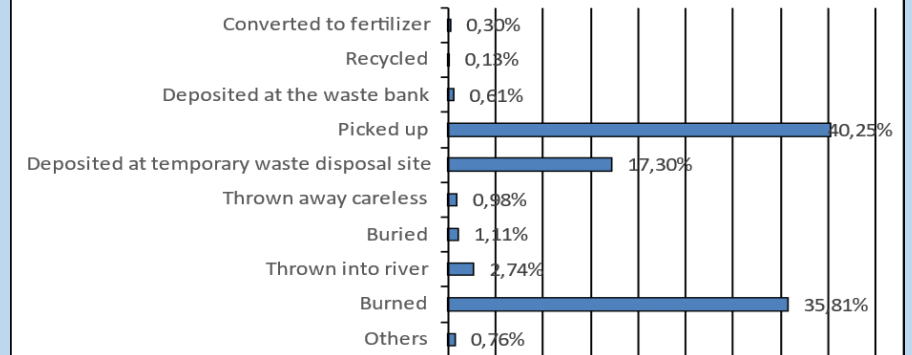
Source: Analysis, 2023, using Landsat 2000 & 2023

Transportation Problems: Traffic Congestion, Inadequate Public Transport, Air Pollution Jakarta Metropolitan Area



Inadequate Urban Infrastructure: Solid Waste Management

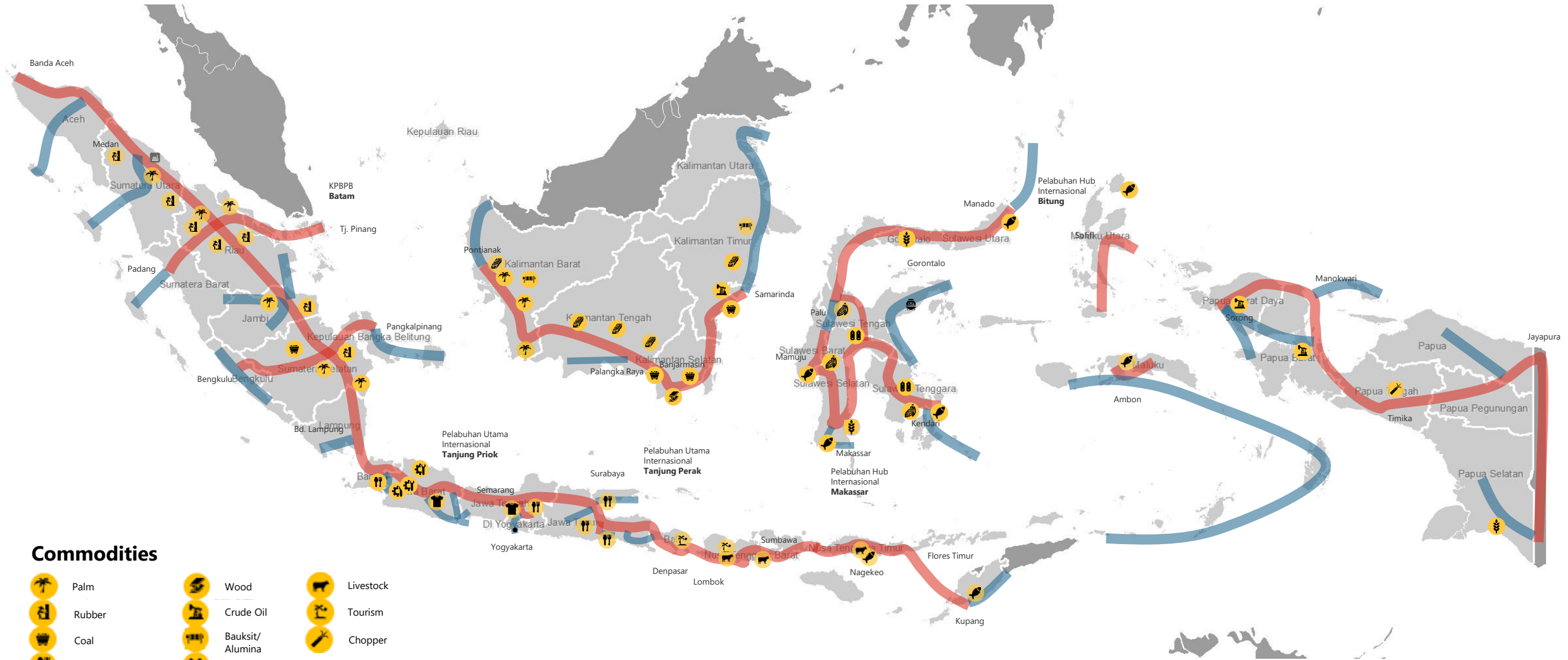
The Proportion of Urban Households Based on Their Waste Management Method (2017)



Source: Statistics Indonesia, 2022

Urban solid waste management is still dominated by open dumping, sanitary landfill, and illegal burning process.

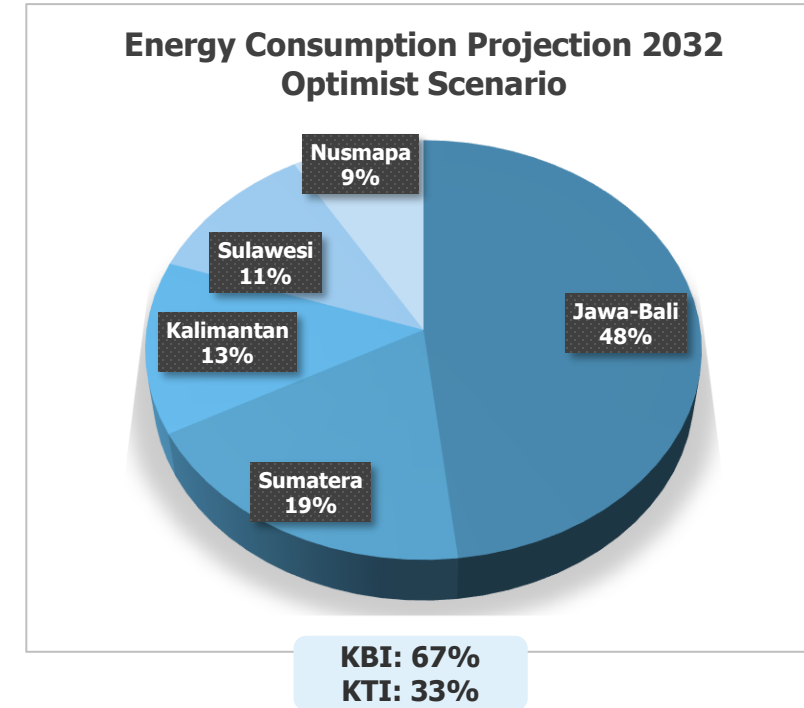
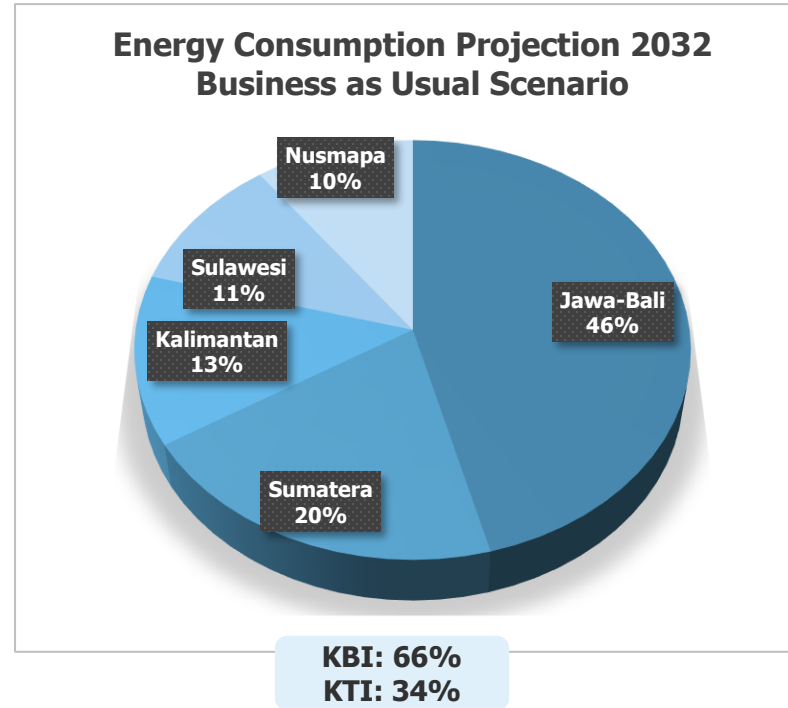
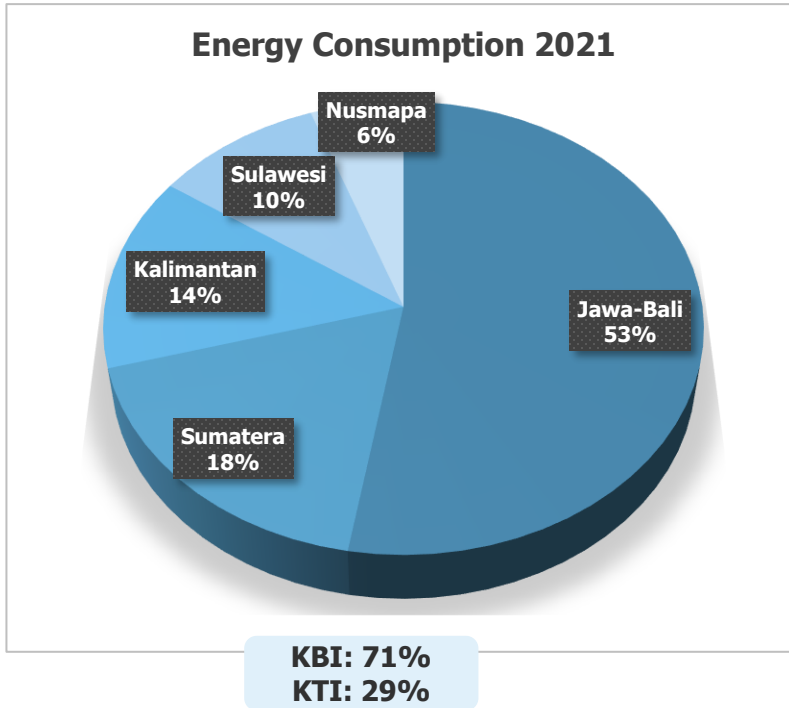
Widespread Location of Leading Commodities



Commodities

- | | | | | | |
|--|--------------------------|--|-----------------|--|-----------|
| | Palm | | Wood | | Livestock |
| | Rubber | | Crude Oil | | Tourism |
| | Coal | | Bauksit/Alumina | | Chopper |
| | Food and Beverages | | Nickel | | |
| | Transportation Equipment | | Crops Farming | | |
| | Textile | | Fisheries | | |
| | Wood | | Cocoa | | |

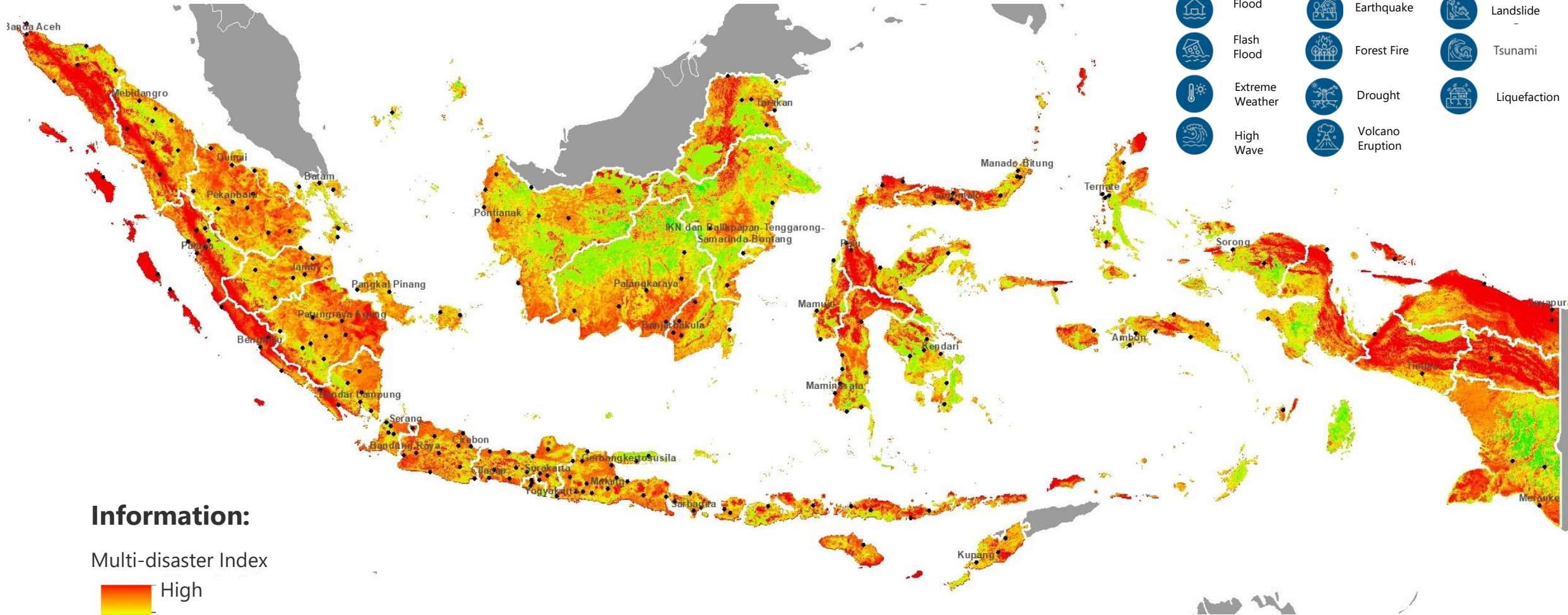
High Electricity Demand














Source: Indonesia Energy Outlook, 2022

- Shifting electricity demand: from household (43.6%) in 2021 to manufacturing (46.6%) and transportation (19.7%) in 2032.
- The process of shifting electricity demand from Java island in 2021 to the Outer Islands in 2032 (reducing regional inequality).

A Country Prone to Disaster Risk

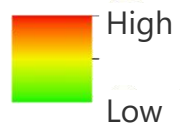


Disaster Types:

- | | | | | | |
|---|-----------------|---|------------------|---|--------------|
|  | Flood |  | Earthquake |  | Landslide |
|  | Flash Flood |  | Forest Fire |  | Tsunami |
|  | Extreme Weather |  | Drought |  | Liquefaction |
|  | High Wave |  | Volcano Eruption | | |

Information:

Multi-disaster Index

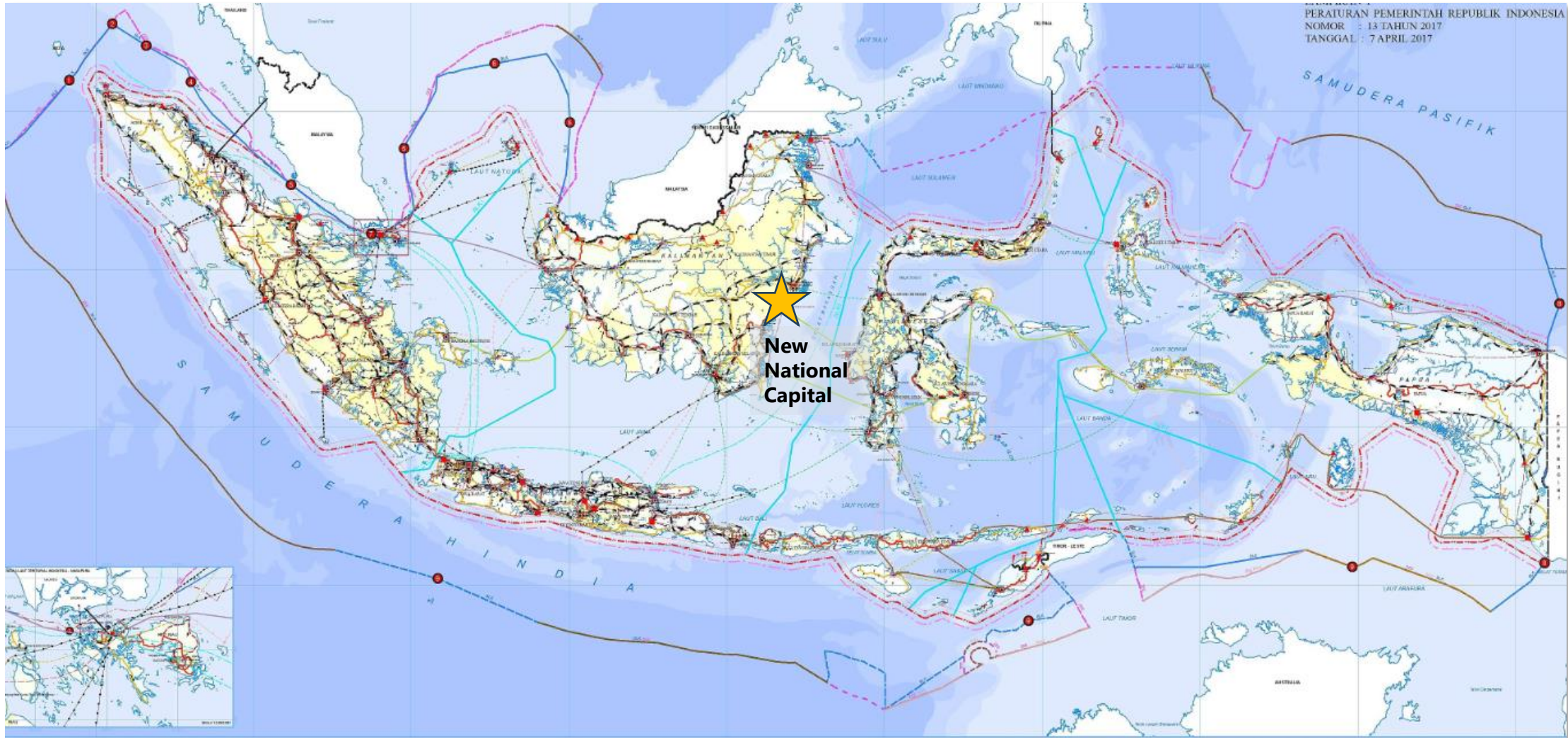




2 ▼

National Spatial Plan as a Basis for Infrastructure Development

National Infrastructure Network Spatial Plan: Inter-Island and Intra-Island Connection (Connecting and Supporting Growth Centers and Their Hinterlands)



National Spatial Plan



National Urban System



National Transportation Network



National Energy Network

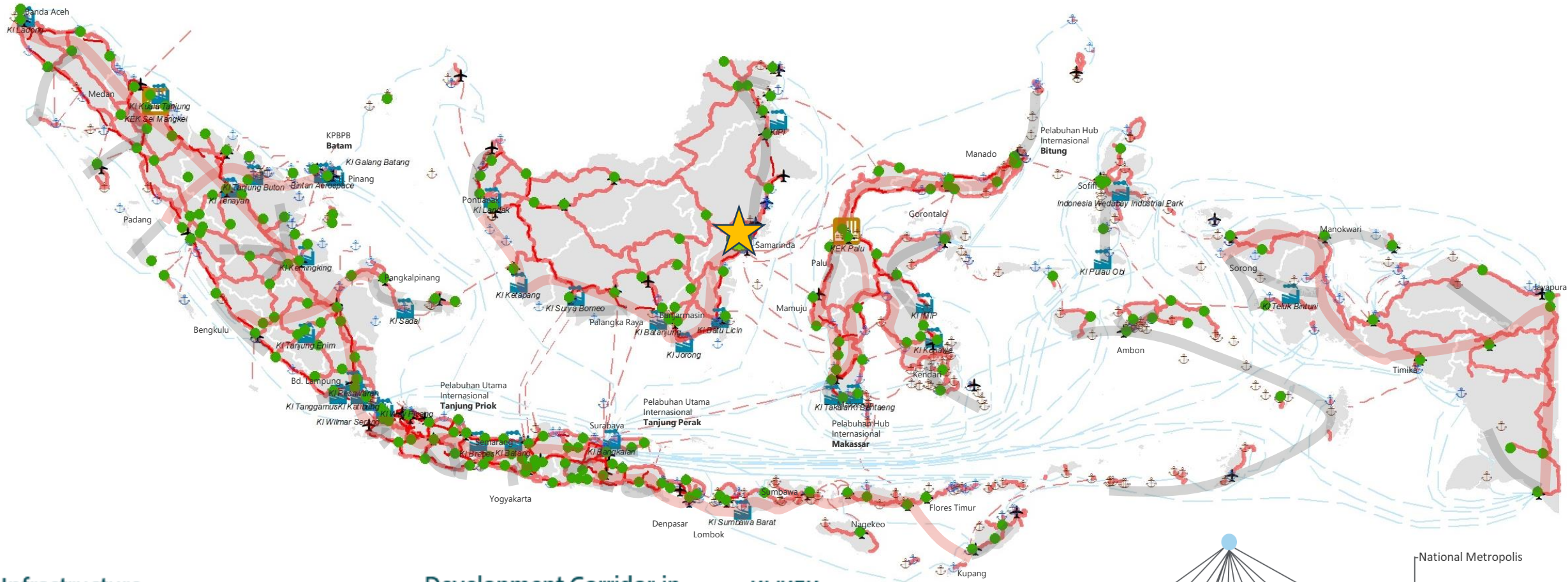


National Telecommunication Network



Water Resource Infrastructure Network

Territorial Connectivity: Regional Development through Connecting Urban & Growth Centers, and Corridor Based Development



Infrastructure

- National Road
- Existing Toll Road
- Planned Toll Road
- Main Marine Route
- Ferry Route

- Sea Port
- Ferry Port
- Airport
- Urban Center

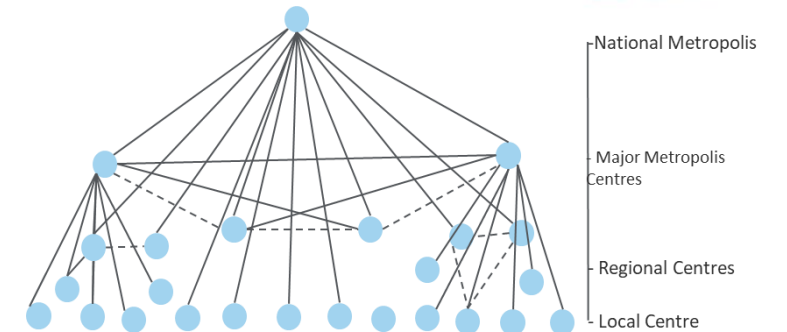
New National Capital

Development Corridor in RPJMN 2020-2024

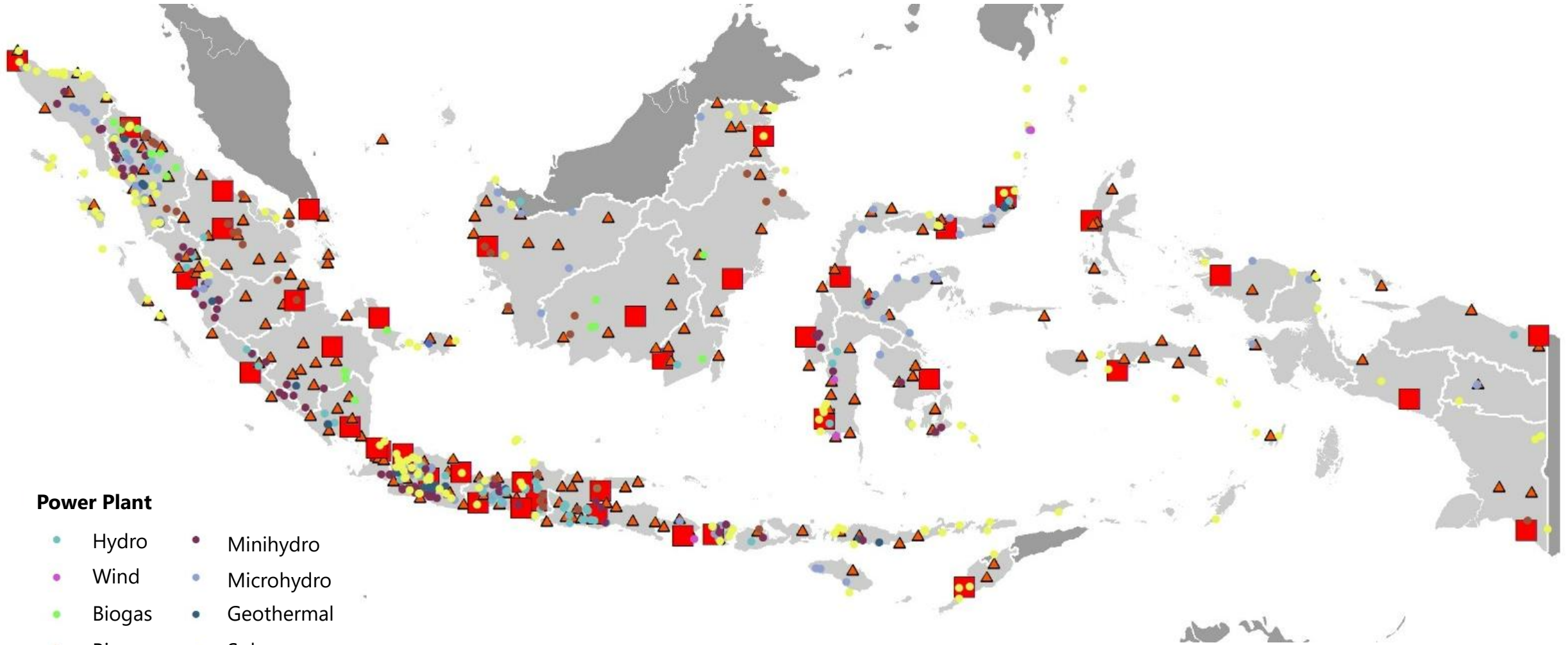
- Corridor for Growth
- Corridor for Equality

KI/KEK

- Industrial Zone
- Exclusive Economic Zone



Supporting Urban System through Development of Renewable Energy

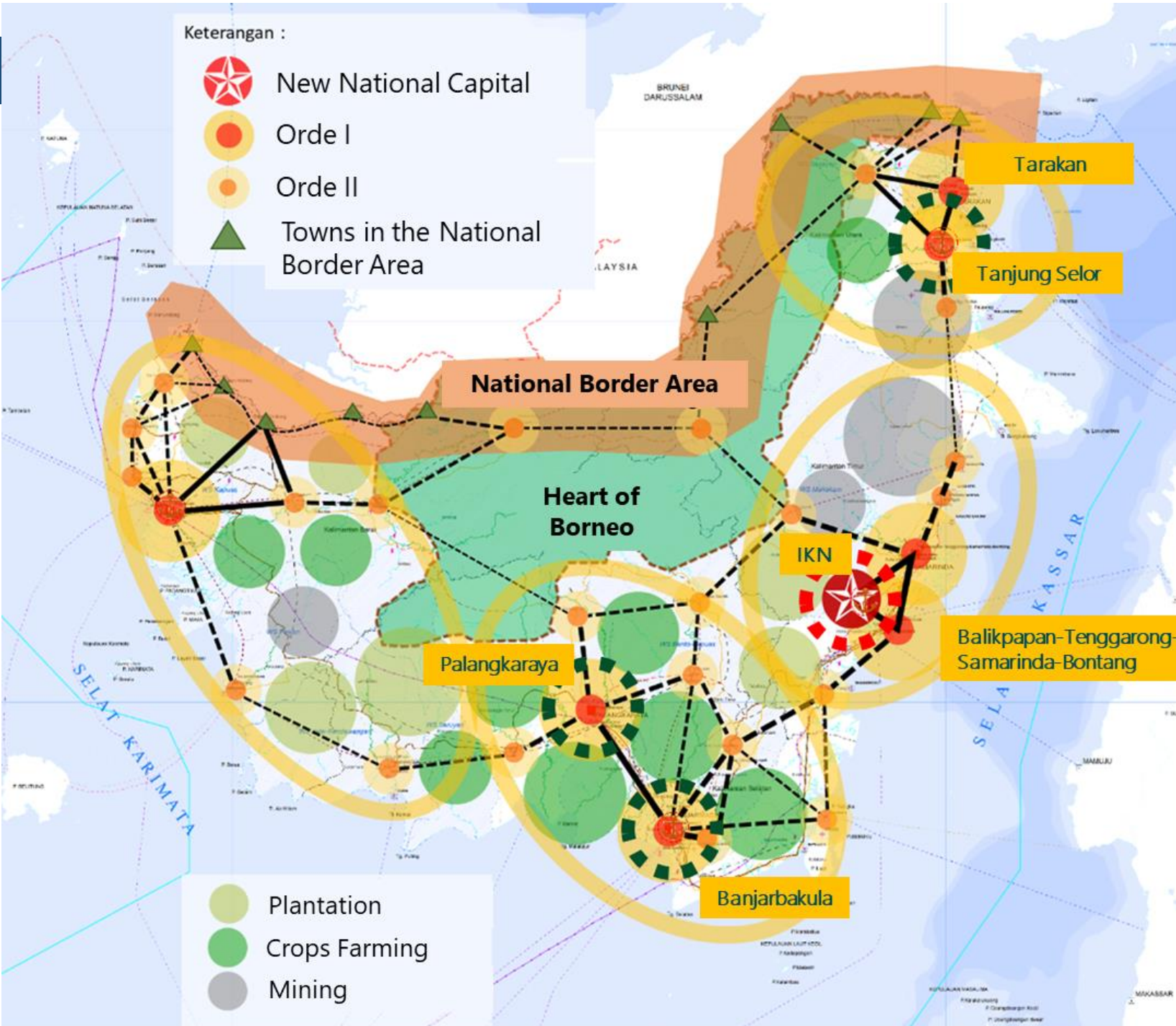


Power Plant

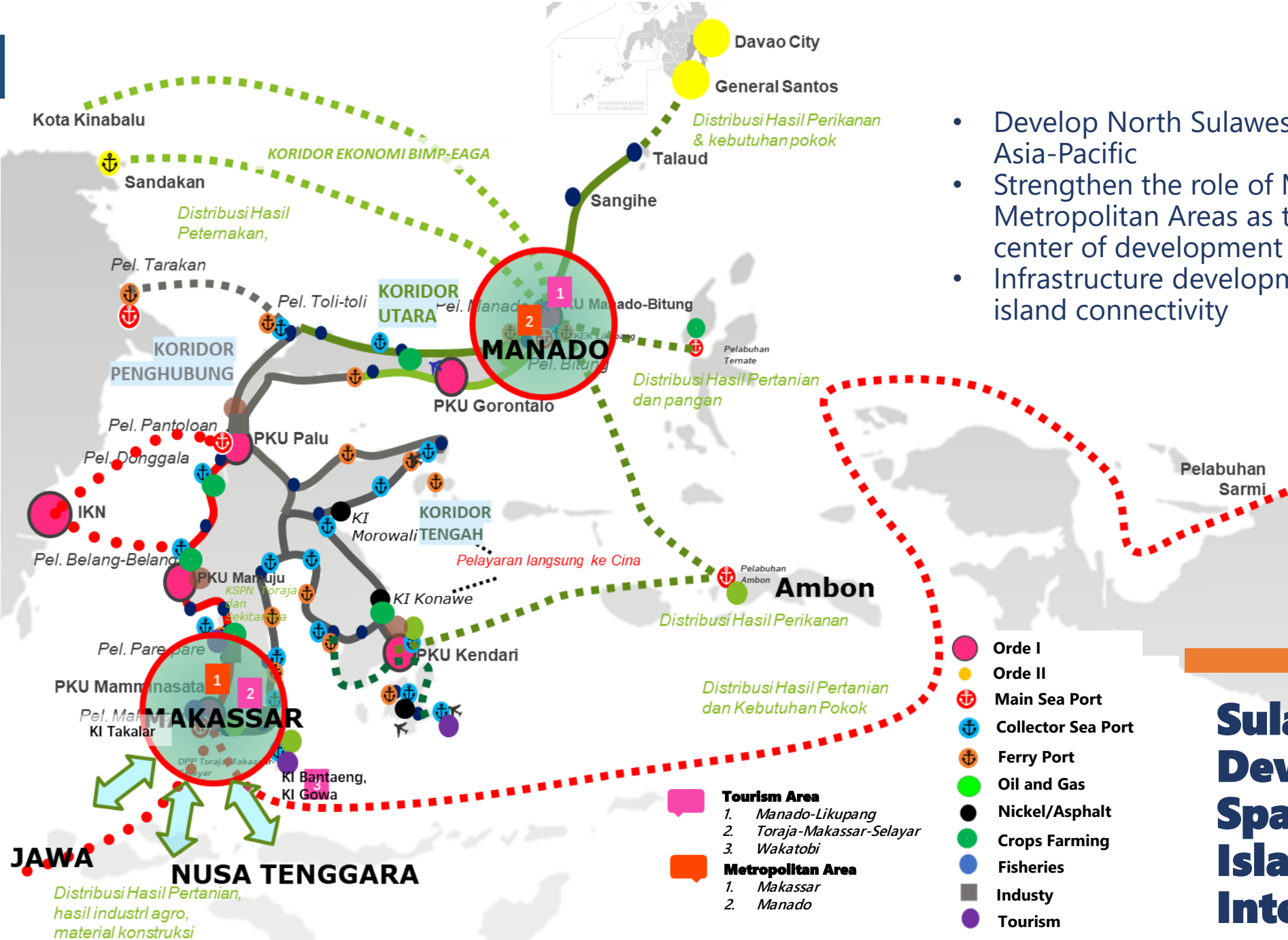
- Hydro
- Wind
- Biogas
- Biomass
- Biofuel
- Minihydro
- Microhydro
- Geothermal
- Solar
- Waste



Kalimantan Economic Development through Spatial Planning: Optimizing Leading Commodities Processing and Downstreaming Natural Resources



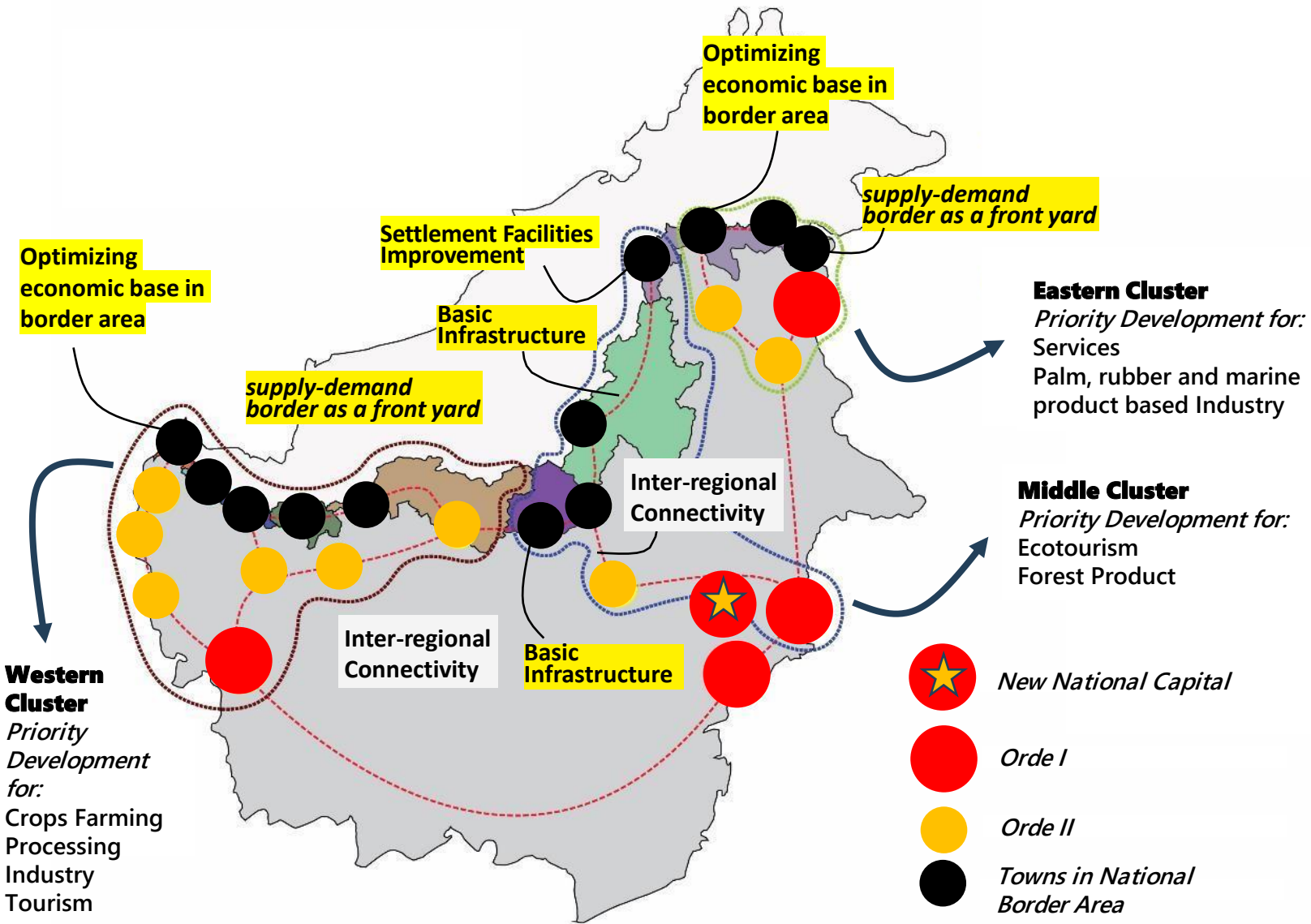
- Development of Nusantara New Capital City and its connection with the City of Samarinda and Balikpapan creating a large interdependence polycentric metropolitan region
- Development of National Border Cities and its connection with oversea and local growth centers, focused on Defense and Security aspects
- Integration between Sustainability, Prosperity and Security aspects
- Border area as the gate to Malaysia and Brunei
- Western coastal cities as the gate to Sumatra
- Eastern coastal cities as the gate to Eastern Part of Indonesia
- Southern coastal cities as the gate to Java



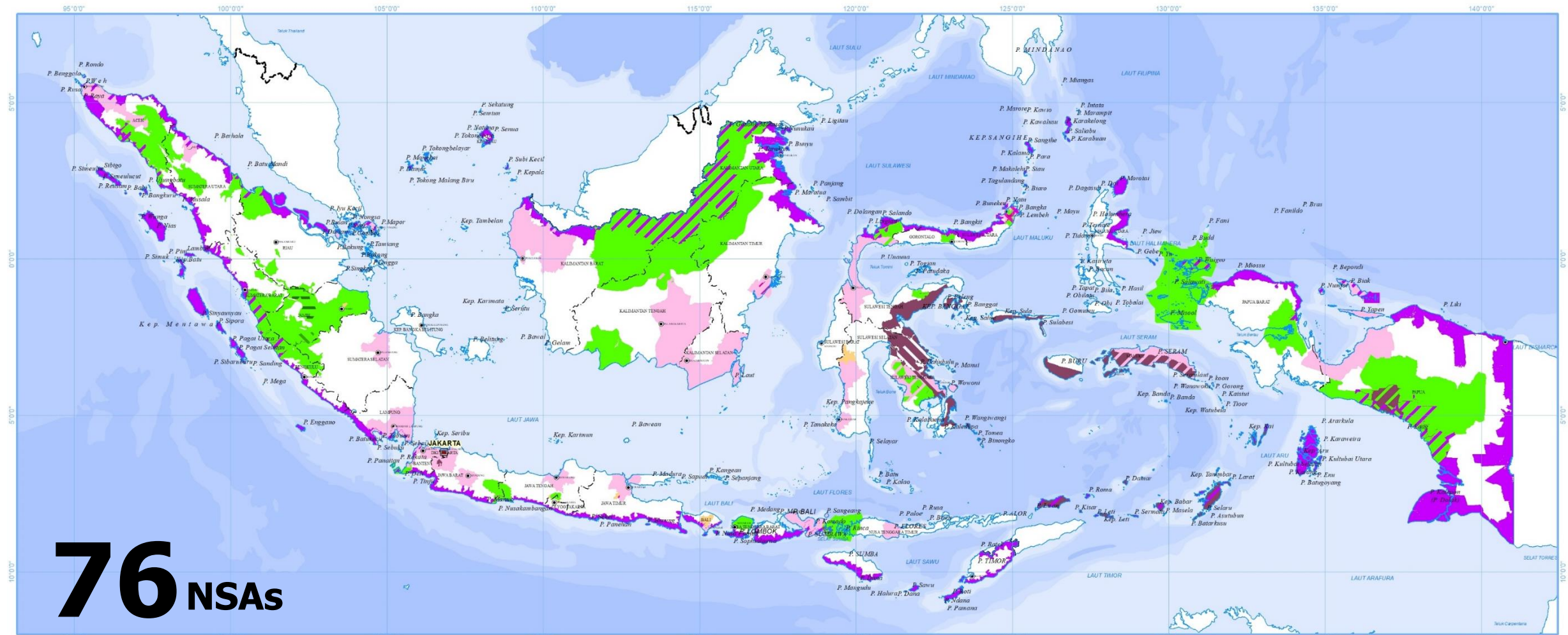
- Develop North Sulawesi as the gate to the Asia-Pacific
- Strengthen the role of Makassar and Manado Metropolitan Areas as the Eastern Indonesia center of development
- Infrastructure development for inter and intra island connectivity

Sulawesi Economic Development through Spatial Planning: Inter-Island Economic Integration

National Border Area Spatial Planning: Integrating Defense and Security with Prosperity and Sustainability Aspects



Developing the Nation through National Strategic Areas (NSA) Spatial Planning



76 NSAs

9 NSAs
DEFENSE & SECURITY

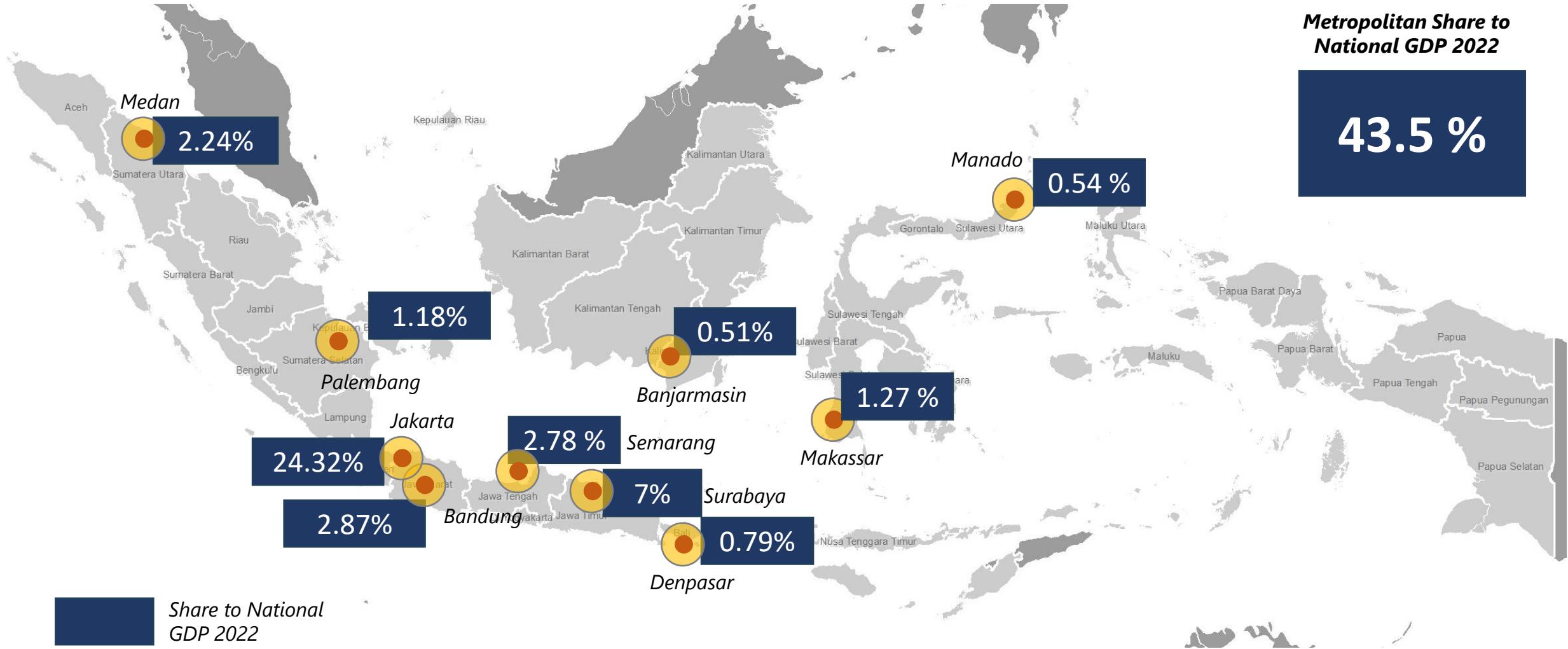
27 NSAs
ECONOMIC GROWTH

7 NSAs
SOCIO-CULTURE

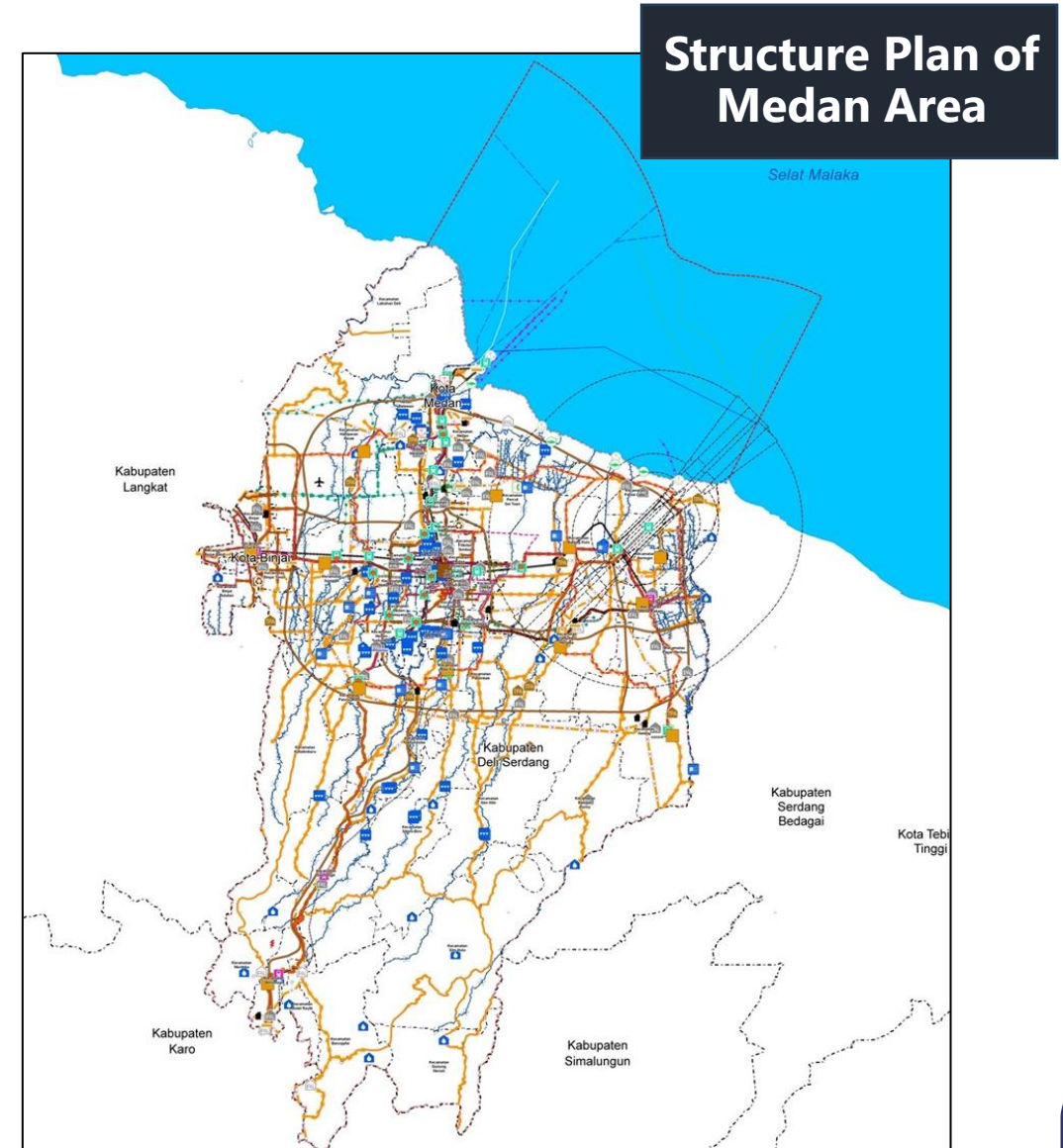
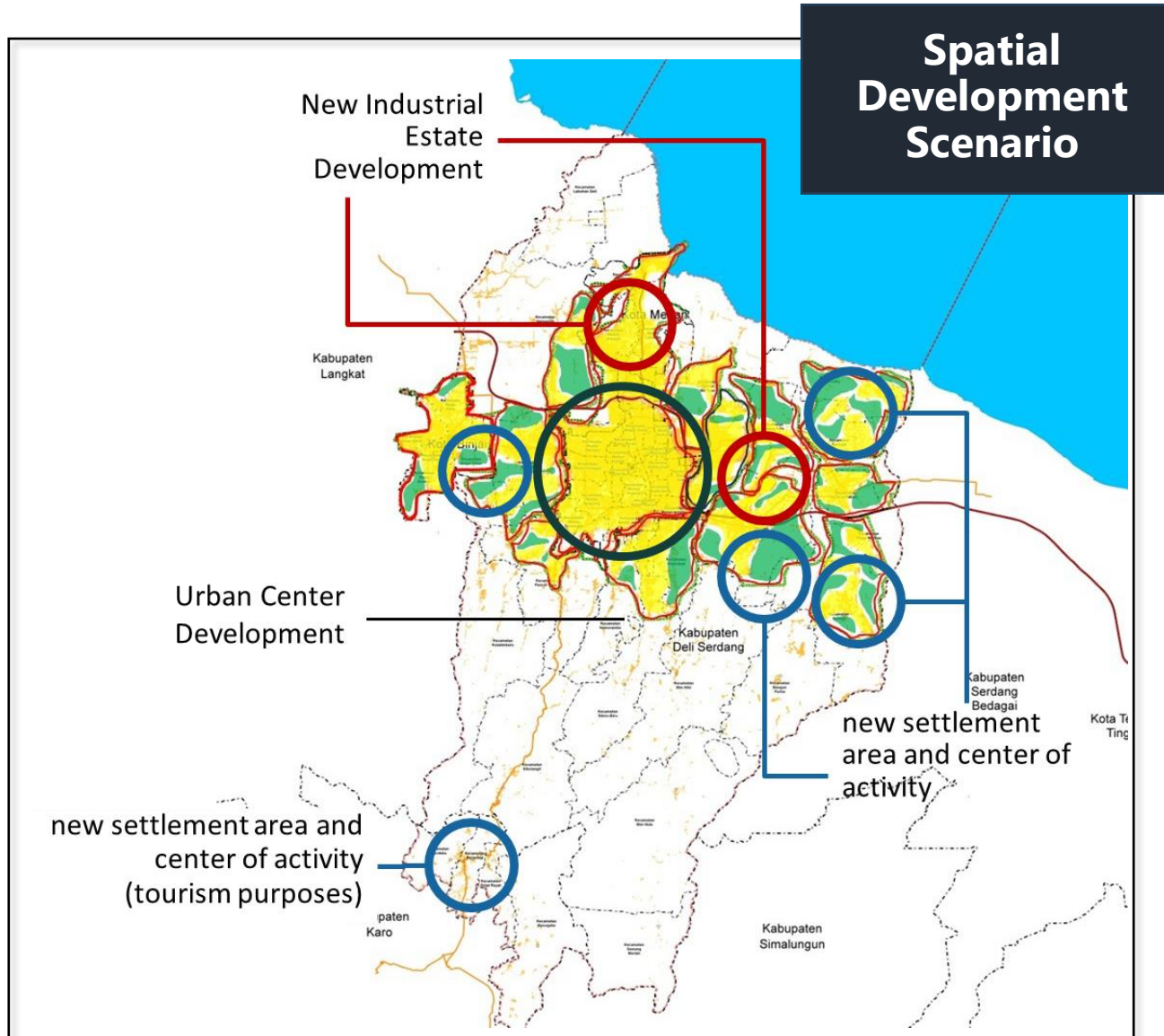
8 NSAs
NATURAL RESOURCES & TECHNOLOGY

25 NSAs
ENVIRONMENT

10 Metropolitan Spatial Planning as the Backbone of National Economic Growth

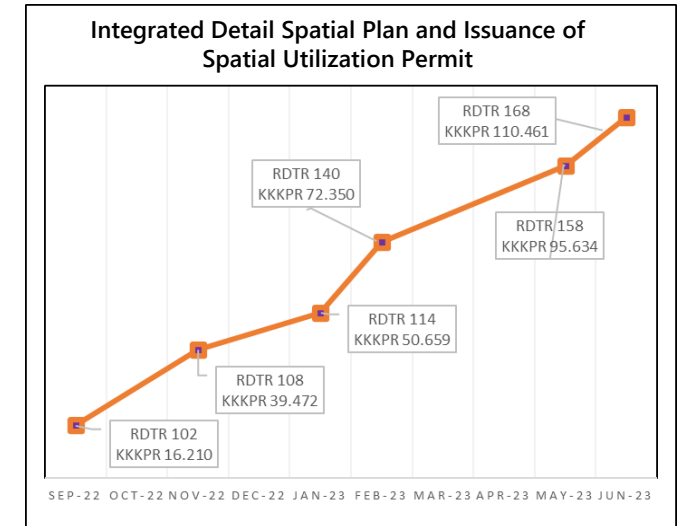
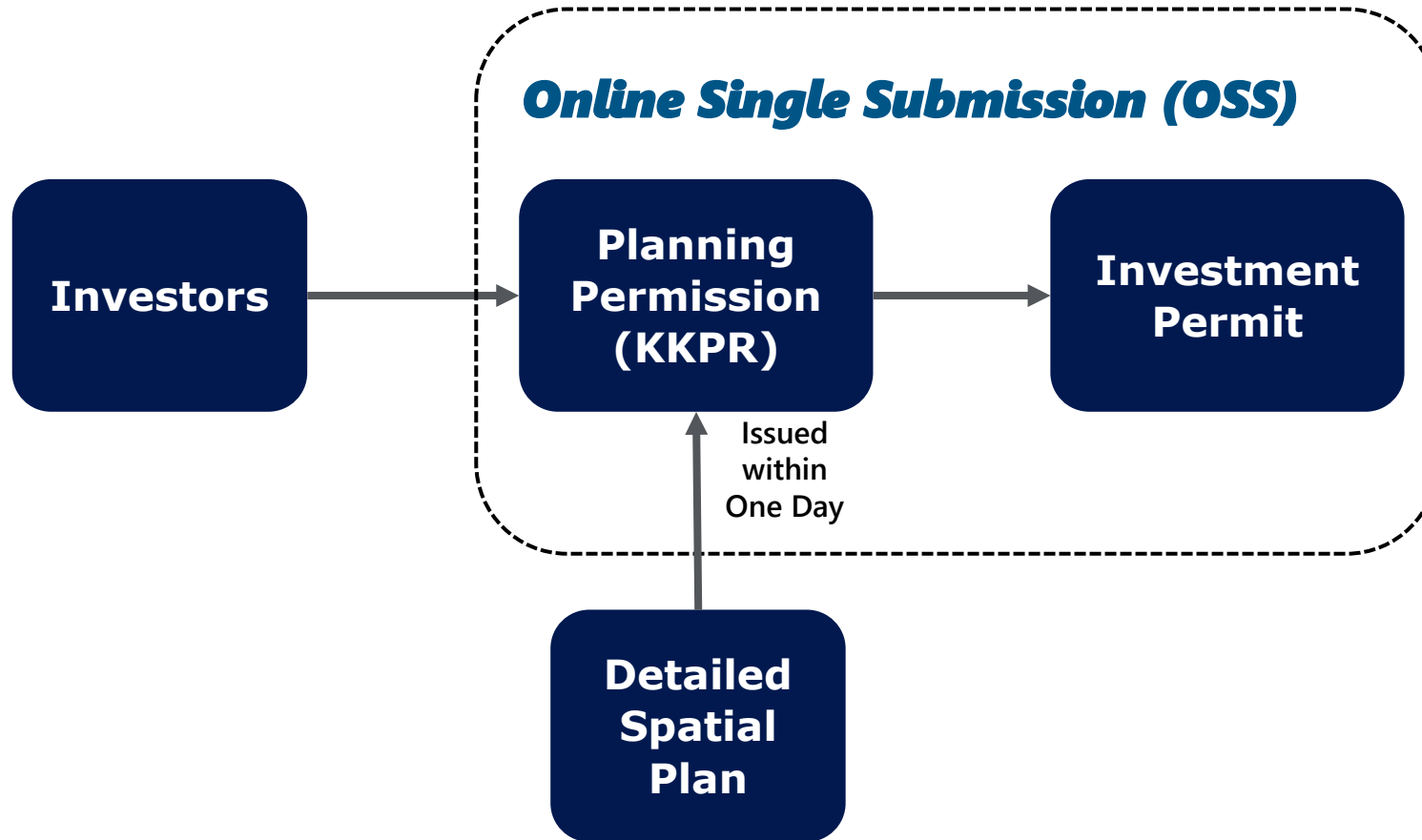


Medan Metropolitan Area (Mebidangro NSA)



3 ▼ **Digitalization of Spatial Planning and the Acceleration of the Investment Licensing Process**

Digitalization and the Use of Spatial Planning as Planning Permission Instrument



Ref: Data Center of Ministry Agrarian Affairs and Spatial Planning and Ministry of Investment as per July 5, 2023



Ref: RKP 2022, Bappenas, World Bank

Digitalization of Indonesia's Spatial Planning



Rencana Tata Ruang Online

gistaru.atrbpn.go.id/rtronline/

Add Data

ATR Simpul Search URL File

RTRW KABUPATEN/KOTA

WILAYAH :
PROVINSI KALIMANTAN TIMUR

Konfirmasi

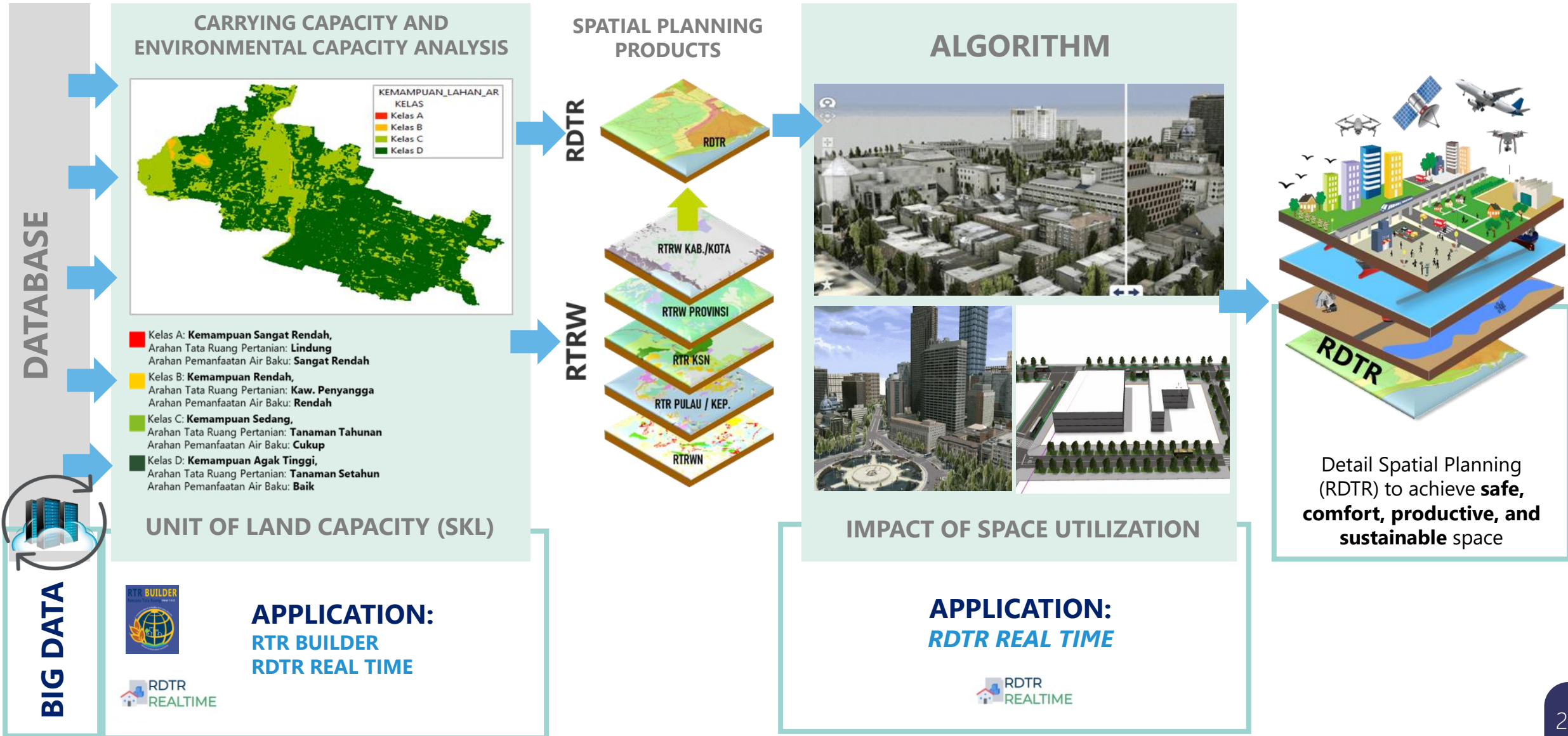
RTRW KAB/KOTA PROVINSI KALIMANTAN TIMUR POLA RUANG
Pilih

RTRW KAB/KOTA PROVINSI KALIMANTAN TIMUR STRUKTUR RUANG
Pilih

0 100 200km

GISTARU

Digitalization in Spatial Planning: "Real Time" Application in Facilitating Spatial Planning Forum Mechanisms



THANK YOU

