

The Fukushima Robot Test Field is a new world-class research base for R&D, demonstration testing, performance evaluations, and operational training. Capable of recreating real-world environments, the Test Field was established as part of the Innovation Coast Framework, which aims to revitalize areas affected by the 2011 Great East Japan Earthquake and provide a space to encourage innovative new solutions to pressing technological issues.

The Test Field will be located in Fukushima's Minamisoma City and Namie Town. In addition to a full development base for researchers, the Test Field will include designated areas for Unmanned Aerial Vehicle (UAVs), infrastructure inspection & disaster response, and underwater & above-water robotics. A runway for long-distance flight tests will be constructed in neighboring Namie Town. These areas will open in July, 2018.





### **Japan to Host World Robot Summit 2020**

In 2020, METI will host the World Robot Summit (WRS), a competition and exhibition event that brings together robotics experts from around the world. WRS aims to promote the use of robots to solve the world's toughest challenges, deepen public understanding of robotics, and encourage discussions that will lead to greater investment in industrial R&D and more practical applications of robotics in everyday life.

The Fukushima Robot Test Field will hold the "Infrastructure & Disaster Response" portion of the WRS competition.

## **Unmanned Aerial Vehicle (UAV) Area**

- Japan's largest net-enclosed airspace, runway, and airport
- Provides a variety of testing environments, such as collision avoidance and long-distance flights
- Promotes UAV commercialization



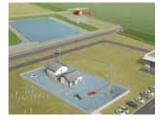
#### **Infrastructure Inspection & Disaster-Response Area**

- Japan's first designated test site for infrastructure inspection and disaster-response demonstration testing
- Simulates a wide range of all potential disaster environments, as well as structural integrity over the lifespan of infrastructure such as bridges



#### **Underwater & Above-Water Robot Area**

- Venue for underwater infrastructure inspections and disaster-response demonstration testing
- Capable of simulating underwater environments at dams, rivers, submersed urban areas, and harbors



#### **Development Base Area**

- Primary development facility
- Outfitted to facilitate preparations, processing, and measurements for various tests, as well as performance evaluations
- Base for research activities



# Fukushima Innovation Coast Framework

The Fukushima Innovation Coast Framework was designed to revitalize industry in communities devastated by the Great East Japan Earthquake and subsequent nuclear disaster. The new industrial infrastructure created through the framework will generate new opportunities for the region, growing industrial clusters, human resource development, and the region's non-resident population. The framework supports projects in nuclear power station decommissioning, robotics, energy, agriculture, and forestry & fishery management.



### **Innovation Coast Success Stories**



# Fukushima Hamadori Robot Demonstration Zone

Fukushima prefecture and Hamadori municipalities are important partners in the Innovation Coast Framework. This partnership helps connect companies, universities, and research institutes developing robots and drones for logistics, infrastructure inspection, and emergency response with sites for



demonstration and operational training, including bridges, dams, rivers, and wilderness areas. Since 2015, this initiative has facilitated over 100 tests and generated more than 500 days\* of testing data. In October 2017, IT service company Rakuten, and convenience store chain Lawson, used the Hamadori Robot Demonstration Zone to test delivery drones transporting hot food from Lawson's Minamisoma Odaka store to a Lawson mobile store vehicle at the nearby Oya Community Center over 2 kilometers away.

\* as of January, 2018



## Laying the Foundation for a Hydrogen Society

Fukushima Prefecture aims to meet 100% of its energy demands with renewable energy by 2040. The use of hydrogen is an important part of achieving this goal.

Last summer, the world's largest hydrogen production project, using renewable energy with zero  $\mathsf{CO}_2$  emissions, started in Namie Town.



By 2020, the project aims to generate clean Fukushima-made hydrogen to be used during the Tokyo Olympic and Paralympic Games.



# Tech Infrastructure for Nuclear Plant Decommissioning

The Japan Atomic Energy Agency (JAEA) has established facilities to bring together decommissioning technology and expertise from around world. These facilities include the Naraha Remote Technology Center, the Collaborative Laboratories for Advanced Decommissioning Science (CLADS) and the Okuma Analysis and Research Center.

# Incentives for Companies Coming to Fukushima Prefecture

## **Fukushima Innovation Development Subsidy**

• Financial support available for companies partnering with local firms on projects that bolster regional development.

# Fukushima Industry Revitalization and Business Subsidy

• Provided to companies establishing local operations which are expected to contribute to the regional economy.

#### **Private Sector Partnership**

#### **4R Energy Corporation**

4R Energy Corporation, a subsidiary of Nissan Motor Corporation and Sumitomo Corporation which repurposes Lithium-ion batteries, completed a new plant in Namie Town in early 2018. In response to the increasing demand for electric vehicles (EVs) and EV batteries, the company will begin refabricating used EV batteries into new energy storage products.

