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BACKGROUND

BACKGROUND

CURRENT CONDITION

- High Energy Demand
- Low energy supply security
- Decreased fossil energy reserve
- Low energy access : limited infrastructure available
- Fossil energy as export commodity
- Oil imports increased
- Inefficiency and low conservation n energy management
- NRE utilization is not optimal
- Energy reserve not available

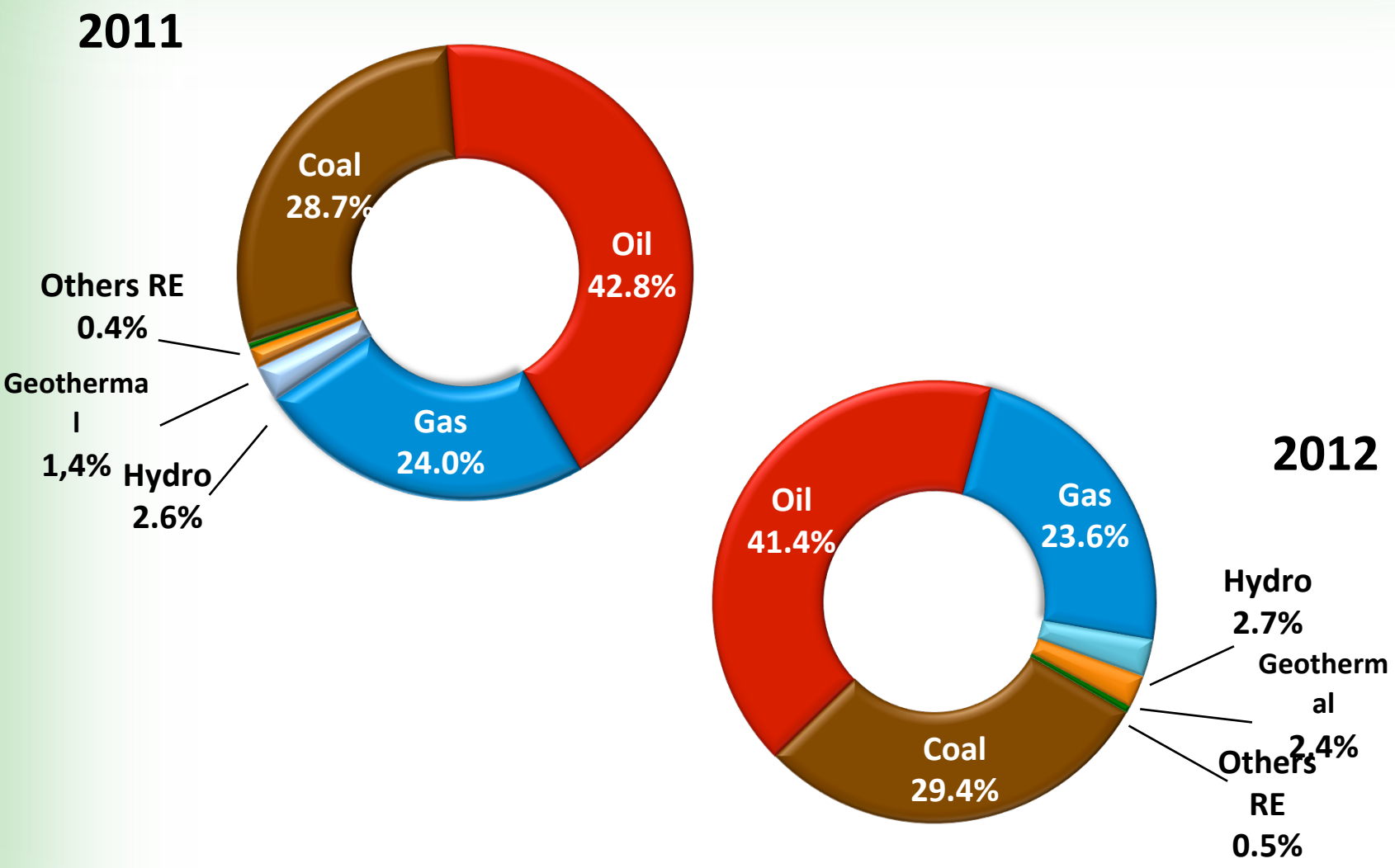
National Energy Security is still Low

FORWARD EXPECTED CONDITIONS

Actualizing energy security and energy independency to support the sustainable national development :

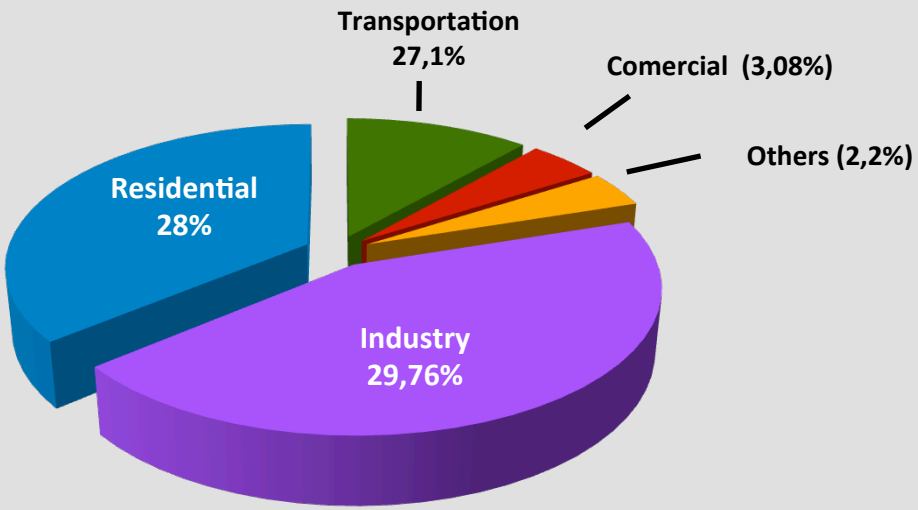
- change of energy management paradigm;
- independent energy management;
- secured energy availability;
- energy resources management optimally;
- Efficient energy utilization;
- increased access of the public to energy;
- enhancing the ability and independence of energy technology and industrial
- employment opportunity
- conservation of environmental functions

ENERGY MIX

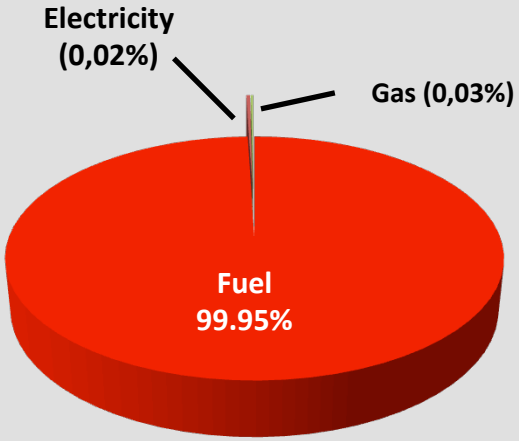


Source: MEMR, reprocessed by NEC

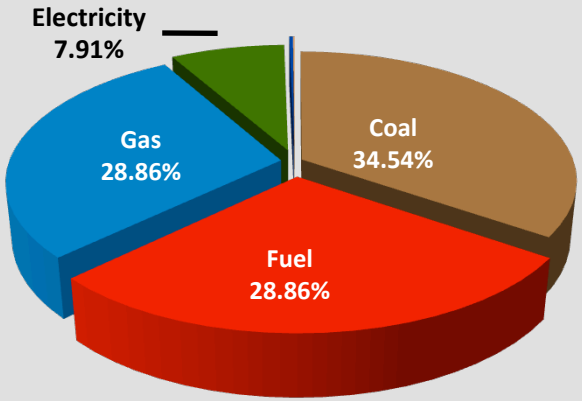
SHARES OF ENERGY UTILIZATION BY SECTOR 2012



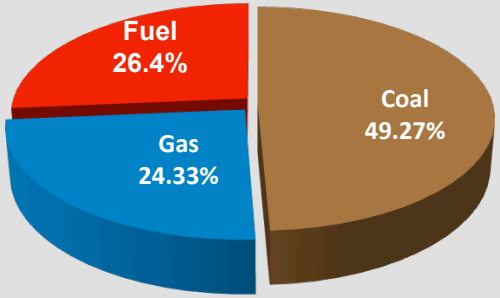
BY TYPE OF ENERGY



TRANSPORTATION



INDUSTRY



POWER PLANT

Source: MEMR, "Handbook of Energy & Economic Statistic Indonesia 2012".

THE NATIONAL ENERGY POLICY

NEW PARADIGM OF THE NATIONAL ENERGY MANAGEMENT

Shift in Energy Management Paradigm

Energy resources are no longer used just as commodity (export), but should be utilized as national development capital :

- Used for national industry
- Support and strengthen the competitiveness of the national industries
- Energy resources should not be exported in the form of primary energy

ENERGY INDICATOR

INDICATOR	EXPECTED in 2025	CURRENT CONDITION	
Energy elasticity	**smaller than 1**	**± 1,4**	inefficient energy consumption
Primary energy consumption per capita	**1.4 TOE**	**0,5**	energy consumption per capita is still low
Primary energy supply	**400 MTOE**	**160 MTOE**	additional primary energy is doubled in 10 years
Electricity consumption per capita	**2500 Kwh**	**700 Kwh**	electricity consumption per capita is still low
Total of installed capacity	**115 GW**	**47 GW *)**	additional installed capacity is more than 6 GW per year
Electrification ratio	**100% in 2020**	**80,51% **)**	

**) Tentative data

*) Energy Mix for Generating Electricity (2013) : Coal 50%, Gas 23%, BBM 13%, Hydro Power 9%, Geothermal 5%

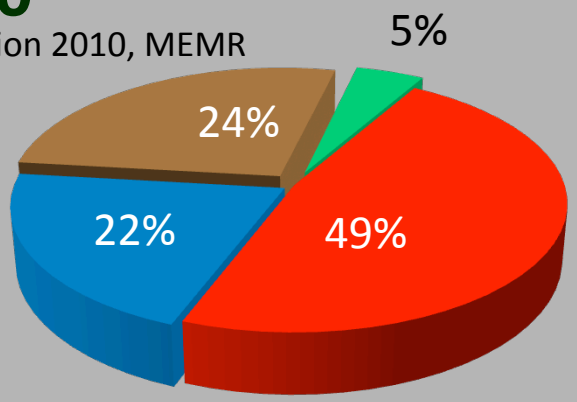
ENERGY MIX TARGET TOWARD 2050

(%)

Oil Coal GAS NRE

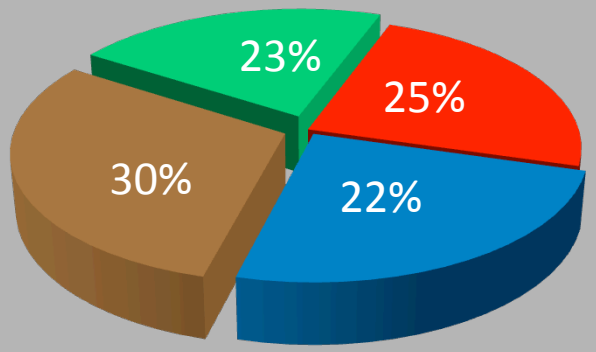
2010

Realization 2010, MEMR



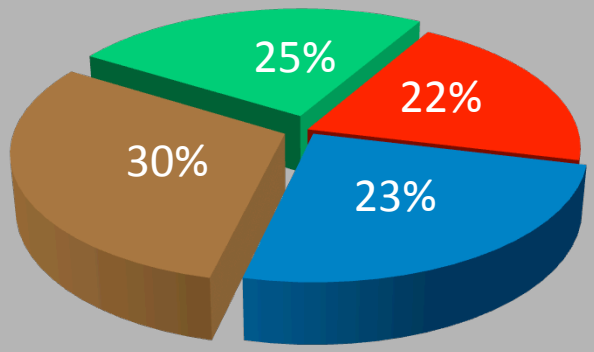
Total 159 MTOE; 0,7 TOE/Cap

2025



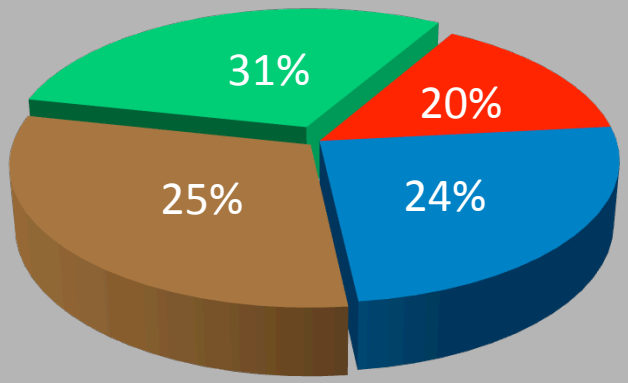
Total 400 MTOE; 1,4 TOE/Cap

2030



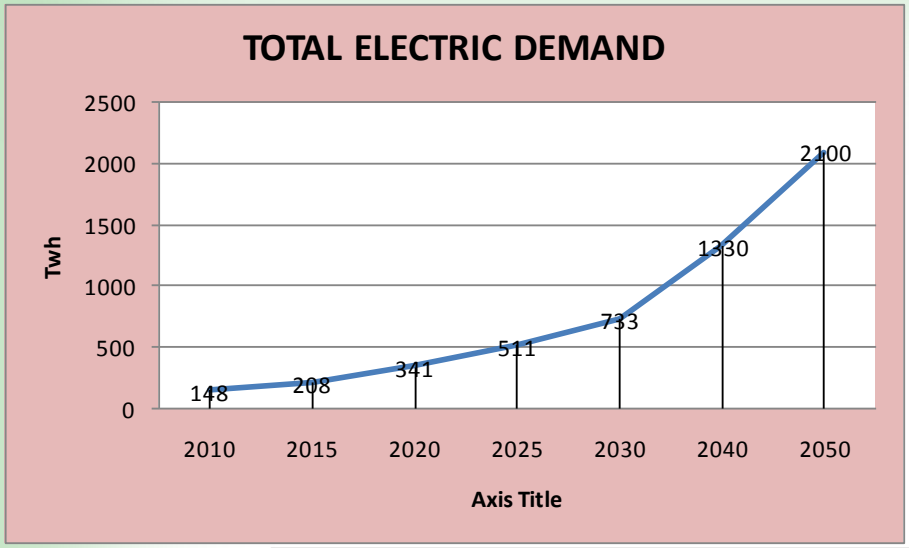
Total 480 MTOE; 1,7 TOE/Cap

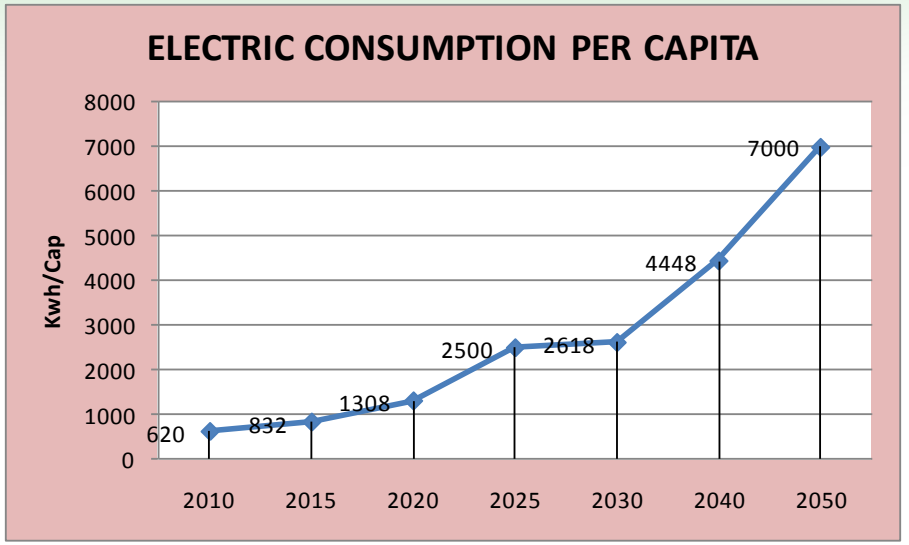
2050

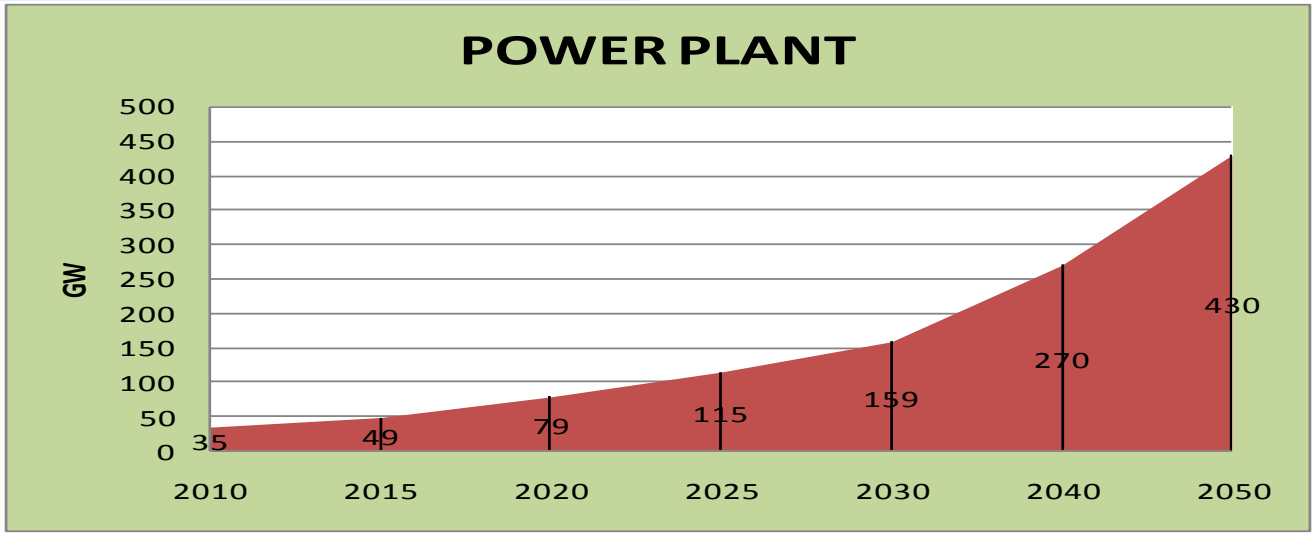


Total 1000 MTOE; 3,2 TOE/Cap

ELECTRICITY TOWARD 2050







ratio electricity approching 100% (in 2020)

NATIONAL ENERGY POLICY DIRECTION

1. Availability of Energy
2. Priority of Energy Development
3. National energy resources utilization
4. National energy reserve
5. Conservation and diversification
6. Environment and Safety
7. Price, subsidy, and incentive
8. Energy infrastructure and industry
9. Energy research and development
10. Institutional and Financing System

ENERGY POLICY DIRECTION

(Energy Security Perspective for a Sustainable Economy)

a. The Availability of energy :

- **Increase exploration energy resources, potential and energy proved reserves**
- **increase energy production from domestic sources and/or foreign sources**
- **reduce and stop exports fossil energy gradually**
- **maintaining a balance between the rate of fossil energy reserves with production rate**
- **prioritize the utilization of local energy resources**
- **Minimizing use of fuel oil**
- **Maximizing renewable energy**
- **Optimize the utilization of natural gas**
- **develop energy intensive industries in the region's rich energy resources**
- **provide buffer stock and strategic reserve of energy to ensure long-term energy security**

b. Energy Accessibility :

- **Prioritizing provision of energy for communities who do not have access to energy**
- **The development and strengthening of energy infrastructure (responsibility of the government and / or regional governments)**
- **Developing and strengthening energy infrastructure, through:**
  - **enhance the ability of the domestic industry in the provision of energy infrastructure;**
  - **Reduce disparity of electricity supply between outside Java and Java through regionalisation of electricity supply;**
  - **Develop the supporting infrastructure coal industries including the coal industry, transport, stockpiling and blending**
  - **To accelerate the provision of the supporting infrastructure for the production of oil and gas (refinery, the transport of energy, transmission system)**
  - **The acceleration of the supporting infrastructure for new and renewable energy industry.**
- **The development of energy infrastructure with regard to geographical conditions (Strengthen the infrastructure exploration, production, transportation, distribution and transmission in region area)**
- **Strengthen the development of energy industry in order to accelerate the targets ahievement of the supply and energy consumption, the strengthening of the national economy and the employment absorption**

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ENERGY POLICY DIRECTION

(Energy Security Perspective for a Sustainable Economy)

c. Energy Acceptability :

- **The energy management harmonized with sustainable national development, the preservation of natural resources, energy resources conservation and controlling environmental pollution**
- **Energy management activities must consider the factorsof health, safety, and social impact while maintaining the functions of the environment**
- **Energy management activities implemented reducing the production of waste by considering the social, environmental and econome aspects.**
- **Operation of nuclear installation is obliged to strictly consider the safety and risk of accidents**

d. Energy Affordability :

- **Energy prices are set based on the economic value of which reflects the energy production costs, environmental costs, the conservation and advantage of public assessed according to its purchasing power**
- **Renewable energy price calculated assuming can compete with oil price**
- **Regulate market coal through domestic coal prices until the establishment of an efficient market**
- **The government regulate electricity market**
- **The government regulate market of renewable energy, through the quota minimum power plants using fuel from new and renewable energy**
- **if the condition of the economy and people's purchasing power are still low, the government and regional government shall provide a subsidy.**
- **If the price of renewable energy more expensive than the prices of unsubsidized fuel oil, the government provides subsidies;**
- **The reduction of subsidy for fuel oil and electricity gradually up to the ability of the people's purchasing power achieved**

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THANK YOU