



**37<sup>TH</sup> INTERNATIONAL NO-DIG CONFERENCE AND EXHIBITION, FLORENCE**

*The Concept of*  
**INDONESIA**  
*NEW STATE CAPITAL CITY*

**Dr. Ir. Syarif Burhanuddin, M.Eng.**

**DIRECTOR GENERAL OF CONSTRUCTION DEVELOPMENT**

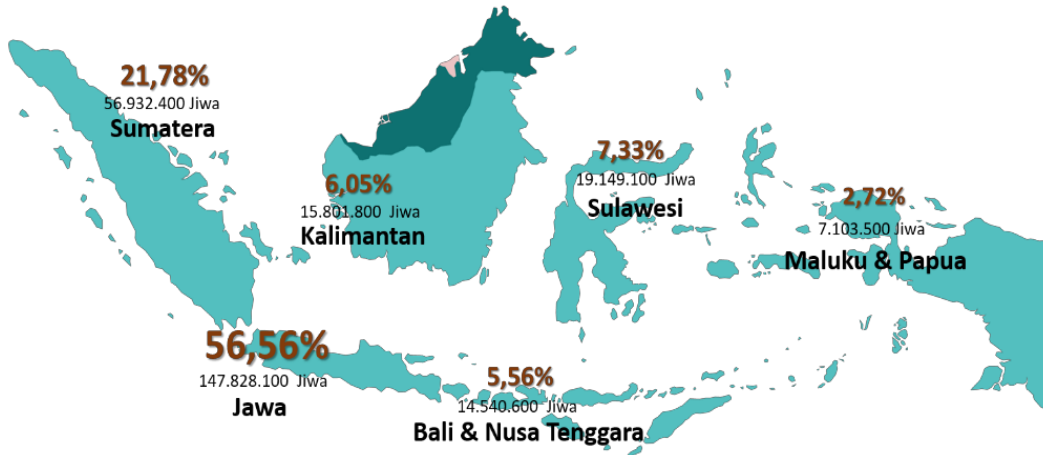


**MINISTRY OF PUBLIC WORKS AND HOUSING  
REPUBLIC OF INDONESIA**

# REASONS FOR RELOCATING THE NEW STATE CAPITAL CITY

1

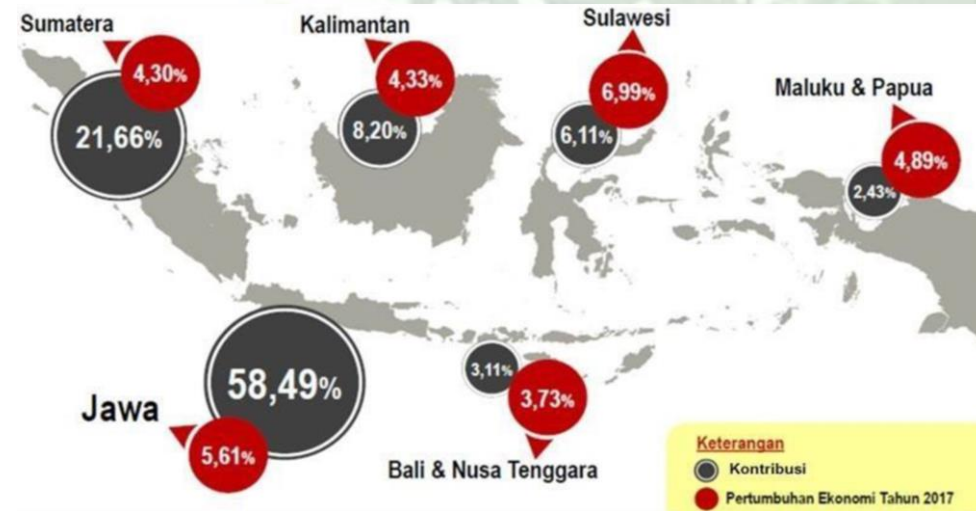
Around 57% of Indonesia's population is concentrated in Java



Sumber: SUPAS (2015)

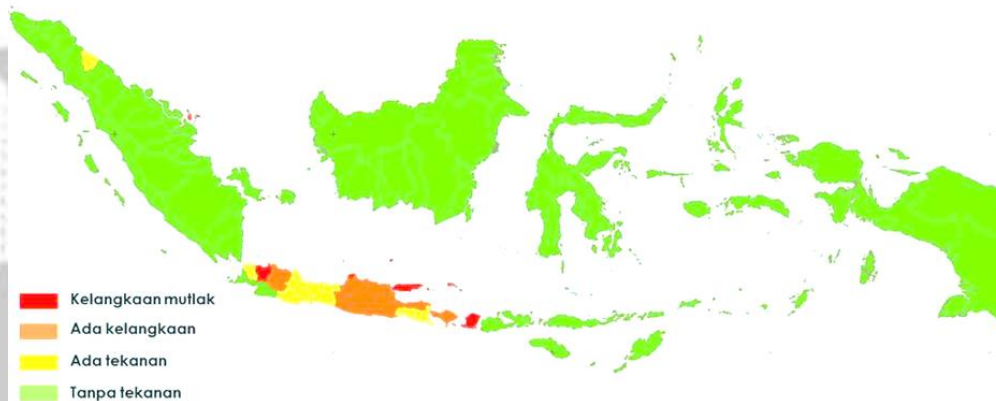
2

Economic per-island contribution to national GDP



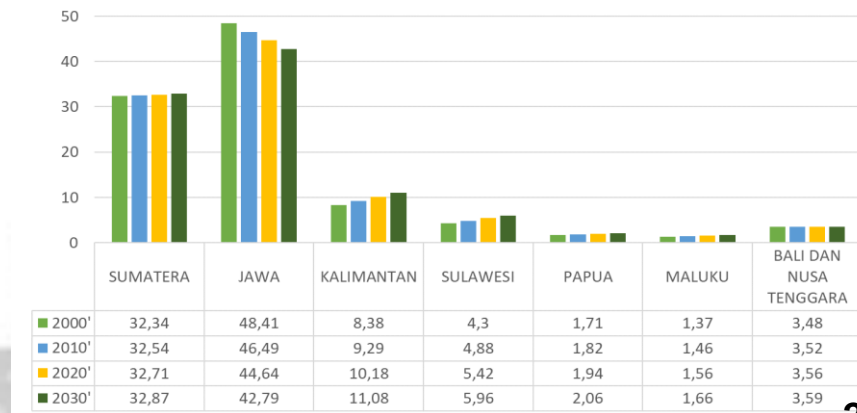
3

Water Supply Crisis in Java especially DKI Jakarta and East Java



4

The Largest Land Conversion Is In Java Island



# NEW STATE CAPITAL CITY:

## *Living With Nature (Forest City)*

- **Forest City concept**, so that green space is at least 50% of the total area including: Recreational Park, Green Spaces, Zoo, Botanical Garden, and Sport Complex, which are integrated with existing landscapes such as hilly areas and watersheds, and topographic structure.
- **Utilization of renewable and low carbon energy** (Solar Energy, Gas, etc.) for Power and Gas Supply, Efficient Power Grid, Street and Building Lighting
- For **energy efficiency** and **conservation**, Green Building Design is required through the application of the Circular Water Management System, Efficient Lighting System and District Cooling System
- **The city with integrated transport system**, towards integrated rail-based, non-motorized mode (bicycle and pedestrian) public transportation





# ***SMART AND INTELLIGENT CITY***



- The use of **smart technology** and **human-oriented** applications
- **International University, Research, and High-Tech Industries** become one of the growth magnets
  - Application of "**Intelligent City**" concept
  - Implement an Integrated Information System and Intelligent Transport System
    - Use of the Internet-based **Smart Water Management System** (IoT)
    - Application of **Smart Waste Management**
  - Gas supply does not use LPG cylinders but instead uses **underground gas networks**

**Using Smart Grid technology** (Solar cell and wind) and electricity distribution using underground networks

# NEW STATE CAPITAL CITY VISION APPROACH





# 1. REFLECTS THE NATION IDENTITY

The nation's identity will be applied philosophically in Urban Design from the pillars of nationhood, namely Pancasila, Bhinneka Tunggal Ika, NKRI and the 1945 Constitution.

National identity through design :

- Morphology and functions of the city
- Spaces for community activities that encourage the principle of mutual cooperation
- Functions and media in preserving the nation's history and culture (Indonesia Sentris: cultural spaces, national galleries, museums, theater buildings, and art parks)



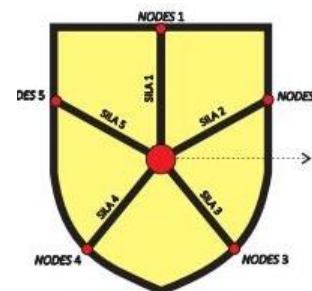
Gambar 1.1. Pancasila



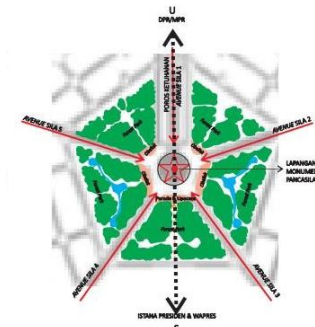
Gambar 1.2. Simbol Pancasila di Dada Burung Garuda



Gambar 1.3. Sketsa Ide Penerapan Konsep Pancasila



Gambar 1.4. Sketsa Ide Penerapan Konsep Pancasila



## 2. GUARANTEEING SUSTAINABILITY

social – economic - environment

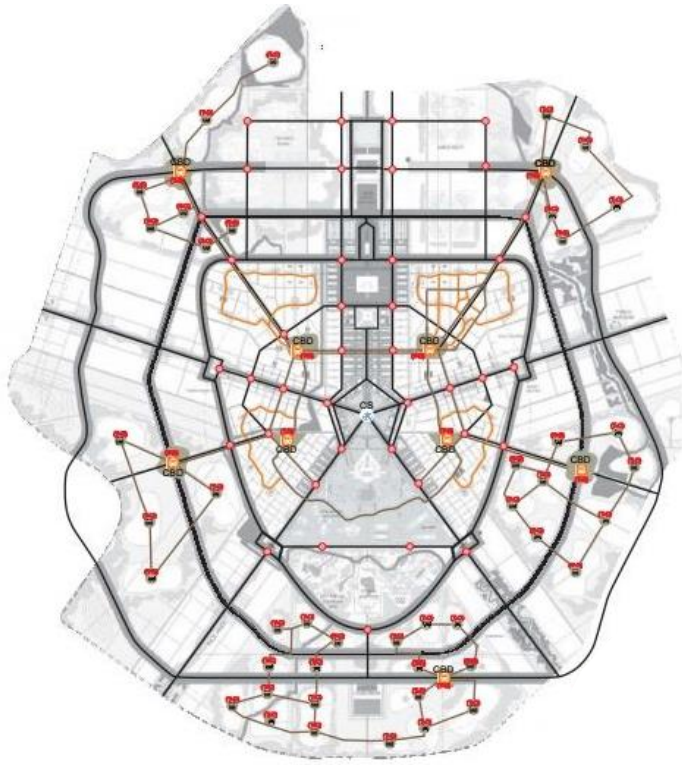
As Outcome of the Integration of Social, Economic and Environmental protection



- Minimize intervention in nature
- Integrate green and blue spaces
- Maintaining the existence of the Kalimantan Forest (City in the Forest);
- Increasing public and community spaces;
- Adopt new urbanism and green building / infrastructure;
- Quality of space that encourages creativity and productivity of the community.

### 3. CREATING A SMART, MODERN & INTERNATIONAL-STANDED CITY

IKN becomes a Compact City, relying on Information and Communication Technology to achieve the SDGs Goals



- Compact and inclusive arrangement of buildings and environment
- Integrated public transportation mode
- Utilizing information and communication technology to improve work productivity
- Collaboration between modern architecture and local wisdom
- Application of design, materials and modern technology, smart building, and the use of renewable energy
- Design that prioritizes the fulfillment of all Sustainable Development Goals (SDGs) targets as a reference for the development of Indonesian cities going forward



# SMART METROPOLIS

NOT ONLY THE COMPLEX PALACE OF THE PRESIDENT AND GOVERNMENT OFFICES



**1** A quiet and expensive city, because it is only inhabited by Government employees, politicians, and diplomats (even a dead city)

**2** Returned to a slum city



**1** A healthy, efficient, productive and happy city for its citizens

**2** Cities that are able to provide world-class security, health and education services

**3** Cities that live with Integrated Public Spaces

**4** A city that is able to attract great national & international talents

**5** Modern business and innovation center (Silicon Valley)



**COMPACT**

**HUMANIST**

**COMPLETE &  
QUALITY PUBLIC  
SERVICE**

**RESISTANCE TO  
DISASTER**

**SUSTAINABLE  
ECONOMIC**

**URBAN  
DESIGN**

# IMPLEMENTATION SCHEDULE

## INFRASTRUCTURES & NEW STATE CAPITAL CITY'S PARTICULAR BUILDINGS DEVELOPMENT 2019-2024

**2019 – 2021**

### **District Design**

- **Urban Design Contest (Sept. 2019 - Agt. 2020)**
- Building and Environmental planning (RTBL) for priority area
- Urban Development Control Plan

**2020 – 2023**

### **PUPR Infrastructures Development**

- Water resources
- Road and Bridge
- Settlements
- Housings

**2020 – 2024**

### **Particular Building**

Presidential Palace, Vice President, MPR, DPR, DPD and K / L

**2024**

### **New State Capital City Relocation Process** *(gradually)*



# INFRASTRUCTURE NEEDS FOR NEW STATE CAPITAL CITY (IKN)



## WATER RESOURCES

### **Raw Water Needs :**

Assuming a population of 2 million

The need for water consumption is 300 liters / day / person

Water discharge requirements are 6.9 m<sup>3</sup> / second

### **Flood Control:**

Can accommodate the flow of water until the flood plan at 100-year intervals

### **Drainage**

Can flow flood discharge due to rain 3-4 hours maximum with a 25 year return period without a puddle

### **Energy Infrastructure**

Hydropower (PLTA) and Gas Development

## ROADS & BRIDGES



### **National Toll Road:**

57 km Ring Road Toll surrounds the city 4,000 Ha

### **Non-Toll National Roads:**

71 km KIPP, 629 km K-IKN, 198 km KP-IKN

### **Pedestrian Facilities:**

86 km KIPP, 671 km K-IKN, 198 km KP-IKN

### **Bike Lane:**

70 km KIPP, 200 km K-IKN, 198 km KP-IKN

### **Rail:**

22 km K-IKN, 50 km KP-IKN



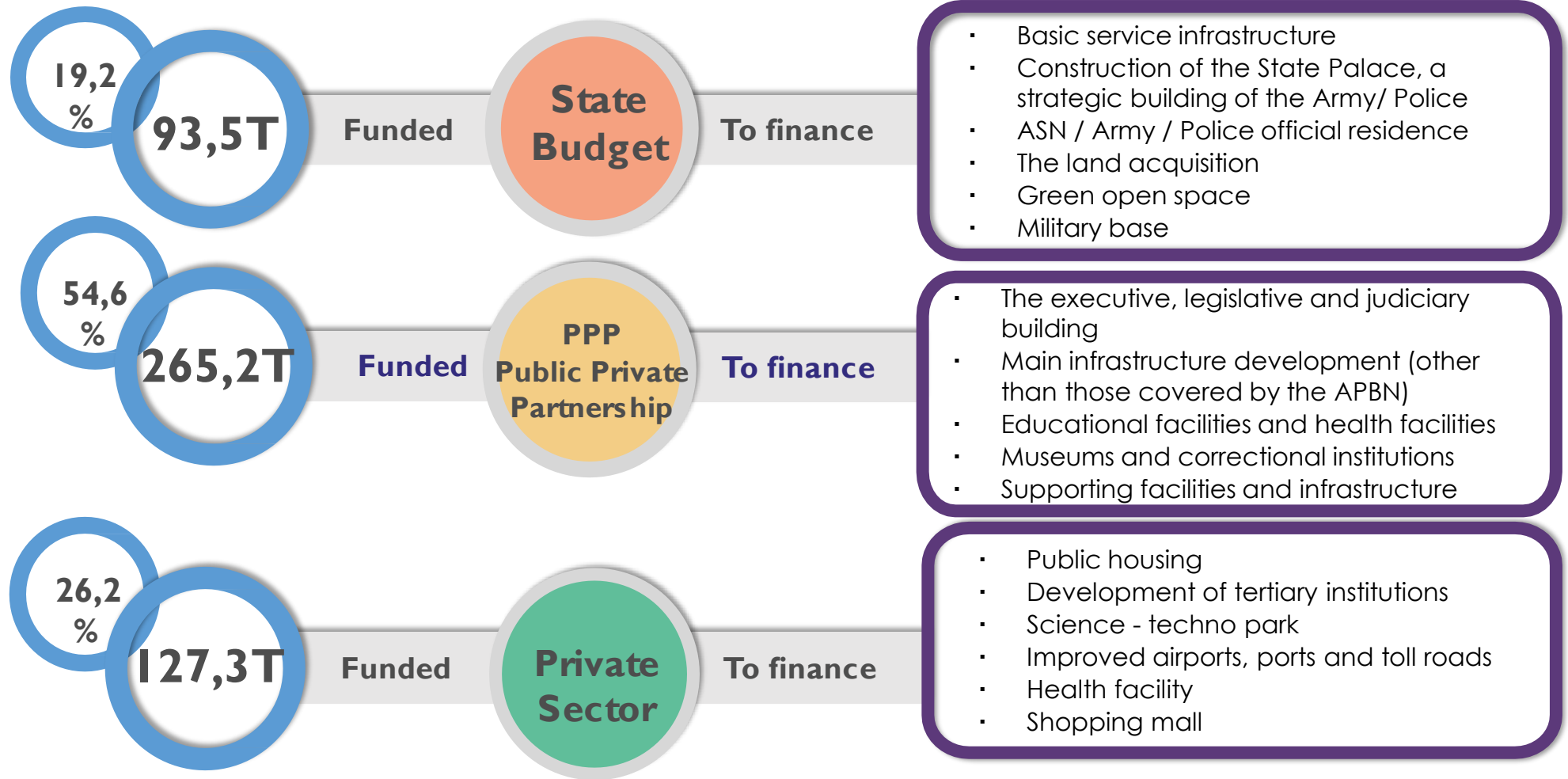
## HOUSINGS

### **Number of Houses / Households:**

307,879 residential units for 1,500,000 people

# FINANCING SCHEME

*cooperation with business entities and private sector is expected to be the main source of financing*



## Total

**485,2 T (USD 30,6 Billion)**

MINISTRY OF PUBLIC WORKS AND HOUSING  
REPUBLIC OF INDONESIA



**THANK YOU**

---

***TERIMA KASIH***