Steps for Reconstruction and Revitalization in Fukushima Prefecture

The Great East Japan Earthquake and Nuclear Disaster Memorial Museum Hub dispatching information from the Fukushima Innovation Coast Framework

Opening target on 2020.9.20 (Futaba Town)

A model of the hero in the NHK drama serial "Yell"

Koseki Yuji machinaka seishunkan, a museum dedicated to the late composer Koseki Yuji (Fukushima City)

Ukedo Fishing Port Auction resumed at the sorting area (Namie Town)
### Index

- **Coming into a decade since the disaster**

1. Revitalization efforts and challenges
   - (1) Decontamination
   - (2) Current status of the Evacuation-designated Zone
   - (3) Change in evacuee numbers
   - (4) Health of Fukushima residents
   - (5) Securing of housing and creating an environment for people to return
   - (6) Basic infrastructure
   - (7) Industry
     - ① Agriculture
     - ② Tourism
     - ③ Business investment and employment creation
     - ④ The Fukushima Innovation Coast Framework I
     - The Fukushima Innovation Coast Framework II
   - (8) Efforts towards decommissioning
   - (9) Impact of disasters, etc. on the revitalization efforts
     - ① COVID-19
     - ② Damage caused by Typhoon Hagibis

2. Going forward
Coming into a decade since the disaster

Revitalization in Fukushima has been making steady progress. The evacuation order was partially lifted for Futaba Town where all residents had been evacuated and there was the full opening of the Fukushima Robot Test Field as well. On the other hand, the path to revitalization is still long and difficult. Due to the unprecedented compound disaster, more than 37,000 people are still evacuated. In addition, other disasters such as Typhoon Hagibis and COVID-19 have caused an enormous impact amid our revitalization efforts.

Revitalization efforts that have shown great progress

- Atmospheric radiation levels have significantly dropped
- Development progress of the Fukushima Robot Test Field
- JR Futaba Station on the Joban Line reopened in Mar. 2020
- Fukushima Pride Delivery Service
  Total sales of the online store reached 2.6 billion yen in FY2019.
- J-Village fully restarted in Apr. 2019

Revitalization efforts still in progress

- More than 40,000 people remain in a state of evacuation
- Current situation and outlook for Units 1 to 4 at the Fukushima Daiichi Nuclear Power Station (Units 5&6 are in cold shutdown)
- Enormous damage caused by Typhoon Hagibis and heavy rains
- Measures taken against COVID-19 (Reception in a lodging facility for patients with mild symptoms)
- Treated water disposal options

The Basic Policy on Reconstruction from the Great East Japan Earthquake after the end of the Reconstruction and Revitalization Period was approved in a cabinet meeting.

As the “Act Partially Amending the Act for Establishment of the Reconstruction Agency and Other Laws” was passed, structures such as organizations, systems and financial resources have been established to support the revitalization efforts after the end of the Reconstruction and Revitalization Period.

Revitalization is moving into the next phase in 2020.
Decontamination of prefectural land has been completed in all areas except for the Difficult-to-return Zone. Atmospheric radiation levels in the Prefecture have significantly dropped, and are the same as other major cities throughout the world.

Completed by Mar. 2018

Substantial decrease

As of 1 Jul. 2020

【Challenges and Responses】
- Restoration of land used for Temporary Storage Sites
- Safe and secure transportation of contaminated soil to the Interim Storage Facility.
- Final disposal of contaminated soil outside of Fukushima Prefecture
- Decontamination of the Difficult-to-return Zone (except for Special Zones for Reconstruction and Revitalization)
(2) Current status of the Evacuation-designated Zone

Progress is being made on the lifting of evacuation orders in accordance with the creation of an environment which people can return to. The proportion of the area of the prefecture under evacuation orders has reduced from approx. 12% to approx. 2.4%.

As of 23 Apr. 2011

As of 10 Mar. 2020 ~ Present

Reduction of approx. 10%

(3) Change in evacuee numbers

(As of Jul. 2020)

<table>
<thead>
<tr>
<th>Year</th>
<th>Evacuees outside the prefecture</th>
<th>Evacuees inside the prefecture</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012.5</td>
<td>164,865</td>
<td>62,038</td>
<td>147</td>
</tr>
<tr>
<td>2013.5</td>
<td>152,113</td>
<td>54,680</td>
<td></td>
</tr>
<tr>
<td>2014.5</td>
<td>129,154</td>
<td>45,854</td>
<td></td>
</tr>
<tr>
<td>2019.12</td>
<td>46,093</td>
<td>10,540</td>
<td>13</td>
</tr>
<tr>
<td>2020.7</td>
<td>41,701</td>
<td>7,590</td>
<td>13</td>
</tr>
</tbody>
</table>

Evacuees outside the prefecture
Evacuees inside the prefecture
Missing

○ Proportion of residents living in municipalities where evacuation orders have been lifted (As of Jun. 2020)

【Lifted 2014】
· Tamura City (Miyakoji District) 84.2%
【Lifted 2015】
· Naraha Town 59.2%
【Lifted 2016】
· Kawauchi Village 80.7%
· Minamisoma City (Odaka District) 54.2%
【Lifted 2017】
· Kawamata Town (Yamakiya District) 47.0%

○ Lifting of evacuation orders in 2020
4 Mar. Futaba Town (around Futaba Station, Evacuation Order Cancellation Preparation Zone)
5 Mar. Okuma Town (around Ono Station)
10 Mar. Tomioka Town (around Yonomori Station)

The first lifting of evacuation orders in Futaba Station reopened 14 Mar. 2020

【Challenges and Responses】
➢ The national government will consider a concrete policy to lift evacuation orders to the whole area of the Difficult-to-return Zone respecting the wishes of the local people.

【Challenges and Responses】
➢ Maintaining a support system and consultation services for evacuees.
➢ Creation of an environment for people to return that includes shopping, healthcare and welfare, education, transportation, and wildlife damage control.
➢ Promotion aimed at encouraging new enterprises, human resources, people from outside the Prefecture to relocate and settle down as well as increasing the number of people visiting the Prefecture.
Health of Fukushima residents

The Prefecture is aiming to become one of the healthiest prefectures in Japan by implementing the Fukushima Health Management Survey and Projects for a Long and Healthy Life.

The Fukushima Health Management Survey is being implemented to understand the health of residents, in order to maintain and improve their health into the future.

◆ Basic Survey
Self-administered questionnaires: 27.7%
[568,331 respondents/2,055,248 subjects]
<Results of estimate on external exposure dose>
【All citizens surveyed】
Ratio of dose from 0 to 2mSv accounts for 93.8% of all.
※Estimate of external exposure dose for the 4 months from the nuclear accident (March-July 2011)

◆ Thyroid Ultrasound Examination
Citizens aged 18 or younger at the time of the disaster (About 380,000 persons)
※Primary Examination （April 2011 - March 2014）
Full-scale Examination （April 2014 - present）
Primary Examination: Ultrasound Examination
Secondary examination: Thorough thyroid ultrasound examination and blood testing

The Projects for a Long and Healthy Life will try to respond to various health issues caused by changing environments after the disaster.

➢ Encouraging healthy thinking among residents.
➢ Educating the next generation through child health promotion programs.
➢ Health promotion that starts from a healthy diet.
➢ Protection from second-hand smoke.
➢ Improving consultation rate of health check ups and screenings.

Development of a hub for cutting-edge radiological research and medical care & Fostering of human resources in medical fields

Fukushima Global Medical Science Center
School of Health Sciences (tentative name) Fukushima Medical University
Fukushima Medical Device Development Support Centre

Providing cutting-edge medical care such as PET scans and MRI’s
Training medical professionals responsible for local medical care.
Promotion of the domestic medical equipment industry and improving medical skills through training.

【Challenges and Responses】
➢ Secure nursing personnel and support the operation of caregiving facilities.
➢ The number (or rate) of people with metabolic syndrome, child obesity and children’s cavities is high, compared with the national average.
➢ Extend people’s healthy life expectancy by encouraging a healthy lifestyle.
Construction of Revitalization Public Housing has been completed to provide for those affected by the disaster with places to settle down. Development is progressing for other facilities such as medical and caregiving services, as well as, shopping facilities necessary for people to move back.

(5) Securing of housing and creating an environment for people to return

Evacuation shelter
Azuma Gymnasium (Fukushima City) Mar. 2011

Temporary housing units
Matsunaga 5-go Park temporary housing units (Aizuwakamatsu City)

Revitalization Public Housing
Iwasaki housing complex (Iwaki City)

Permanent housing provision

Shopping facilities
Idate Village: Madei-Hall
Naraha Town: KOKONARA Shopping Mall
Minamisoma City: Odaka Store
Roadside-Station "Namie"

Educational facilities

[1] Locally reopened schools
1. Kawauchi Village 2012.4~
2. Hirono Town 2012.8~
3. District Tamura City 2014.4~
4. Odaka District Minamisoma City 2017.4~
5. Idate Village 2018.4~
6. Katsumaro Village 2018.4~
7. Yamakiya District Kawamata Town 2018.4~
8. Odaka Village

[2] Schools moved to evacuation sites (Some schools have resumed in their hometowns)
9. Tomioka Town 2018.4~
10. Namie Town 2018.4~
11. Okuma Town
12. Futaba Town

[3] Schools moved to evacuation sites (Remain at the sites)
13. A
14. B
15. C
16. D

100% completed throughout the Prefecture
※Except for 123 units of which leasing procedures are pending

Futaba Medical Center-affiliated hospital operates as a secondary emergency medical facility in Futaba district accepting patients 24/7, 365 days a year (including on public holidays).

Challenges and Responses
- Continuing to provide consultation regarding housing and rebuilding of livelihoods, as well as looking after residents, providing support for everyday life and, and community building
- Providing a comprehensive medical and caregiving system based on the needs of residents
- Further promotion of distinctive and engaging education
96% of reconstruction work has been completed. Development of transportation networks including roads has been progressing and train services along the entirety of the JR Joban Line have been resumed.

**[The regions]**

<table>
<thead>
<tr>
<th>Area</th>
<th>Total</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aizu</td>
<td>26</td>
<td>100.0%</td>
</tr>
<tr>
<td>Central</td>
<td>535</td>
<td>100.0%</td>
</tr>
<tr>
<td>Coastal</td>
<td>1,604</td>
<td>95.3%</td>
</tr>
</tbody>
</table>

**The Areas**

- 100% • Port and harbors, Sewage, Park, Public housing
- 95% • River and sand erosion control, Road and bridge, Fishing port
- 90% • Coast

**[Challenges and Responses]**

- Impact on revitalization efforts caused by Typhoon Hagibis.
- Reconstruction of public works facilities and coasts in the Difficult-to-return Zone
- Development of the Fukushima Reconstruction and Revitalization road and strengthening of the road network which connects the east and west sides of the Prefecture.
- Creating a sustainable local public transportation network.
### Production values have recovered up to 90.7% of pre-disaster levels, and farming has resumed gradually in the affected areas.

#### Smart agriculture initiatives
- **Self driving tractor**
- **Spraying pesticides by drone**

#### Wildlife Damage
- **A hedge dug up by wild boars**
- **Wild boars captured in a cage trap**

#### Challenges and Responses
- Regaining the price of agricultural products to the national average (Promoting branding of Fukushima products).
- **Wildlife damage control.**
- Further accelerating the resumption of farming, developing and demonstrating advanced technology, securing new manpower.
- Promoting measures against radioactive materials necessary for the maintenance of forests as well as revitalizing the forest areas for logs and minor forest products.
- Resumption of coastal fishery, support for expanding market channels, securing and fostering human resources for fishery operators and management entities.

---

**Decontamination of farmland**
- Reverse plowing
- Reverse the surface soil with subsoil

**Cleaning of tree bark**

---

Fukushima Pride Delivery Service
- Total sales of the online store reached 2.6 billion yen in FY2019.
- Increased about 400 million yen compared to the previous fiscal year.

---

**Farming has resumed in the affected areas**

---

**Ratios of agricultural products compared to 2010 set as 100%**

---

**Transition of the price for most Fukushima agricultural products.**

---

**Fukushima Pride Delivery Service**
- [https://fukushima-pride.com/](https://fukushima-pride.com/)
The number of tourists visiting Fukushima has recovered to 98.5% of pre-disaster levels, and the number of educational tours to 89%. However, the growth rate of inbound tourists has not yet reached the national average.

**Challenges and Responses**

- Recovering the number of educational tours by expanding target regions while continuing to focus on students from neighbouring and metropolitan areas.
- Attracting more inbound tourists by promoting extensive sightseeing tours.
- Promotion to attract inbound tourists by making use of facilities such as the Great East Japan Earthquake and Nuclear Disaster Memorial Museum, J-Village and the Fukushima Robot Test Field.
- Creating content for tour programmes unique to Fukushima such as Hope Tourism.

### Tourists from outside Fukushima

<table>
<thead>
<tr>
<th>Year</th>
<th>Number (Unit: Thousand people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>35,211</td>
</tr>
<tr>
<td>2011</td>
<td>57,179</td>
</tr>
<tr>
<td>2012</td>
<td>56,336</td>
</tr>
<tr>
<td>2013</td>
<td>50,000</td>
</tr>
<tr>
<td>2014</td>
<td>40,000</td>
</tr>
<tr>
<td>2015</td>
<td>30,000</td>
</tr>
<tr>
<td>2016</td>
<td>20,000</td>
</tr>
<tr>
<td>2017</td>
<td>10,000</td>
</tr>
<tr>
<td>2018</td>
<td>5,000</td>
</tr>
</tbody>
</table>

### Educational Tour

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of schools</th>
<th>Unit: Guest overnight</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>100</td>
<td>19</td>
</tr>
<tr>
<td>2010</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>89</td>
<td>73</td>
</tr>
<tr>
<td>2012</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

### Total number of international guests

<table>
<thead>
<tr>
<th>Year</th>
<th>Nationwide</th>
<th>Fukushima</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>2011</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>2012</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>2013</td>
<td>321</td>
<td>321</td>
</tr>
<tr>
<td>2014</td>
<td>285</td>
<td>285</td>
</tr>
<tr>
<td>2015</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>2016</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>2017</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>2018</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**Promotion of Hope Tourism especially in Hamadori (Coastal Region)**

- Sake breweries tours in Fukushima which won the Annual Japan Sake Awards for 7 straight years.
- The route starts from Tokyo and travels around Fukushima, Tochigi, and Ibaraki.
- The Great East Japan Earthquake and Nuclear disaster Memorial Museum fully reopened in Apr. 2019.
- Scheduled to open in summer 2020.
- No.1 Tadami River Bridge Viewpoint which attracts tourists from around Japan and the world (Mishima Town).

**DIAMOND ROUTE JAPAN**

- Attracting inbound tourists by distributing attention-grabbing videos such as “SAMURAI spirits”.

**Sake**

- Breweries tours in Fukushima which won the Annual Japan Sake Awards for 7 straight years.
(7) Industry ③ Business investment and employment creation

The shipment value of products in the Prefecture has recovered to exceed the benchmark set before the disaster (2010). The Prefecture's gross product growth rate has also exceeded that of Japan's GDP.

- **Recovery of the industrial bases in Futaba County and the Coastal Region.**
  - Accelerating the Fukushima Innovation Coast Framework to develop self-sustaining and continuous industry growth

- **Creation of new industries through technological development support and attracting new businesses to the region.**
  - Promoting participation of local companies

- **Supporting disaster affected companies in Futaba County and other businesses to resume operations and promoting expansion of business from outside of the Prefecture.**
  - Seminar on Industrial Sites for Business Establishment under the Fukushima Innovation Coast Framework

**Fukushima business investment subsidy for revitalization of industries**

Creating employment and industry expansion in the Prefecture through supporting companies looking to start new or expand the number of factories and other facilities in the Prefecture.

- **Allotted to 551 entities**
  - **7,041 jobs created (Projection)**

**Subsidy to business investment for employment creation in the tsunami and nuclear disaster-affected areas**

We support companies that set up new factory or additional factory inside the prefecture. Those activate business and create jobs.

- **209 entities**
  - **2,542 jobs created (projection)**

**Subsidy for investment promotion for the support of self-help and return and the employment creation**

In order to secure jobs for disaster-affected people and accelerate support for their independence and ability to return to the areas they evacuated from, we will support companies that are planning to newly or additionally build plants in the evacuation-ordered areas, and make efforts to create employment and cluster industries.

- **85 entities**
  - **850 Jobs created (projection)**

**The Prefecture's gross product**

(Unit: Trillion yen)

Compared with 2010: 107% increase

**The shipment value of products (Futaba County)**

(Unit: Trillion yen)

Compared with 2010: 106% increase

**The shipment value of products (Fukushima Pref.)**

(Unit: 100 million)

Pref.: Exceeds pre-disaster record

Futaba County: Remains at 20% pre-disaster record
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.

◆ There are 3 core pillars based on a blueprint drawn up on Dec. 9, 2019 for the development of industry with the Innovation Coast Framework.

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

- **Decommissioning**
  Developing technology by gathering wisdom from Japan and around the world
  - Demonstration tests necessary for decommissioning, etc. are carried out at Naraha Center for Remote Control Technology Development (Naraha Town)
  - Okuma Analysis and Research Center (Okuma Town)
  - Collaborative Laboratories for Advanced Decommissioning Science (CLADS) (Tomioka Town)

- **Agriculture, Forestry and Fisheries Industries**
  Revitalization of agriculture, forestry and fisheries industries utilizing ICT and robotic technologies
  - Adding higher value to marine products in Fukushima, developing processing technology, working on countermeasures against radioactive materials (Fukushima Prefectural Fisheries and Marine Science Research Centre, Iwaki City)

- **Robots and Drones**
  Clustering of industries with the Fukushima Robot Test Field as the core
  - R&D and demonstration tests of robots expected to be used in disaster response, distribution, infrastructure and other purposes are performed at the Fukushima Robot Test Field (Minamisoma City and Nami Town)
  - Experiment using drones to transport blood products for transfusions was performed by Tokyo Metropolitan Keitak Hospital.

- **Healthcare-related industries**
  Opening up markets for businesses by supporting technological development
  - Supporting the development of new medicine and diagnostic agents for diseases which focus on cancer (Translational Research Center, Fukushima City)
  - Integrating support from the development through to the commercialization of medical devices (Fukushima Medical Device Development Support Centre, Koriyama City)

- **Energy, the Environment and Recycling**
  Establishment of advanced renewable energy and recycling technologies
  - Fukushima Hydrogen Energy Research Field (FH2R) (Namie Town) is the world’s largest facility for producing hydrogen derived from renewable energy. Hydrogen produced at FH2R is used in fuel cells installed in Prefectural Azuma Sports Park and J-Village. Electricity is supplied to both of these facilities.

- **Aerospace industries**
  Demonstrations of “flying cars” and attracting related companies
  - Development of flying cars by SkyDrive Inc., a company which has a research room in the Fukushima Robot Test Field
  - Full-size model of the asteroid explorer, Hayabusa 2, was exhibited at the Robot and Aerospace Festa in Fukushima in 2019. Companies in Fukushima greatly contributed in developing its parts. (November 2019, at BIG PALETTE FUKUSHIMA)
Initiatives towards the realization of the framework

**Clustering of industries**
- Creation of industrial complex and promoting business investment
- Offering various consulting services for companies aiming to commercialize

**Fostering human resources in education**
- Kindai University and Kawai Town contributed to realizing the growing of "Anthurium, The Flower of Kawai" in the Revitalization Knowledge Project
- "Innovation Human Resources Development Project" Soma High School working together with College of Engineering, Nihon University

**Expanding the non-resident population**
- "Mieru-ka Caravan" PR Caravan-Visitable Fukushima Innovation Coast Framework demonstrating advanced technologies and holding seminars for local residents
- In FY2019, a model tour was planned and held as well as a booklet was created

**New establishment for the Fukushima Innovation Coast Framework Promotion Organization - "Support office matching decommissioning-related industries in Fukushima"**

**Spreading information**
- Passing down the records and lessons learnt from the compound disaster to future generations

**Re-establishment of the living environment**
- Creating an environment necessary for people to safely live
  - Development is progressing for public infrastructure
    - Tohoku Chuo Expressway
    - Joban Expressway
    - JR Joban Line
    - Preparation to operate a shuttle bus between the Fukushima Robot Test Field and Fukushima station etc.

**The Great East Japan Earthquake and Nuclear Disaster Memorial Museum opened in the autumn of 2020**
- We collect and archive mainly nuclear disaster related materials and use them for displays and presentations, research and training. By disseminating information, we prevent memories of the disaster from fading and help with disaster reduction and prevention.
- Visitors can relive the experience by listening to "the talks of storytellers", firsthand stories of victims who have experienced the compound disaster.

**Fukushima Robot Test Field's first training exercise was conducted on the assumption of removing fuel from the reactors at the TEPCO Fukushima Daiichi Nuclear Power Station**
- TEPCO conducted training for the removal of fuel from the Fukushima Daiichi Nuclear Power Station (1F) Unit 2 spent fuel pool. They used a submersible remotely operated vehicle with an underwater camera in the indoor water tank building at the Fukushima Robot Test Field. It was the first training exercise for decommissioning work at 1F.

**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 along with establishing an international education research hub.
(8) Efforts towards decommissioning

The current decommissioning status of TEPCO’s Fukushima Daiichi (F1) and Daini (F2) Nuclear Power Stations (NPS) and disposal of tritiated water

Current situation and outlook for the F1NPS Units 1 to 4 (Units 5&6 are in cold shutdown)

Disposal of treated water containing tritium at F1NPS

◆ About the tritium containing treated water
  - The generation of contaminated water was reduced from approx. 540m³/day (May. 2014) to approx. 180m³ (average in FY2019) by the implementation of a multi-layered approach including: pumping up groundwater by Subdrain and installing the Land-side frozen soil wall. However, the treated water which is created by purifying the contaminated water is being generated continuously. Therefore, the tanks expected to reach full capacity in summer 2022, and appropriate space to install additional tanks is limited.

◆ Disposal Method
  According to a report by the Subcommittee on Handling of the ALPS Treated Water, two methods were proposed: ① Discharge into the Sea ② Vaporization into the atmosphere. Prevention of reputational damage was also considered.

  Also, based on the report, the government is holding hearings with a wide variety of people such as local governments and agriculture, forestry, fisheries operators.

Reference
Revision of the Mid-and-Long-Term Roadmap was approved at the national Inter-Ministerial Council for Contaminated Water and Decommissioning Issues (27 Dec. 2019)

Main revisions
- Fuel debris → Start trial retrieval from the first unit (Unit 2) by 2021
- Fuel removal from the spent fuel pool → Complete fuel removal from Unit 1 through 6 by 2031

The decision has been made to decommission F2NPS

TEPCO submitted a notice for decommissioning of all reactors at the F2NPS (Units 1 to 4) to the Minister of the Economy, Trade, and Industry in Sep. 2019

<Decommissioning Process>

The period to complete the decommissioning of the reactors is expected to be 44 years. The complete process will be divided into 4 stages to carry out the decommissioning.

Challenges and Responses
- It is necessary to have continuous surveillance carried out by the association for monitoring of safety in decommissioning to ensure decommissioning progresses steadily and safely.
- Requests to the national government and TEPCO (The handling of treated water containing tritium):
  ① Responsibly work to present clear measures against harmful rumours and spread accurate information about tritium.
  ② Work not to generate new harmful rumours towards the Prefecture's agriculture, forestry, and fisheries industry and tourism industry due to the handling of the treated water.
  ③ Carefully hear opinions from a wide variety of people such as agriculture, forestry, and fisheries operators or local governments.

Source: Ministry of Economy, Trade and Industry

Tanks at F1NPS

Current situation of treated water at F1NPS (as of 25 June, 2020)
Number of tanks: 1,006 tanks
Storage volume in the tanks approx. 1,21 million m³

(Source: The Subcommittee on Handling of the ALPS Treated Water Report 10 Feb. 2020)
I Impact

Direct impact caused by the prevention of the spread of COVID-19

Suspension and postponement of various events, etc.
- Postponement of World Robot Summit and other events
- Postponement of the Tokyo 2020 Olympic Torch Relay and suspension of other traditional events
- Cancellation of tours visiting disaster-affected areas, etc.

Suspension of construction work to build facilities and extension of the construction period
- Suspension of construction work caused by contractors suspending business
- Extension of the construction period caused by the delay of materials being delivered, etc.

Impact on the commerce and agriculture industry
- Large decrease in sales of business operators who reopened for business in the disaster-affected areas
- Large impact on business operators in keeping employees
- Demand remains low for flowers such as medalists' bouquets for Tokyo 2020 Olympic and Paralympic Games, etc.

Restriction on activities to support disaster-affected people
- Temporary closure of a base supporting the rebuilding of livelihoods outside the Prefecture
- Postponement of visits to disaster-affected people and disaster-affected companies, etc.

II Medical treatment systems to treat COVID-19 (Fukushima model)

Number of beds secured (Results)

<table>
<thead>
<tr>
<th>Severe symptoms (Beds)</th>
<th>Moderate - Mild symptoms (Beds)</th>
<th>No symptoms</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>214</td>
<td>300</td>
<td>529</td>
</tr>
<tr>
<td>Total</td>
<td>229</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of infected people: 109
Number of deaths: 0
(As of 2020.8.18)

- Properly dividing the roles of medical facilities and accommodation facilities for medical care. Also, creating a system that allows patients who tested positive for COVID-19 to receive medical care depending on their symptoms (Taking measures to have even mild patients hospitalized).
- Fukushima Medical University Hospital is treating severe patients or patients with worsening conditions

- Securing PCR test capacity of 570 cases per day in order not to have patients wait to take the test.

- Establishment of local outpatient facilities (Outpatient facilities for patients with fever): Providing medical treatment for patients with fevers and reducing the burden of outpatient facilities for returnees and potential contacts.

- The Prefectural medical management headquarters manages the transferring of patients over a wide-area and patients who have a risk of worsening conditions. The Headquarters also supply and deliver medical goods needed for medical treatment

- Requesting the cooperation of fire services and concluding a comprehensive agreement with all the public health centres and fire services in the Prefecture. Securing a stable and wide-area transfer system

- Making use of the "Kibitan Healthcare Network", a medical information network which connects related medical care facilities with accommodation facilities for patients. Quickly sharing medical information such as diagnostic imaging results from CT and MRI scans.

- Being the first in the country to support medical facilities treating COVID-19 patients by compensating for unused hospital beds

III Economic measures

- In addition to the national government’s measures, the Prefecture is implementing its own initiatives in order to advance both the enhancement of medical treatment systems and the recovery of the prefectural economy in stages.
  - Securing beds for inpatients
  - Providing financial payments to business operators who cooperated with the request to shutdown business for infection prevention measures
  - Providing financing support for small and medium sized companies
  - Providing support by offering discount hotel charges toward the recovery of tourism demand
  - Promoting equipment installations to enhance the supply chains of small and medium sized companies
  - Providing medical expenses or allowance to support healthcare related workers
  - Supporting events, etc. that follow the “New Lifestyle”, etc.

- Implementing efforts in revitalization and reconstruction simultaneously with infection prevention measures and recovery of the economy

Three crises impacting revitalization and reconstruction which were caused by the matters mentioned above

People in the Prefecture who have been helping in the revitalization efforts after experiencing multiple disasters could be discouraged

People will not be able to understand the revitalization efforts due to the cancellations of events and ceremonies

People who are engaged in revitalization efforts and supporters, etc. will not be able to do activities with local people at actual places
(9) Damage caused by Typhoon Hagibis and its enormous impact on revitalization

Damage caused by Typhoon Hagibis (As of Jul. 14, 2020)

- Deaths: 38 (including 6 disaster-related deaths)
- Evacuees: 4,690
- Housing damage: Totally destroyed 1,470 houses, Partially destroyed 12,311 houses.
- Public infrastructure facilities disaster assessment: approx. JPY 89 billion
- Damage to agriculture, forestry and fisheries industries: approx. JPY 63.6 billion
- Damage to commerce and Industry: JPY 93 billion
- Damage to the Prefecture’s cultural properties: approx. JPY 0.5 million
- Damage to Social and educational facilities: approx. JPY 2 billion
- Evacuees: 4,690
- Damage to commerce and Industry: JPY 93 billion

Fukushima Pref. Govt. initial budget in FY2020 for Typhoon Hagibis: JPY 58.8 billion

【Details】
- Restoration and Maintenance Subsidy Project for Facilities of Small and Medium Enterprise Groups: JPY 9.1 billion
- Public infrastructure (Agriculture, Forestry and Fishery Department, Public Works Department): JPY 42.7 billion
- Business continuity support project: JPY 0.5 billion

Route 138 (Sukagawa City)

Before re-construction

After re-construction

【Supporting aid】

- 【Disaster-affected residents】
  Counselling for everyday life, checking in with members of the community as part of isolation prevention
- 【Disaster-affected companies】
  Subsidies for supporting enterprise groups, sustaining small businesses, etc. to support resumption of business and disaster prevention.
- 【Agricultural, forestry and fisheries workers】
  Supporting the restoration of agricultural machinery and the resumption of farming
- 【Tourism companies】
  Attracting tourists through "fukko-wari" reconstruction discounts.

【Challenges and Responses】

- Early resumption of full-scale operations of disaster affected companies.
  ※Of those that have resumed businesses which were affected, approx. 40% operate partially in the Koriyama Central Industrial Park. (As of Jan. 2020)
- Early restoration of agricultural facilities to resume farming
- Developing disaster-resistant communities which can withstand intense and frequently occurring disasters by promoting disaster prevention measures, disaster mitigation, and building national land resilience
2 Going forward

While firmly handling the impact of COVID-19 and other problems, the Prefecture is continuing to proceed with revitalization and move forward to the next phase.

The Basic Policy for Reconstruction from the Great East Japan Earthquake after the end of the Reconstruction and Revitalization Period was approved in a cabinet meeting on 20 Dec. 2019

Enactment of the "Act Partially Amending the Act for Establishment of the Reconstruction Agency, etc." on 5 June, 2020

[Revitalization framework after the end of the Reconstruction and Revitalization Period]

- Extending the Reconstruction Agency’s installation period by 10 more years to maintain comprehensive coordinating ability.
- Continuing a special financial account for reconstruction and revitalization from the Great East Japan Earthquake.
- Promoting the return of people to areas they evacuated from as well as the relocation of people outside the prefecture. Also, accelerating the resuming of farming.
- Developing the clustering of industries which centers around the promotion of the Fukushima Innovation Coast Framework as well as dealing with harmful rumors.

- Due to the cancellations of events for revitalization and traditional events, there is an impact towards the fading of memories and towards communities of disaster-affected residents.
- With the demand remaining low for the Prefecture's agricultural products and a decrease in sales of restaurants, the commerce and agriculture industry operators are impacted.
- Due to unemployment and other problems, rebuilding the livelihoods of disaster-affected residents is impacted.

To be fully opened on 31 Mar. 2020

Fukushima Robot Test Field

Proceeding with the revitalization through the national government’s support.

- Enhancing medical treatment systems to secure residents’ physical and mental health.
- Rebuilding the livelihoods of residents affected by the disaster.
- Stimulating demand in tourism.
- Supporting small and medium sized companies
- Supporting agricultural, forestry and fisheries workers, etc.

Immediate and steady support to answer the needs of disaster-affected residents and companies.

Start drawing up a comprehensive plan based on input from Fukushima residents.

Together with the revitalization and the reconstruction of the region, the Prefecture is moving forward to the next phase.