Effort to form Industrial Clusters

Training and securing of human resources and support for research and development through collaboration with FREA and other organizations

- Human resource development in research institutes, etc.
- Upgrading FREA's R&D Functions

Support for the commercialization and industrialization of new technologies originating from Fukushima

- Renewable Energy Commercialization Demonstration and Research Support Project

Holding REIF Fukushima

- REIF (Renewable Energy Industrial Fair) Fukushima

Overseas collaborative exchanges with advanced renewable energy regions

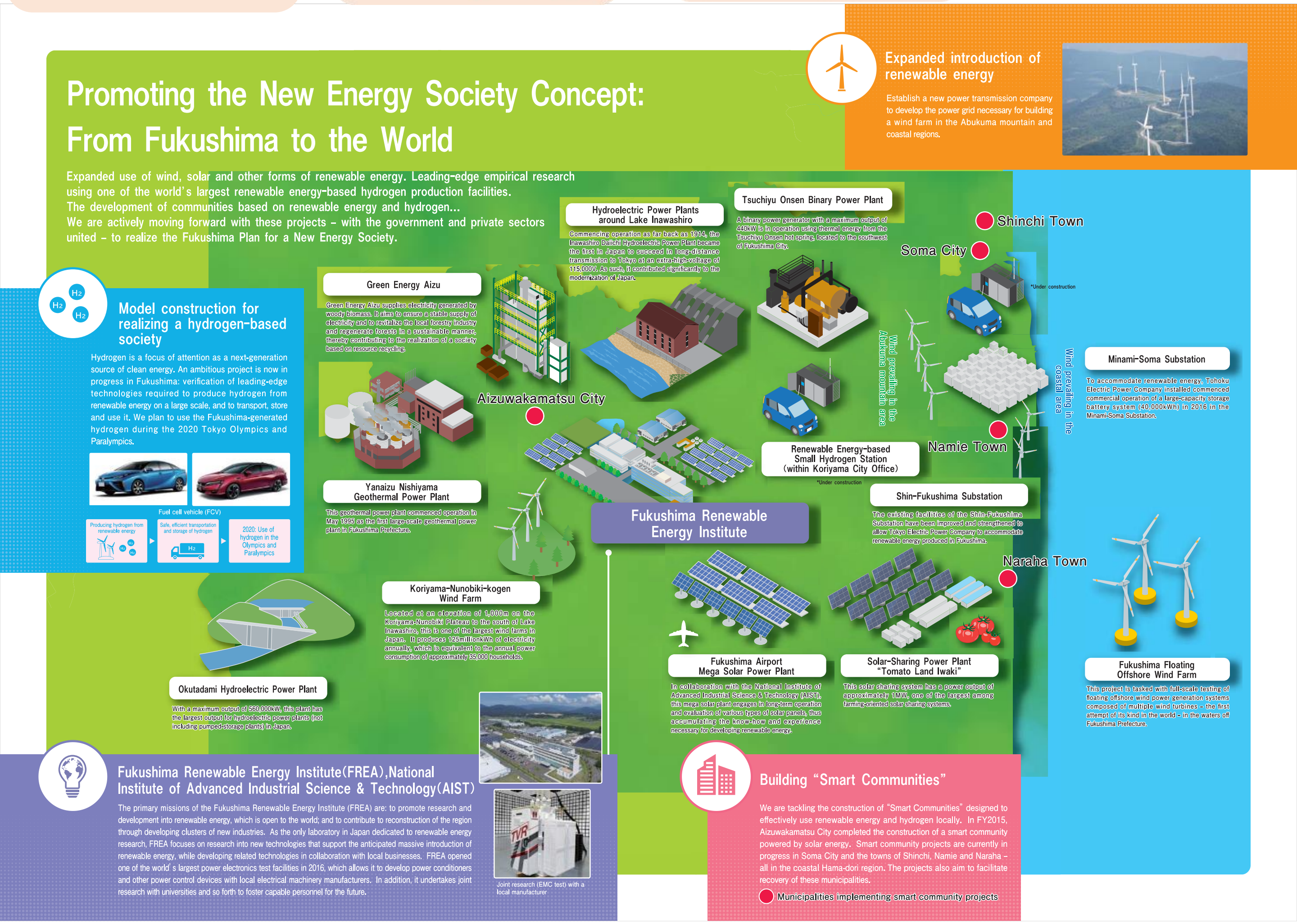
- Promoting Overseas Collaboration through EAF
- Holding seminars at REIF Fukushima (lectures by overseas partners of the prefecture, etc.)
- Business matching with foreign companies (invitation to REIF)

Royal Danish Embassy
December 2014

Spain
Basque Country
January 2026

Germany
Hamburg
January 2026

Germany
NRW
January 2026



Promoting the New Energy Society Concept: From Fukushima to the World
Expanded use of wind, solar and other forms of renewable energy. Leading-edge empirical research using one of the world's largest renewable energy-based hydrogen production facilities. The development of communities based on renewable energy and hydrogen... We are actively moving forward with these projects – with the government and private sectors united – to realize the Fukushima Plan for a New Energy Society.
Expanded introduction of renewable energy
Establish a new power transmission company to develop the power grid necessary for building a wind farm in the Abukuma mountain and coastal regions.
Model construction for realizing a hydrogen-based society
Hydrogen is a focus of attention as a next-generation source of clean energy. An ambitious project is now in progress in Fukushima: verification of leading-edge technologies required to produce hydrogen from renewable energy on a large scale, and to transport, store and use it. We plan to use the Fukushima-generated hydrogen during the 2020 Tokyo Olympics and Paralympics.
Fuel cell vehicle (FCV)
Producing hydrogen from renewable energy
Safe, efficient transportation and storage of hydrogen
2020: Use of hydrogen in the Olympics and Paralympics
Green Energy Aizu
Green Energy Aizu supplies electricity generated by woody biomass. It aims to ensure a stable supply of electricity and to revitalize the local forestry industry and regenerate forests in a sustainable manner, thereby contributing to the realization of a society based on resource recycling.
Hydroelectric Power Plants around Lake Inawashiro
Commencing operation as far back as 1914, the Inawashiro Daiichi Hydroelectric Power Plant became the first in Japan to succeed in long-distance transmission to Tokyo at an extra-high-voltage of 115,000V. As such, it contributed significantly to the modernization of Japan.
Tsuchiyu Onsen Binary Power Plant
A binary power generator with a maximum output of 440kW is in operation using thermal energy from the Tsuchiyu Onsen hot spring, located to the southwest of Fukushima City.
Shinchi Town
Soma City
*Under construction
Wind prevailing in the Abukuma mountain area
Wind prevailing in the coastal area
Minami-Soma Substation
To accommodate renewable energy, Tohoku Electric Power Company installed commenced commercial operation of a large-capacity storage battery system (40,000kWh) in 2016 in the Minami-Soma Substation.
Aizuwakamatsu City
Namie Town
Renewable Energy-based Small Hydrogen Station (within Koriyama City Office)
*Under construction
Yanaizu Nishiyama Geothermal Power Plant
This geothermal power plant commenced operation in May 1995 as the first large-scale geothermal power plant in Fukushima Prefecture.
Fukushima Renewable Energy Institute
Shin-Fukushima Substation
The existing facilities of the Shin-Fukushima Substation have been improved and strengthened to allow Tokyo Electric Power Company to accommodate renewable energy produced in Fukushima.
Naraha Town
Koriyama-Nunobiki-kogen Wind Farm
Located at an elevation of 1,000m on the Koriyama-Nunobiki Plateau to the south of Lake Inawashiro, this is one of the largest wind farms in Japan. It produces 125millionkWh of electricity annually, which is equivalent to the annual power consumption of approximately 35,000 households.
Okutadami Hydroelectric Power Plant
With a maximum output of 560,000kW, this plant has the largest output for hydroelectric power plants (not including pumped-storage plants) in Japan.
Fukushima Airport Mega Solar Power Plant
In collaboration with the National Institute of Advanced Industrial Science & Technology (AIST), this mega solar plant engages in long-term operation and evaluation of various types of solar panels, thus accumulating the know-how and experience necessary for developing renewable energy.
Solar-Sharing Power Plant "Tomato Land Iwaki"
This solar sharing system has a power output of approximately 1MW, one of the largest among farming-oriented solar sharing systems.
Fukushima Floating Offshore Wind Farm
This project is tasked with full-scale testing of floating offshore wind power generation systems composed of multiple wind turbines – the first attempt of its kind in the world – in the waters off Fukushima Prefecture.
Fukushima Renewable Energy Institute(FREA),National Institute of Advanced Industrial Science & Technology(AIST)
The primary missions of the Fukushima Renewable Energy Institute (FREA) are: to promote research and development into renewable energy, which is open to the world; and to contribute to reconstruction of the region through developing clusters of new industries. As the only laboratory in Japan dedicated to renewable energy research, FREA focuses on research into new technologies that support the anticipated massive introduction of renewable energy, while developing related technologies in collaboration with local businesses. FREA opened one of the world's largest power electronics test facilities in 2016, which allows it to develop power conditioners and other power control devices with local electrical machinery manufacturers. In addition, it undertakes joint research with universities and so forth to foster capable personnel for the future.
Joint research (EMC test) with a local manufacturer
Building "Smart Communities"
We are tackling the construction of "Smart Communities" designed to effectively use renewable energy and hydrogen locally. In FY2015, Aizuwakamatsu City completed the construction of a smart community powered by solar energy. Smart community projects are currently in progress in Soma City and the towns of Shinchi, Namie and Naraha – all in the coastal Hama-dori region. The projects also aim to facilitate recovery of these municipalities.
Municipalities implementing smart community projects