

Today, over a decade after the Great East Japan Earthquake on March 11, 2011, the Fukushima Hamadori district¹ and other areas affected by the nuclear accident continue to face challenges, such as a shrinking population, lack of industrial leaders, and expansive areas of unused or underutilized land, caused by the prolonged evacuation. Working to resolve these issues, the Government of Japan established the Fukushima Institute for Research, Education and Innovation (F-REI) in April 2023 under the Act on Special Measures for the Reconstruction and Revitalization of Fukushima. This article presents the mission and future prospects of this newly-established special legal entity.

F-REI'S MISSION

F-REI has an important mission to fulfill: to become a world-class center for creative reconstruction that embodies dreams and hopes for the reconstruction of Fukushima and the entire Tohoku region; helps to raise Japan's industrial competitiveness to the highest level on the international stage; and contributes to economic growth and efforts to improve people's lives. F-REI's main focus is research and development; however, the institute's principal operations also include efforts for social implementation and industrialization of research outcomes and human resources development, as it looks to find solutions to challenges in Fukushima and the world. F-REI also plays a role as a cross-functional control tower coordinating the activities of research facilities and other existing organizations located in Fukushima.

F-REI'S ACTIVITIES

Under the leadership of Dr. Yamazaki Koetsu, F-REI President,² the institute will promote the following four areas of activities using an integrated approach: research and development, industrialization, human resources development, and control tower functions.

(1) Research & Development

F-REI will promote world-class R&D that will help solve problems in disaster-affected regions in the Tohoku region and around the world, and F-REI's second-to-none research will focus on the following five areas where Fukushima has a clear competitive advantage



F-REI Headquarters in Namie Town, Fukushima Prefecture
Photo: The Fukushima Institute for Research, Education and Innovation

Dr. Yamazaki Koetsu (left) pays a courtesy call on Prime Minister Kishida Fumio on July 22, 2022. (At the time, Yamazaki was a nominee for the position of F-REI president.)

Photo: Courtesy of Cabinet Public Affairs Office

Five Areas:

- 1. Robotics
- 2. Agriculture, forestry and fisheries
- 3. Energy
- 4. Radiation science, medicine and drug development, and industrial applications for radiation
- 5. Collection and dissemination of data and knowledge on nuclear disasters

(2) Industrialization

F-REI will establish a collaborative system between industry and academia to invest in F-REI ventures and conduct joint research with companies. The institute will promote participation of stakeholders from Japan and abroad by utilizing state-of-the-art facilities and demonstration fields, and fostering bold deregulation. F-REI will also engage in efforts to secure incentives for researchers through the strategic management of intellectual property, etc.

(3) Human resource development

F-REI will utilize joint graduate school programs to foster research personnel, and will collaborate with technical colleges. The institute will also provide important technical opportunities for students of elementary, junior and senior high schools to obtain first-hand experience in cutting-edge research and academic fields through implementation of visiting lectures in order to cultivate their interest. Furthermore, F-REI will aim to develop specialized technical skills for industrialization through professional education and recurrent education targeting corporate personnel and working students.

(4) Control tower

F-REI will organize a council and maximize its functions as a command post to coordinate activities implemented by existing facilities. In addition, the council will make strategic decisions on the allocation of research resources, execution of security measures, and on other critical topics from the perspective of economic security. F-REI will integrate existing facilities in Fukushima and consolidate budgets from the standpoint of accelerating research and streamlining redundancies.

ACTIVITIES TO BECOME A CORE CENTER FOR CREATIVE RECONSTRUCTION

F-REI will collaborate with local municipalities, residents, companies and organizations in a variety of different partnerships to ensure that the establishment of this institute will have an expansive ripple effect. As a wide-area campus for empirical research that encompasses activities within its facilities and beyond, F-REI is committed to becoming the "only place in the world for research, demonstrations, and social implementation," and to disseminating information on a global scale.

These very important missions that F-REI undertakes cannot possibly be accomplished overnight. The institute will spare no effort to contribute to creative reconstruction by steadily accumulating positive results.

- **Note:** 1. The Pacific Ocean coastal area on the east side of Fukushima Prefecture
 - 2. Yamazaki Koetsu, former president of Kanazawa University, was appointed the first president of F-REI on April 1, 2023. His specialty is mechanical engineering.