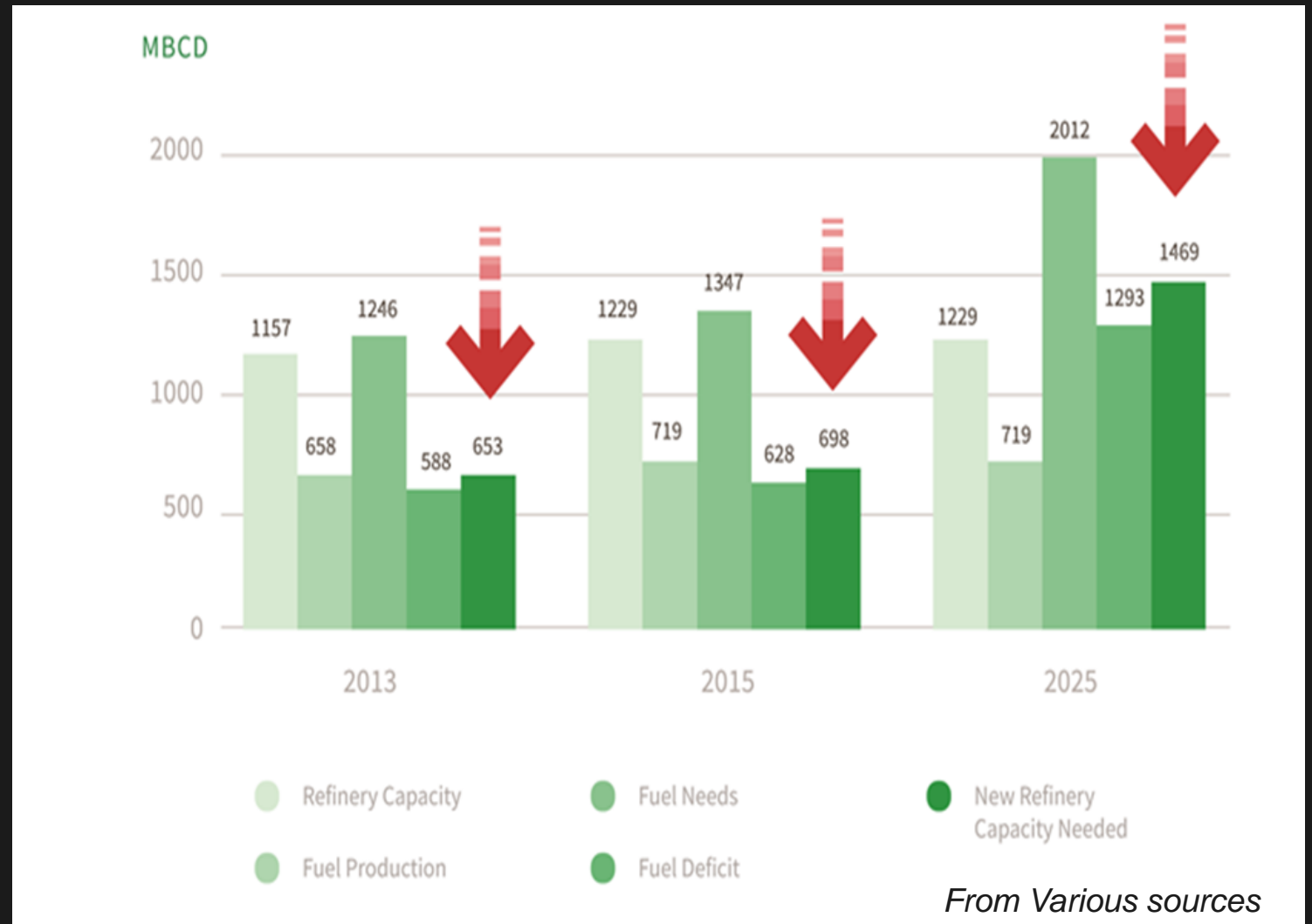




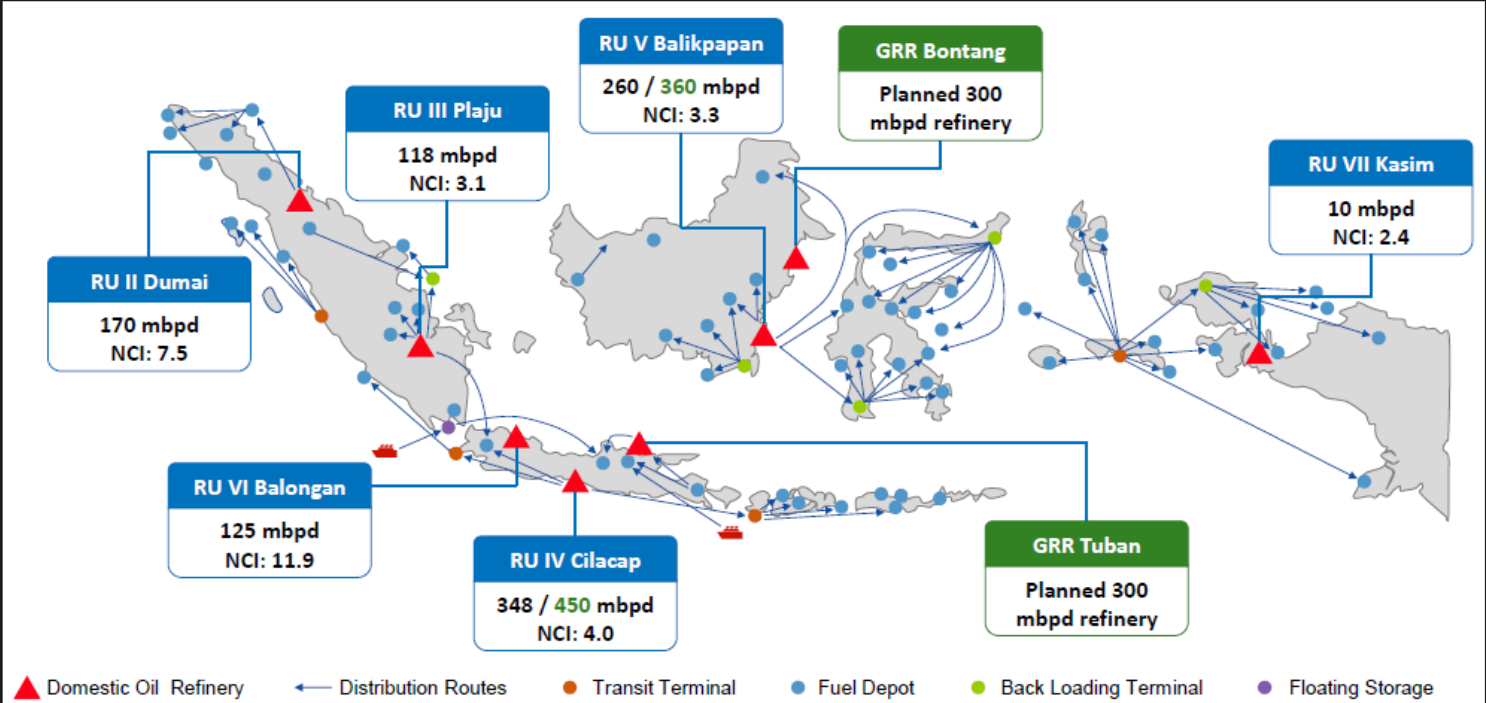
# Refineries in Indonesia

# Refinery Capacity vs Fuel Products Consumption

Pertamina's current refinery capacity is (approx.) 852.000 BPD crude oil. Meanwhile, fuel consumption has reached 1.500.000 BPD. Domestic fuel consumption is predicted to reach 1.900.000 BPD by 2025.



# Map of Refineries in Indonesia



Source: Pertamina

# Refinery Development Masterplan (RDMP) Balikpapan



Source: KPPIP

|                         |                                   |
|-------------------------|-----------------------------------|
| <b>Location</b>         | East Kalimantan                   |
| <b>Investment Value</b> | US\$ 6.31 Billion                 |
| <b>Funding Scheme</b>   | State-Owned Enterprise Assignment |
| <b>Project Owner</b>    | PT Pertamina                      |
| <b>Construction</b>     | 2018                              |
| <b>Operation Target</b> | 2021                              |

- The capacity of the existing refinery (260 kbpd with Euro II fuel quality) will be upgraded to 360 kbpd with Euro V fuel quality.
- This project will be developed in two phases, with a volume increase in the first phase, and fuel quality upgrading in the second phase.



# Refinery Development Masterplan (RDMP) Balongan



|                         |                                   |
|-------------------------|-----------------------------------|
| <b>Location</b>         | West Java                         |
| <b>Investment Value</b> | US\$ 4 billion                    |
| <b>Funding Scheme</b>   | State-Owned Enterprise Assignment |
| <b>Project Owner</b>    | PT Pertamina                      |
| <b>Construction</b>     | 2018                              |
| <b>Operation Target</b> | 2021                              |

- Upgrading of existing refinery capacity from 150 kbpd to 240 kbpd with Euro V quality.
- This project is accelerated to absorb increase of naphta feedstock from RDMP Balikpapan.

Source: KPPIP

# Refinery Development Masterplan (RDMP) Cilacap



|                         |                                   |
|-------------------------|-----------------------------------|
| <b>Location</b>         | Cilacap, Central Java             |
| <b>Investment Value</b> | US \$ 6.05 billion                |
| <b>Funding Scheme</b>   | State-Owned Enterprise Assignment |
| <b>Project Owner</b>    | PT Pertamina                      |
| <b>Construction</b>     | 2020                              |
| <b>Operation Target</b> | 2024                              |

- Upgrading of existing refinery capacity from 348 kbpd with Euro II quality to 400 kbpd with Euro V quality.
- Pertamina will form a joint venture company with Saudi Aramco to manage this project.

# New Grass Root Refinery (NGRR) Tuban



Source: KPPIP

|                         |                                   |
|-------------------------|-----------------------------------|
| <b>Location</b>         | East Java                         |
| <b>Investment Value</b> | US\$ 14.76 Billion                |
| <b>Funding Scheme</b>   | State-Owned Enterprise Assignment |
| <b>Project Owner</b>    | PT Pertamina                      |
| <b>Construction</b>     | 2020                              |
| <b>Operation Target</b> | 2024                              |

- The refinery will produce 300 kbpd of fuel with Euro IV fuel quality.
- Around 460 ha of available land is provided by the Indonesian government with lease mechanism.
- Existing facilities (steam, power, water infrastructure) of nearby LNG Badak can be utilized for this project.



# New Grass Root Refinery (NGRR) Bontang



|                         |                                   |
|-------------------------|-----------------------------------|
| <b>Location</b>         | Bontang, East Kalimantan          |
| <b>Investment Value</b> | US\$ 14.64 Billion                |
| <b>Funding Scheme</b>   | State-Owned Enterprise Assignment |
| <b>Project Owner</b>    | PT Pertamina                      |
| <b>Construction</b>     | 2020                              |
| <b>Operation Target</b> | 2024                              |

- The refinery will produce 300 kbpd of fuel with Euro IV fuel quality.
- Around 460 ha of available land is provided by the Indonesian government with lease mechanism.
- Existing facilities (steam, power, water infrastructure) of nearby LNG Badak can be utilized for this project.

Source: KPPIP