

Key Points of Recommendations by the Round Table for Studying Energy Situations

- Initiatives for Energy Transitions -

■ Possibility → **Ambitious scenario**: Energy transitions and taking on decarbonization through the transitions

Major countries as well as major enterprises have been upholding initiatives taking on decarbonization.

Full-fledged competitiveness is seen among countries for winning supremacy for energy transitions.

■ Uncertainty → **Multiple track scenario**: Seeking possibility in all choices

Meanwhile, non-continuous attempts are still under consideration while major countries are trying ambitiously.

The U.K. and France taking all-around approaches to energy transitions have achieved more outstanding results than Germany pursuing efforts solely for renewable energy.

Currently, no such perfect energy source that is economic and decarbonized exists.

The cost examination of each existing power source should be shifted to a cost-risk examination among decarbonization systems.

■ Unclearity → **Scientific review mechanism**: Flexible determination of priority issues in light of the latest situations

All consequences derived from geopolitical situations, geoeconomic situations and inter-technology competitions are unclear.

Constant observation of technologies and situations from every angle is necessary to set priority issues in development of targets and political resources.

Priority issues should be revised through further review mechanism depending on the latest situation

■ Energy transitions in complicated and uncertain environments

→ **Sophistication** of energy policy requirements;

“3E+S” (Energy Security, Economic Efficiency, Environment + Safety)

➤ Safety at the top priority

→ **Enhancement of safety through innovations** by technologies and governance reforms

➤ Energy Security: Resource self-sufficiency rates

→ **Improvement of technology self-sufficiency rates**

+ **Securement of diversity of energy options**

➤ Environmental friendliness

→ **Taking on decarbonization**

➤ Economy: Curbing public burdens

→ **Enhancement of domestic industrial competitiveness**

■ Fukushima Daiichi Accident

- Efforts for renewable energy aiming to place **economically-independent decarbonized major power sources**, meanwhile **decreasing the dependency on nuclear energy**
- **Renewable Energy**
 - **Development of hydrogen, electricity storage and digital technologies;**
reconstruction of power grids;
and development of decentralized networks
 - Immediately launching the development of human resources, technologies and industries to make renewable energy become a major power source
- **Nuclear energy**
 - **An option for decarbonization in the phase of practical use**
 - Indispensable need for recovering public confidence in nuclear energy;
efforts for **seeking safe reactors and development of back-end technologies**
Immediately launching **the development of human resources, technologies and industries;**
responsible and sincere efforts, based on the Fukushima accident as a starting point, is essential
- **Fossil fuels**
 - **Major power source in the transitional period; enhancement of resource diplomacy**
 - **Focusing on shift of power generation to gas thermal, fading out of inefficient coal-fired power generation and, concentrating high efficient technologies for coal-fired power generation;**
Contribution to low carbonization + decarbonization;
developing collaboration with resource-rich countries

■ Full-scale efforts for successful energy transitions

- [i] **Domestic policy / diplomacy**
- [ii] **Enhancement of industrial competitiveness and reconstruction of infrastructures**
- [iii] **Finance**