JREF Policy Program -- Renewable Energy Futures

- Examples/cases of what's working or what *will* work in the future – innovation in business, technology, infrastructure, social structures
- Scenarios: library, synthesis, policy implications
- Integration of electric power and transport sectors: institutions and infrastructure
- Energy storage options, technologies, integration – and implications for business development and policy
- Future directions of building-integrated renewables and community-scale power
- Viewpoints and visions of possible renewable energy futures – global and Japan

JREF "Innovation Network"

- 100 people worldwide
- Sharing and learning about innovation for renewable energy (policy, business, social)
- Advise foundation on strategy and results (from core programs of policy research, business innovation, and advocacy)
- Bridge between Asia and EU, U.S., developing countries
- Facilitate global dialogue and global leadership for renewable energy
- Put forward a set of collective and individual visions about the future
- Connect with industry associations, entrepreneurs, and business councils globally

Renewable Energy Futures for Japan

- Managing variable renewables on power grids
    - demand response
    - strengthened transmission network
    - energy storage (large-scale, household, role of pumped hydro)
    - variable control regimes for existing baseload power plants

- Centralized vs. decentralized infrastructure
    - supergrids, large-scale wind farms and megawatt-scale solar plants
    - rooftop solar, small biomass/biogas CHP, passive solar architecture

- Wind power: transmission infrastructure, onshore vs. offshore

- Ocean energy?

- Electric vehicles – integration with electric power systems, trip distance, recharging infrastructure

- Role/response of incumbent energy companies/utilities

- Future business models (i.e., local energy service utilities, rooftop solar PV leasing)