(6) Industry 2. Tourism

The effects of COVID-19 and the Fukushima-oki (offshore) Earthquake, which occurred in February 2021, has caused the number of tourists visiting Fukushima to plummet. On the other hand, educational tour inflows are increasing mainly due to visits from neighboring prefectures.



(6) Industry 3. Business investment and employment creation

The Prefecture's gross product growth rate is comparable with that of Japan's GDP, and levels in shipment values of Fukushima Prefecture's manufactured goods recovered to pre-disaster levels. However, in Futaba County, they are only 30 percent compared to what they were before the disaster.



(6) Industry 4. The Fukushima Innovation Coast Framework I

For the initiative to take shape, efforts are fully underway in the development of industry hubs, clustering of industries, fostering human resources, and expanding the non-resident population.

The Fukushima Innovation Coast Framework

The Fukushima Innovation Coast Framework is a national project that aims to revitalize industries in the coastal region affected by the Great East Japan Earthquake and the nuclear disaster through the establishment of a new industrial base in the region. Based on the 3 core pillars, the project is being put into shape in the coastal region in the priority fields of decommissioning, robotics, drones, energy, environment, recycling, agriculture, forestry and fisheries, and healthcare-related industries as well as aerospace industries. It also includes various infrastructure development initiatives to achieve these plans, such as clustering of industries, fostering human resources, increasing people visiting the region, spreading information, and re-establishing the living environment.

◆ 3 core pillars to realise the initiatives

- 1. A region where people can take on any challenge We aim to develop the coastal region to be a place where new challenges are taken up in various fields.
- 2. Local companies are major players In order to encourage not only cutting-edge companies but various local companies to actively participate in the initiative, we will promote wide-area cooperation between local businesses and incoming companies to the region.
- 3. Fostering human resources who will play a major role in the initiative We will foster innovators in the region and professionals who will support the industrial cluster.

• Hubs for research and main projects



Consideration towards establishing the Fukushima Institute for Research, Education and Innovation(Abbreviated name:F-REI)

F-REI is a legal entity that will be established by the Government of Japan (scheduled in Apr. 2023) as a world-class, core center for creative reconstruction to realize the revitalization of Fukushima and other parts of the Tohoku region as well as contributing to driving Japan's scientific and technological capabilities and industrial competitiveness. This institute will promote cooperation between industry hubs created by the initiatives of the Fukushima Innovation Coast Framework and embody and develop the concept further. →In Mar. 2022, Basic Concept of the Fukushima Institute for Research, Education and Innovation was designed. The law to partially amend the Act on Special Measures for the Reconstruction and Revitalization of Fukushima including the establishment of the new legal entity was enacted in May. After the enactment, a basic plan for research and development, including creating new industries was formulated in Aug.In Sept., location of the institute's head office was decided to establish in Namie Town in the Reconstruction Promotion Council.

(6) Industry 4. The Fukushima Innovation Coast Framework II

◆Initiatives towards the realization of the framework

Clustering of industries

Helping to promote business investment and supporting companies inside and outside the region to start business

Expanding the non-resident population in the Coastal Region and

other areas where the number of residents has decreased due to

A startup pitch event was held for businesses and those who

presentations about their business plans to start businesses

aspire to be business entrepreneurs and pioneers to make

Seminar on Industrial Sites for Business Establishment to publicize the most preferential system in Japan and environment of the location





ns that support busines preneurship and creation mpaniment support by Subsidies for supporting the creation of innovation Fukushima Tech Create supr



Spreading

Fostering human resources in education

Revitalization Knowledge

and technical colleges

nationwide in the

Project supports activities

Passing down the records and lessons learnt from the compound disaster to future generations

> ■ In Oct. 2022, the number of visitors reached 150,000 at the Great East Japan Earthquake and Nuclear Disaster Memorial Museum, which opened in Sep. 2020. We have now an enhanced research system in place after full-time researchers joined. We collect and archive mainly nuclear disaster related materials and use the research results for exhibitions, presentations, and training. By disseminating information, we try to prevent memories of the disaster from fading and help with disaster reduction and prevention.



■ Classes on smart agriculture are available at Soma Agricultural High School, where educational programs under the Fukushima Innovation Coast Framemwork are being implemented.

Fostering the youth force who will carry the future of the Coastal Region



The entire Prefecture will work to foster highly ambitious leaders for this project as well as human resources who will serve as immediate assets in the fields of expertise of robotics, renewable energy, agriculture, forestry, fisheries, and more. Odaka Industrial Technology and Commerce High School and Futaba Future School have taken the lead in this project.

The University of Aizu has also been working with local enterprises to develop robotics technology and human resources using its expertise in ICT.



Odaka Industrial Technology and Commerce High School

The school has been designated as one of the Meister high schools, which is a project of the Ministry of Education, Culture, Sports, Science and Technology. It is working to develop human resources with advanced knowledge and skills that can handle new industries through the human resource development system linked to these industries as well as the collaboration between commercial and industrial academic courses.

Futaba Future School Junior and Senior High school



The school has been designated by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) as part of a project to promote high school education reform through collaboration with local communities (glocal type) and is fostering global leaders. The school is working on the study of creating local communities, exploring future revitalization, and supporting top athletes.

[Challenges and Responses]

- Creating an economic ripple effect in the Prefecture by connecting businesses to the innovation projects and enhancing industrial clustering
- Developing the surrounding environment and communities in conjunction with the establishment of the international education and research institute

Expanding the nonresident population

On-site tours were held for companies which are considering entering into agriculture in the 15 municipalities in the Coastal Region and other areas to help them understand the current situation in the region further.



evacuation

Mieruka Visible

(Fukushima Tech Create program)

Seminars have been held for residents fir them be familiar with the efforts of the Fukushima Innovation Coast Framework



Re-establishment of Creating an environment necessary for people to safely live the living environment

■ Development is progressing for public infrastructure Tohoku Chuo Expressway

• Joban Expressway

• JR Joban Line

■ Operation of a shuttle bus Fukushima Robot Test Field-Fukushima station



The preferential tax system to promote the Fukushima Innovation Coast Framework

Special provision for taxation will be applied to businesses that invest in equipment, employ people affected by the disaster and carry out R&D in relation to the development of new products in the priority fields of the initiative.

Eligible areas

Areas implementing projects which promote the creation of new industries

*Part of the international research and industry areas in Fukushima Prefecture (15 municipalities)

Who can apply

The sole proprietor or corporations who are in areas implementing projects which promote the creation of new industries and who are engaged in these projects

*These projects are specified by the Order of the Reconstruction Agency to play a

- central part in creating and activating industry clusters
- Details of special cases
- 1. A 15 percent tax credit for payments such as salary will be given if evacuees are hired.
- 2. Special depreciation and tax credits will be provided when acquiring machines, devices, instruments, equipment and buildings, etc.
- 3. Immediate depreciation and tax depreciation for depreciable assets will be provided towards development and research
- 4. Tax exemption from business tax, real estate acquisition tax or property tax and other measures on building new or adding factories or equipment will be provided.

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6) Industry 5. Renewable energy

Aiming to become a "pioneering region in renewable energy", initiatives are conducted to expand the adoption of renewable energy and promote industry cluster.



Benefits of utilising hydrogen

It can be generated from renewable energy and other resources and stored for a long periodof time. It does not emit CO2 while being utilised.

Fukushima Hydrogen Energy Research Field (FH2R)

- Fukushima Hydrogen Energy Research Field was opened in Namie Town on 7 Mar. 2020. This is one of the world's largest hydrogen production bases from renewable energy sources (utilizing 20MW generated solar power). It can supply up to 1,200 Nm3 of hydrogen per hour (rated power) and fill up about 560 fuel cell vehicles a day.
- Hydrogen stations, fuel cell bus, and fuel cell vehicles were adopted in various places.

Koriyama City Stationary hydrogen station



Tohoku's first FC bus



[Challenges and Responses]

Windmill parts

- Switch to low-carbon society through efforts to save natural resources and conserve energy
- Create systems that gives back profit to the local community

REIF Fukushima

- Local production for local consumption of energy
- > Attract companies related to the industries. Foster new industries and create jobs

Katsurao Village

Smart Community

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Public Works Office Sukagawa Branch

'Nealy ZEB" for the first time in Tohoku

as a government building.It achieved to reduce 87 percent of energy consumption

The office received a certification of

(7) Efforts towards decommissioning

> TEPCO estimates that the period to complete the decommissioning of the four reactors is to be 44 years and the complete process will be divided into 4 stages. It created a decommissioning plan to show the details which will be carried out in

> The Nuclear Regulation Authority (NRA) approved the plan in Apr. 2021, in accordance with the Act on the Regulation

power station is located (Naraha Town and Tomioka Town) also gave prior approval based on the Agreement on

At Stage 1, there is a plan to inspect the contamination status of radioactive substances, remove the contamination, dismantle and remove equipment outside of the controlled area and remove the spent fuel from the reactor buildings.

of Nuclear Source Material, Nuclear Fuel Material and Nuclear Reactors. Fukushima Prefecture and the towns where the

Ensuring the Safety of the Surrounding Communities when Decommissioning the Fukushima Daini NPS. In response to

Currently, decontamination and evaluation of the contamination status of the equipment, and dismantlement and removal

Stage 1. (The period to prepare for the dismantling the facilities is 10 years.)

of equipment outside of the radiation controlled area, etc. are being carried out.

this, TEPCO started decommissioning work in June.

Fukushim	a Daiichi NPS		ALPS treated water
Measures being taken	Major milestones (on the Mid- to Long- Term Roadmap)	Current state of progress	 Contaminated water is being generated from the cooling of fuel which melted (fuel debris) due to the nuclear accident and by the rainwater and groundwater flowing into the reactor buildings. Water in which radionuclides, except tritium, are removed from the contaminated water below the regulatory standards by using ALPS and other equipment is referred to as ALPS treated water. In the basic policy on handling the multi-nuclide removal equipment (ALPS) treated water, created by the national government in Apr. 2021, ALPS treated water will be discharged into the sea after being purified and diluted to levels well below its regulation standard while ensuring its safety. In order to dispel concerns about further harmful rumours following the decision on the disposal policy, it is necessary for the Prefectural Government to urge the national government to thoroughly implement the release of treated water in accordance with the national government's Action Plan for the Continuous Implementation of the Basic Policy on Handling of ALPS Treated Water formulated in Dec. 2021 (revised Aug. 2022).
Contaminated water measures	Reduction of the volume of contaminated water Reduce to about 100m ³ /day or less (within 2025)	In order to reduce the volume of contaminated water, measures have been taken to prevent groundwater from flowing in by pumping up groundwater from Subdrain and with impermeable walls of frozen soil as well as to prevent rainwater from seeping in by installing roofs of reactor buildings and other buildings.	
Fuel removal from spent fuel pools	Complete fuel removal from Units 1 to 6 (within 2031) Start of fuel removal from Unit 1 (FY2027 to 2028) Start of fuel removal from Unit 2 (FY2024 to 2026)	Unit 1: Operation of installing a large cover has been in progress to remove rubble from the upper part of the pool from Apr. 2022. Unit 2: Since Jun. 2022, a foundation construction to install a stand for removal has been underway. Unit 3: Fuel removal was completed in Feb. 2021. Unit 4: Fuel removal was completed in Dec. 2014.	Fuel debris retrieval *Fuel debris: Molten nuclear fuel and other structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor Image: structural debris which have been solidified inside the reactor
Fuel debris retrieval	Begin fuel debris retrieval from initial reactor (From Unit 2) (postponed from within 2021 to around 2023)	Unit 1: An additional investigation inside the primary containment vessel is being carried out using an underwater robot. Unit 2: A robot arm is being adjusted for the start of fuel debris retrieval Unit 3: An additional investigation and analysis inside the primary containment vessel are being planned.	Cooling water Cooling water
Waste measures	Eliminating outside temporary storage areas for rubble and other waste (within FY2028)	An additional miscellaneous solid waste incineration facility to dispose waste such as rubble, fallen trees and used protective clothing has started operation and a facility for analysing low-to-medium-level radioactive waste has started operation in Oct. 2022.	Purification Storage
Fukushima Daini NPS			Reactor building (schematic) tanks

Source: Ministry of Economy, Trade and Industry

[Challenges and Responses]

- It is necessary to have continuous surveillance carried out by the Association for Monitoring the Safety in Decommissioning to ensure the decommissioning progresses safely and steadily
 Taking all possible measures such as explaining to all the persons
 - Taking all possible measures such as explaining to all the persons involved with the decision on the disposal policy of the ALPStreated water and gaining their understanding while spreading accurate information

(8)	Strengthening the countermeasures against harr	nful rumours
	and the fading awareness of the disaster	

Following the decision on the disposal policy of ALPS treated water, the Prefecture has partially amended its strategy of strengthening countermeasures against harmful rumours and the fading awareness of the disaster in order to dispel concerns over new harmful rumours.

Z	Basic polic been deci	 Outline of the basic policy on handling the multi-nuclide removal equipment (ALPS) treated water (13 Apr. 2021- Meeting of the Inter-Ministerial Council for Contaminated Water, Treated Water, and Decommissioning Issues) Discharge of the treated water into the sea was selected considering the successful precedence in Japan and the ability to conduct secure monitoring. Discharge from the premises of the Fukushima Daiichi Nuclear Power Station will begin approximately two years later. The concentration of tritium, which is a radioactive substance, will be diluted to less than 1/40 below the regulatory standards. 	 The preferential tax system for measures against harmful rumours Eligible areas All 59 municipalities in the Prefecture Who can apply Individual business operators or corporations conducting specified business operators or corporations conducting business fields in the Prefecture. Business activities related to production, processing, distribution and sales of agricultural, forestry, and fisheries products. Business activities supporting the promotion of tourism in the Prefecture. Details of special cases (1 or 2) A 10 percent tax credit for payments such as salary will be given if specified disaster-affected people are hired. Special depreciation and tax credits will be provided when acquiring machines, devices, instruments, equipment and buildings, etc. Approvals 7 companies (as of 16 Feb. 2022)
ational Government	y has ded	 Support the fisheries industry to expand the sales channels of the Prefecture's fisheries products and call for flexible compensation from TEPCO Establish a new inter-ministerial council to consider necessary measures. 	
	Action plan to dispel concerns over harmful rumours has been formulated	Action Plan for the Continuous Implementation of the Basic Policy on Handling of ALPS Treated (3rd Inter-Ministerial Council (Concerning the Continuous Implementation of the Basic Policy on Handling of ALPS Treated Water held in Dec. 2021)1. Framework for preventing reputational damage2. Framework for overcoming reputational damage while continuing and expanding business with confidence• Thoroughly implement the handling of ALPS treated water to mitigate potential reputational damage2. Framework for overcoming reputational damage while continuing and expanding business with confidence• Strengthen and enhance monitoring• Support demonstration of safety, improve productivity, expand sales channels, etc.• Mork with third parties such as international organizations to oversee and ensure transparency• Compensate while being considerate of the parties affected by persistent reputational damage• Share and disseminate information to foster peace of mind • Have strategic communication with the international community • Examine and understand widespread knowledge about safety, etc.• Continue to pursue future technologies to mitigate reputational damage	

Policies to strengthen countermeasures (Fukushima Prefecture's strategies to strengthen measures to fight harmful rumours and fading public interest fifth edition *The Prefecture has partially amended in Jan. 2022)

	Agricultural, forestry, and fisheries products and Fukushima products	Tourism	Priority measures (strengthening measures while also taking into consideration concerns over the release of treated water)	
Fukushima Prefectural Government	 Strengthen measures for distribution and sales. Measures promoting Fukushima brand products, etc. Improve the brand power and expand exports Projects strengthening competitiveness of Fukushima farm products, etc. Increase consumer confidence Strategic information dissemination of the agricultural, forestry, and fisheries products, etc. 	 Create tourism models clarifying the strengths and features of the region Projects promoting Hope Tourism, etc. Continue to spread information using overseas contacts, including virtually, etc. Projects recovering inbound tourists, etc. 	 Promoting understanding at home and abroad Spread accurate information Strategic information dissemination project about the charms of the Soso District, project to pass down the information about the disaster to the next generation, etc. Spread the charms An all-Fukushima promotion week project in central Tokyo, information dissemination proto dispel harmful rumors overseas, etc. Spread information using bonds Project to promote the Prefecture using the legacy of the Tokyo 2020 Olympic and Paralyn Games, etc. 	
	Spreading information (cooperation, co-creation, etc.)	Underlying measures		
	 Spread information in cooperation with each department Fukushima Prefecture's strategic information dissemination project to meet challenges, etc. Spread information about the current situation and the charms of Fukushima Projects promoting the use of J-Village Expand the collaboration and co-creation Projects supporting municipalities and local communities, etc. 	 Thoroughly inspect the food Projects dealing with radioactive materials in food products, etc. Have risk communication concerning radiation Projects promoting food security and safety Spread information about the progress in restoring the environment Projects managing and operating the Fukushima Prefectural Centre for Environmental Creation (main building), etc. 	 Strong support for businesses Strengthen measures for fisheries industry Project to foster next generation human resources for the fisheries industry, etc. Promote production and consumption of local food Project to support the development of areas producing flowers unique to Fukushima Enhancing the local charms, brand power and expanding exports Project to attract more visitors utilising cultural assets and other elements 	
		福島産…		

Negative image of Fukushima which has not yet recovered Source: Survey by Consumer Affairs Agency (on Mar. 2022) (Survey on purchase of food items)

6.5% of people who are concerned about radioactive materials in food products answered "I am reluctant in purchasing Fukushima products"

(Regarding the monitoring for radioactive materials in food) 59.4% of people answered "I do not know" about the monitoring inspections 福島産・・・

[Challenges and Responses]

- > Deeply rooted harmful rumours and fading of memories related to the disaster over time
- ➢ Concerns over new harmful rumours by the disposal of ALPS treated water

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From "Future from Fukushima" to "Making it a reality,one at a time. Fukushima": The new slogan for Fukushima Prefecture

For the tenth anniversary of the disaster, Fukushima Prefecture has created a new slogan from its former, "Future from Fukushima".

"Make it a reality" means continuing to bring each individual's strengths together, connect their thoughts, and mold them into something tangible.

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