

# 5<sup>th</sup> Strategic Energy Plan

**We aim to contribute to further growth of the Japanese economy, improvement of the standard of living, and global development through energy supply that is stable, sustainable long term, and independent.**

Following the 3E+S principles, realise an energy supply and demand structure that is stable, low-burden, and compatible with the environment.

## 3E+S

- Safety
- Energy security
- Environment
- Economic efficiency

⇒

## Sophisticated 3E+S

- + Safety innovation by technology/governance reform
- + Raise technical self-sufficiency rate and ensure diversity of choice
- + Work towards decarbonisation
- + Enhance domestic industrial competitiveness

## Changing circumstances

① Start of inter-technology competition for decarbonisation

② Geopolitical risk increased by technology changes

③ Intensified competition between nations and firms

## Towards 2030

~ To reduce emission of greenhouse gases by 26% ~

~ To achieve energy mix target ~

- Currently halfway to the target
- Deliberate promotion
- Realistic initiatives
- Intensify and enhance measures

### <Primary measures>

#### ○ Renewable energy

- Lay foundations to use as major power source
- Cost reduction, overcome system constraints, secure flexibility of thermal power

#### ○ Nuclear power

- Lower dependency on nuclear power generation to the extent possible
- Restart of nuclear power plants and continuous improvement of safety

#### ○ Fossil fuels

- Promote independent development of fossil fuels upstream, etc.
- Effective use of high-efficiency thermal power generation
- Enhance response to disaster risks, etc.

#### ○ Energy efficiency

- Continued thorough energy efficiency
- Integrated implementation of regulation of Act on Rationalizing Energy Use and support measures

#### ○ Promotion of hydrogen/power storage/distributed energy

## Towards 2050

~ Toward reducing GHGs by 80% ~

~ Challenges towards energy transitions and decarbonisation ~

- Possibility and uncertainty
- Ambitious multiple track scenario
- Pursue every option
- Choose priorities by scientific review

### <Primary directions>

#### ○ Renewable energy

- Aim to use as major power source, economically independent and decarbonised
- Start on hydrogen/power storage/digital technology development

#### ○ Nuclear power

- One of the options for decarbonisation
- Pursuit of safe reactors, development of back end technologies

#### ○ Fossil fuels

- Major power source during the transitional period. Enhance resource diplomacy
- Shift to gas, fadeout inefficient coal
- Start hydrogen development for decarbonisation

#### ○ Heat & transportation, distributed energy

- Challenges for decarbonisation with hydrogen, power storage, etc.
- Distributed energy systems and regional development

(Combination of next generation renewables/power storage, EV, micro grid, etc.)

Draw up strategic plan ⇒ All Japan's efforts (projects, international collaboration, financial dialogue, policy)