

The road to Carbon Neutrality as envisioned by the Kyuden Group

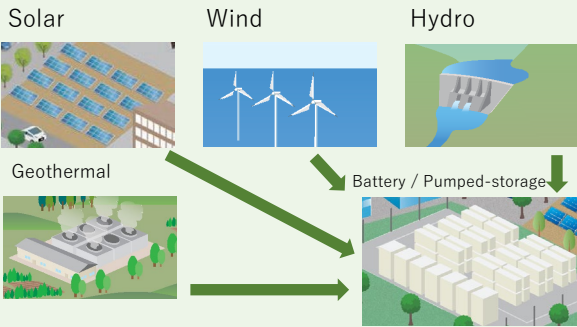
Decarbonizing/lowering the carbon intensity of energy sources (Supply side)

Promoting electrification (Demand side)

Renewables + Storage

Main energy source → P6

- Promote development of renewables
- Control technology of integrated distributed energy resources



Nuclear

Maximize use → P7

- Improve capacity factor
- Research next-generation light water reactors, small modular reactors (SMRs), and high-temperature gas-cooled reactors (HTGRs)
- Research hydrogen production



Thermal power + new technologies

Net-zero emissions → P13

- Achieve higher efficiency
- Research hydrogen / ammonia production and co-firing
- Research applying CCUS* / carbon recycling technology

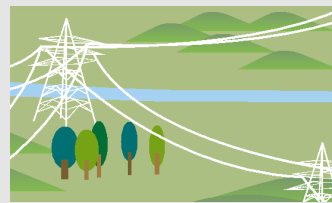


* Carbon dioxide Capture, Utilization and Storage

Grid

Upgrade transmission/distribution network → P9

- Wide-area operation of power transmission & distribution networks
- Enhance supply-demand balance and grid-stabilizing technology

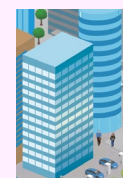


To go electric across sectors

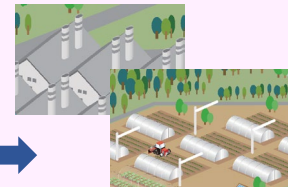
Maximize electrification → P11

- Promote all-electric homes and electrification of equipment such as air conditioning, hot-water supply, kitchen appliances for commercial facilities (household & business)
- Technological research on energy conversion equipment; promote electrification for heat demand of various temperature ranges (industry)
- Provide services or businesses to promote EVs (transport)
- Research business potential of hydrogen supply, etc.

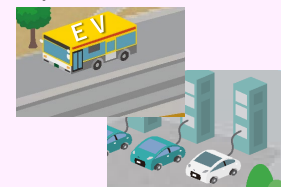
Household & business



Industry



Transport



Local power sources

Together with local communities create a zero-carbon society → P13

- Contribute to the development of regional energy systems
- Value adding developments to urban and rural areas

