

Progress of Reconstruction in FDNPS surrounding area

Ministry of Economy, Trade and
Industry (METI)

September 2022



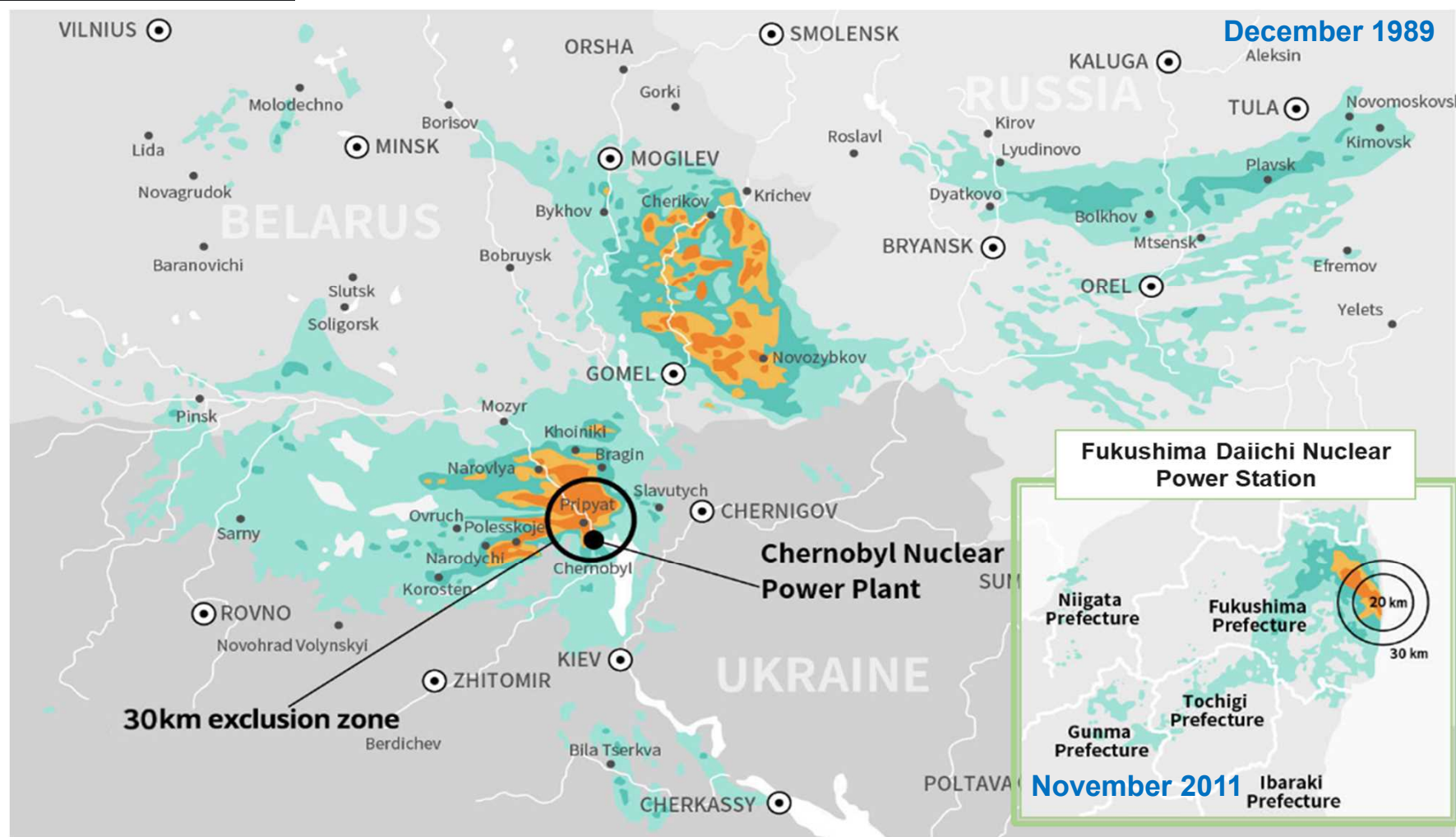
Agenda

1. Current Status of Fukushima Daiichi NPS Surrounding Area
2. Progress of Reconstruction
3. Next Step

1. Current Status of Fukushima Daiichi NPS Surrounding Area

Comparison of the Scale of Nuclear Power Plant Accidents Between Chernobyl & Fukushima Daiichi NPS

- The amount of cesium and iodine released at Fukushima Daiichi were around 10–40% of Chernobyl. Radionuclides with long half-lives such as plutonium were only around 0.02–0.1%.
- Compared to the Chernobyl, the Fukushima Daiichi has a small-scale high-concentration contaminated area.



Cs-137 deposition (kBq/m²)

More than 3,700 1,480–3,700 555–1,480
185–555 37–185

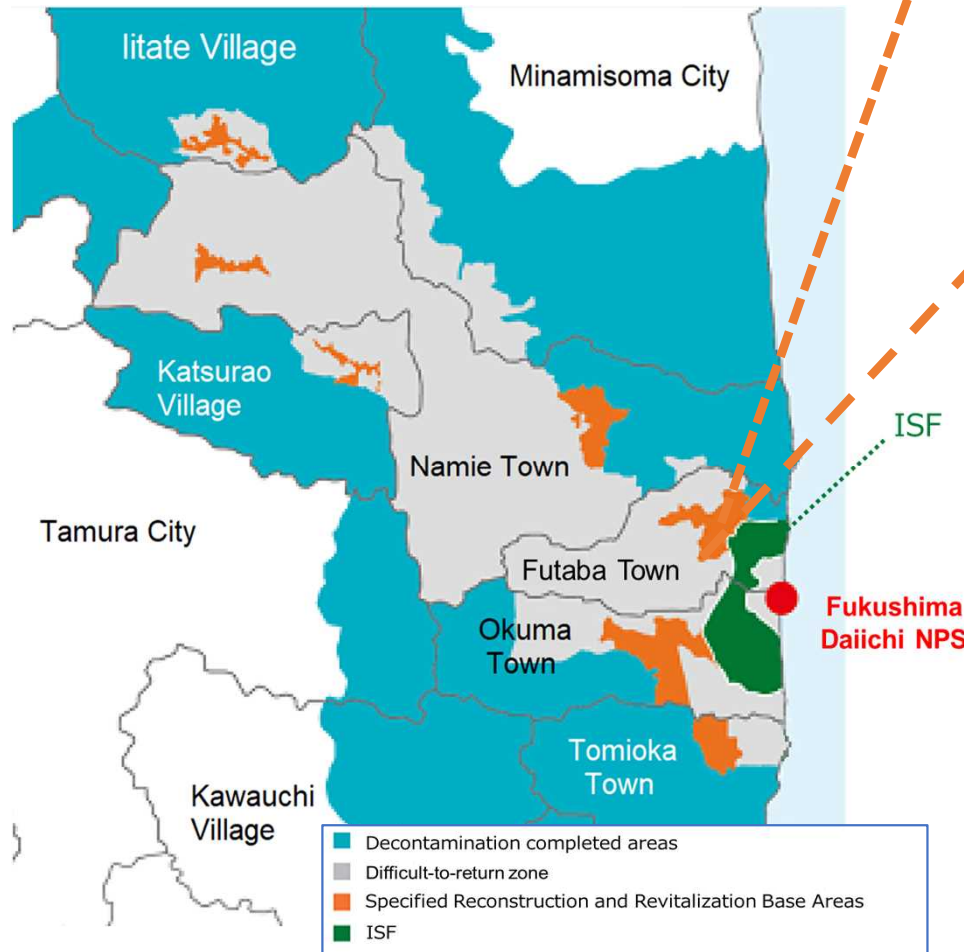
※ Same Scale

Referenced from: Reconstruction Agency website
https://fukushima-updates.reconstruction.go.jp/en/faq/fk_200.html

Progress of Disaster Recovery

Decontamination Work and Construction of interim storage facility(ISF)

- ISF is installed to manage and store the soil and waste generated from off site decontamination work as well as the specified waste (> 100,000 Bq /kg) intensively and safely until the final disposal.



Development of Specified Reconstruction and Revitalization Base Areas



The Base area in Futaba Town where the Fukushima Daiichi NPS is located

- As radiation doses have decreased in some Restricted Areas, the GOJ has developed "Specified Reconstruction and Revitalization Base Areas" with the aim of lifting evacuation orders and permitting inhabitation.

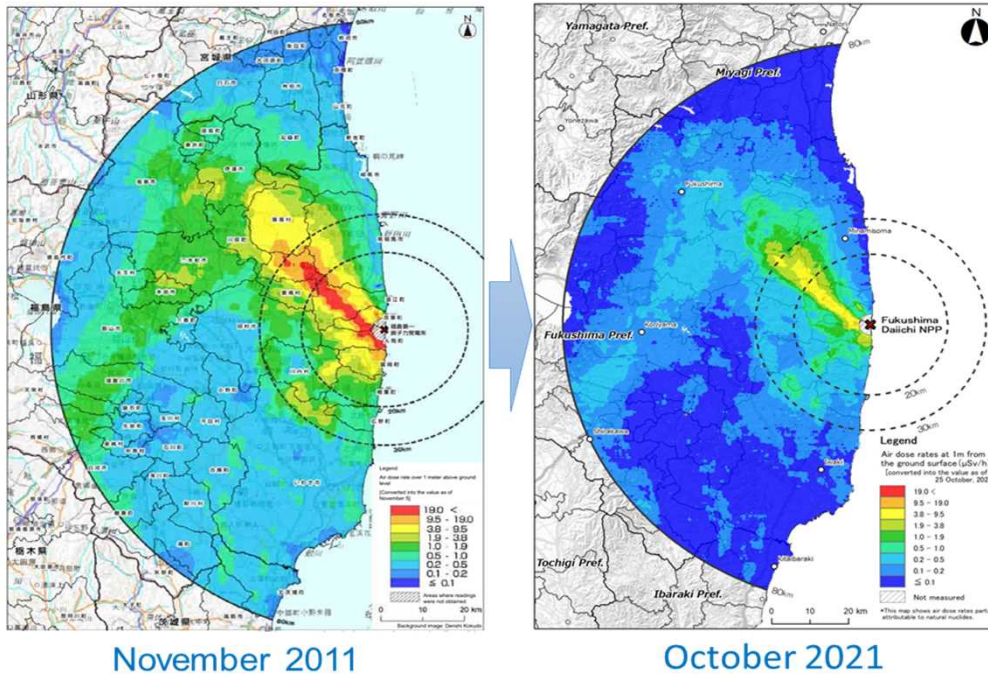
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Katsurao Village, Okuma Town, Futaba Town

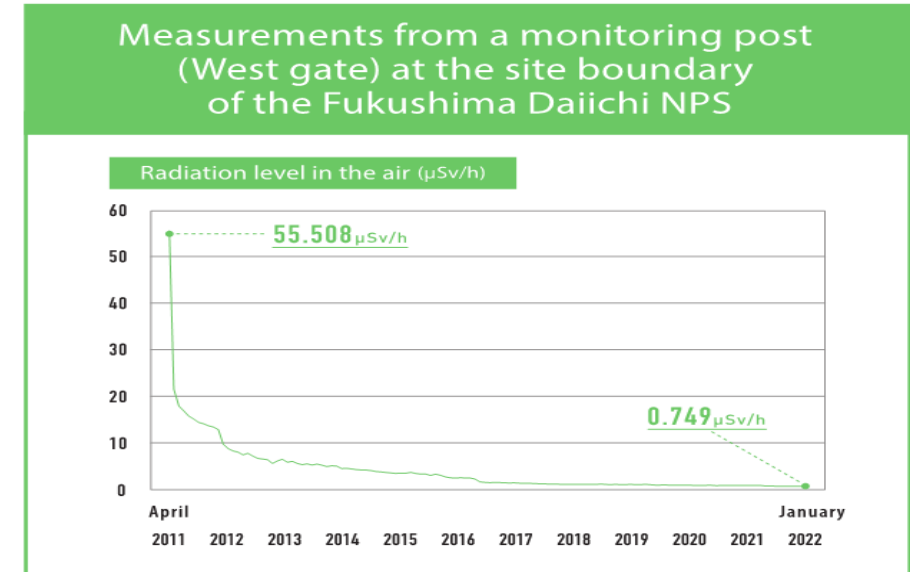
< 2023 spring >

Tomioka Town, Namie Town, Iitate Village

Changing Air Dose Rate and Lifting Evacuation Order



- Average air dose rate decreased by 80% compared to in November 2011. (within 80km from Fukushima Daiichi NPS)



* Changes in monthly average levels measured at a monitoring post (MP5) at the site boundary of the Fukushima Daiichi NPS

- Radiation levels at the site boundary have sufficiently decreased compared to levels immediately after the accident.

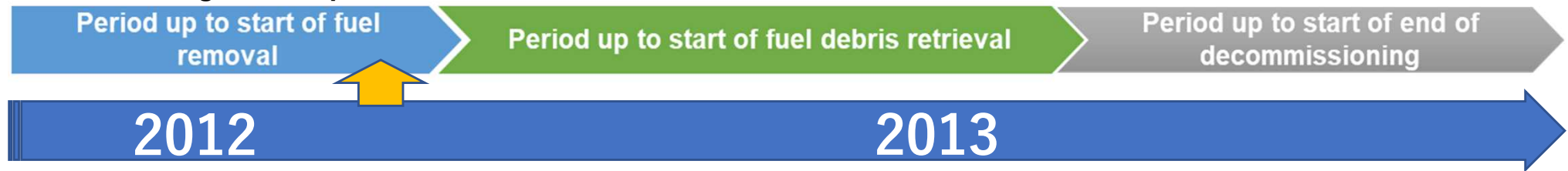
	maximum figures	Current status
Areas under evacuation orders	1,150 km ² August 2013	327 km ² (28%) As of June 2022
The number of evacuees in Fukushima Prefecture	164,865 May 2012	30,231 As of May 2022

2. Progress of Reconstruction

- In Parallel with Decommissioning -

Progress of Reconstruction (2012~2013)

Decommissioning Roadmap



- Unit 4: Removal of rubble on reactor building roof completed (Oct)

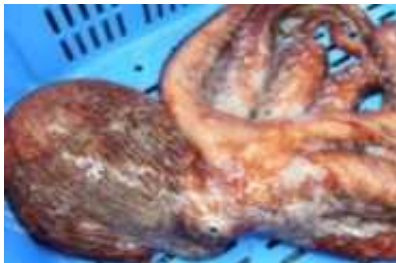


- Unit 4: Fuel removal from spent fuel pool and transfer to common pool started (Nov)
- Test operation of multi-nuclide removal equipment (ALPS) started (Mar)

- First commercial fishing resumed in Fukushima offshore



Snow crab



Yanagi octopus



Japanese flying squid

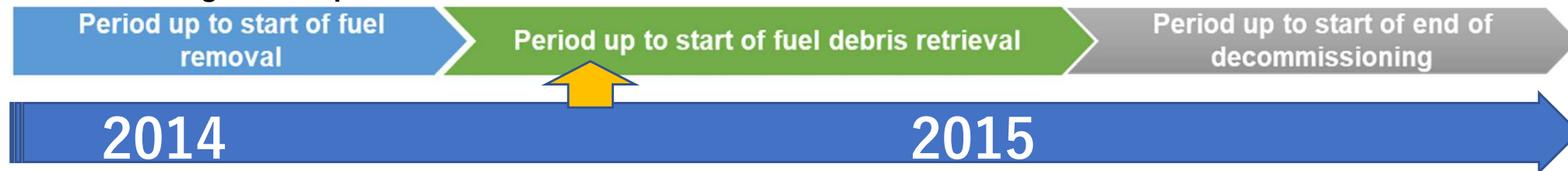
- First normal rice growing resumed in previously restricted areas



Photo: Paddy fields in Tamura City
(Shooting date: June 4, 2013)

Progress of Reconstruction (2014~2015)

Decommissioning Roadmap



- Unit 4: Fuel removal (1,535 assemblies) from spent fuel pool completed (Dec)



- Sub-drain pumping and discharge started (Sep)
- Sea-side impermeable wall closed (Oct)
- Unit 3: Removal of large rubble (fuel handling machine) from spent fuel pools completed (Aug)

- Evacuation order lifted for the first time in some areas (Tamura City)



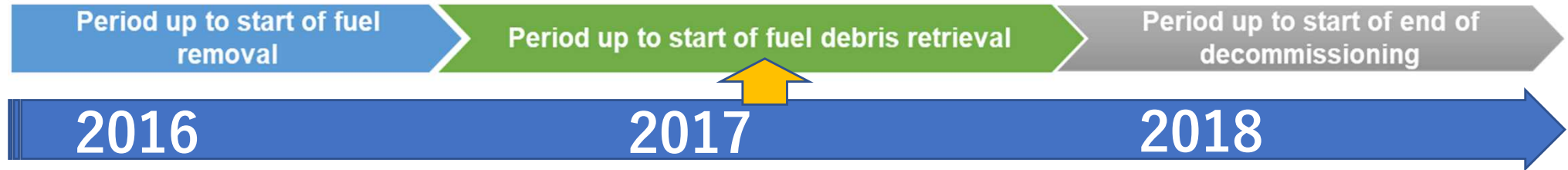
Reopening of school

- Joban Expressway is fully reopened (major arterial road in the disaster area)

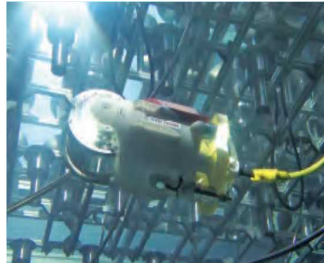


Progress of Reconstruction (2016~2018)

Decommissioning Roadmap



- Unit 1: Removal of wall panels of the building cover completed



- Unit 3: Lower part of RPV surveyed (Jul)

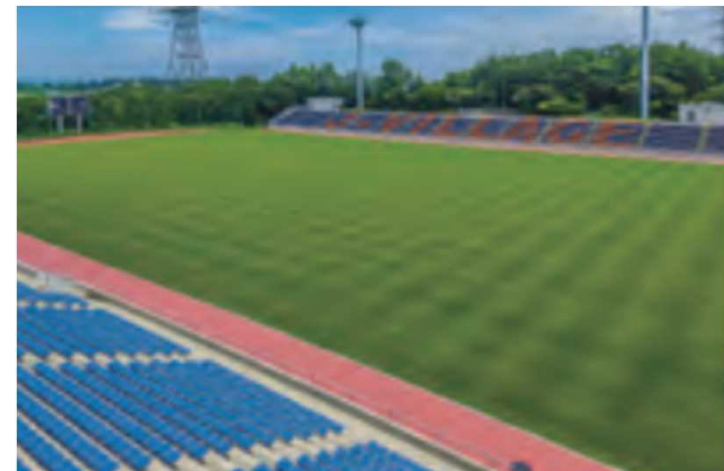
- Frozen-soil land-side impermeable wall Completed. 5–6 m gap in groundwater level created on the mountain side
- Generation of contaminated water reduced to one-third of the amount before (from 540 m³ to 170 m³/day)

➤ Fukushima Robot Test Field in service



(fully opened in 2020 after a phase-in)

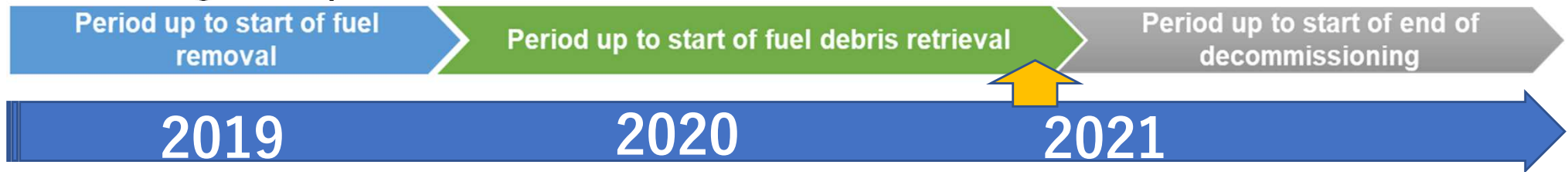
➤ J-Village reopened



(fully opened in 2019)

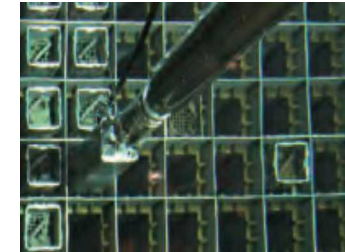
Progress of Reconstruction (2019~2021)

Decommissioning Roadmap



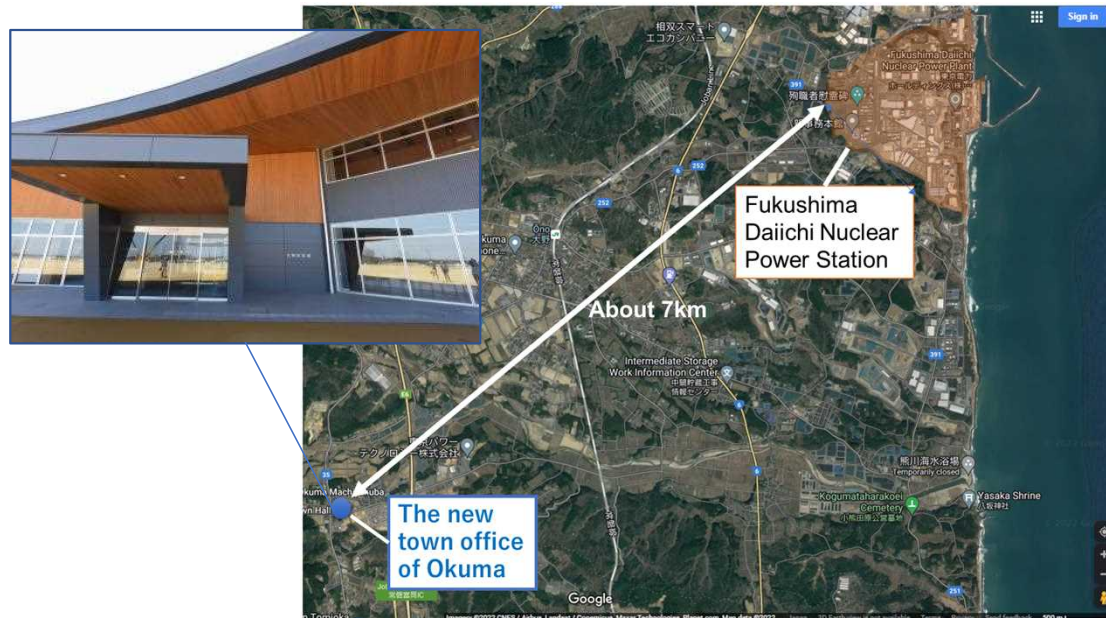
- Unit 3: Fuel removal from spent fuel pool started (Apr)

- Complete the treatment of stagnant water in buildings
- Generation of contaminated water reduced to 140 m³/day



- Unit3: Removal of all 566 fuel assemblies completed (Feb)

- Evaluation order partially lifted in Okuma Town where the Fukushima Daiichi NPS is located, allowing municipal services to start at a new town hall building



- Fukushima Hydrogen Energy Research Field opened



Referenced from:
https://www.nedo.go.jp/news/press/AA5_101293.html

3. Next Step

Revival of Ukedo fishery harbor

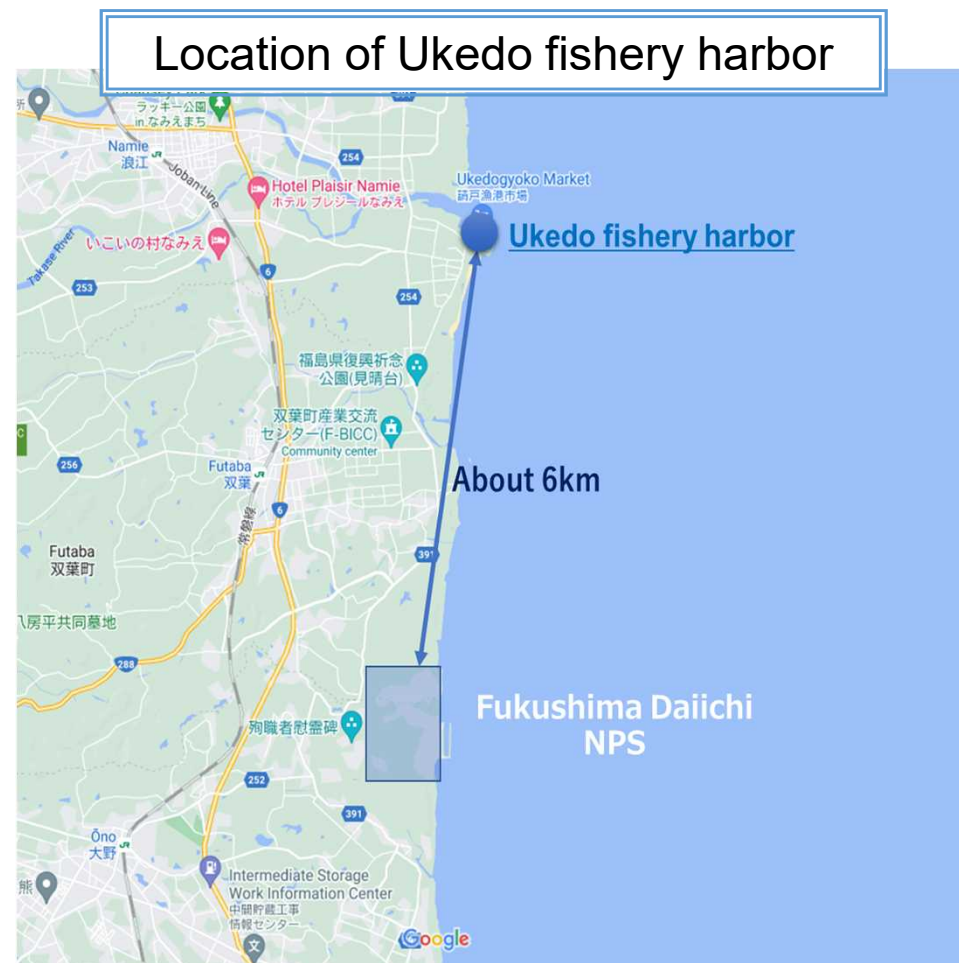
- Industries including fisheries are also revitalized. Fish auction in the Ukedo fishery harbor, 6 km far from Fukushima Daiichi NPS was resumed in April 2020.
- The restoration of the fishery harbor was completed in November 2021.



Auction at Ukedo fishery harbor



Ukedo fishing harbor New Year's Departure Ceremony

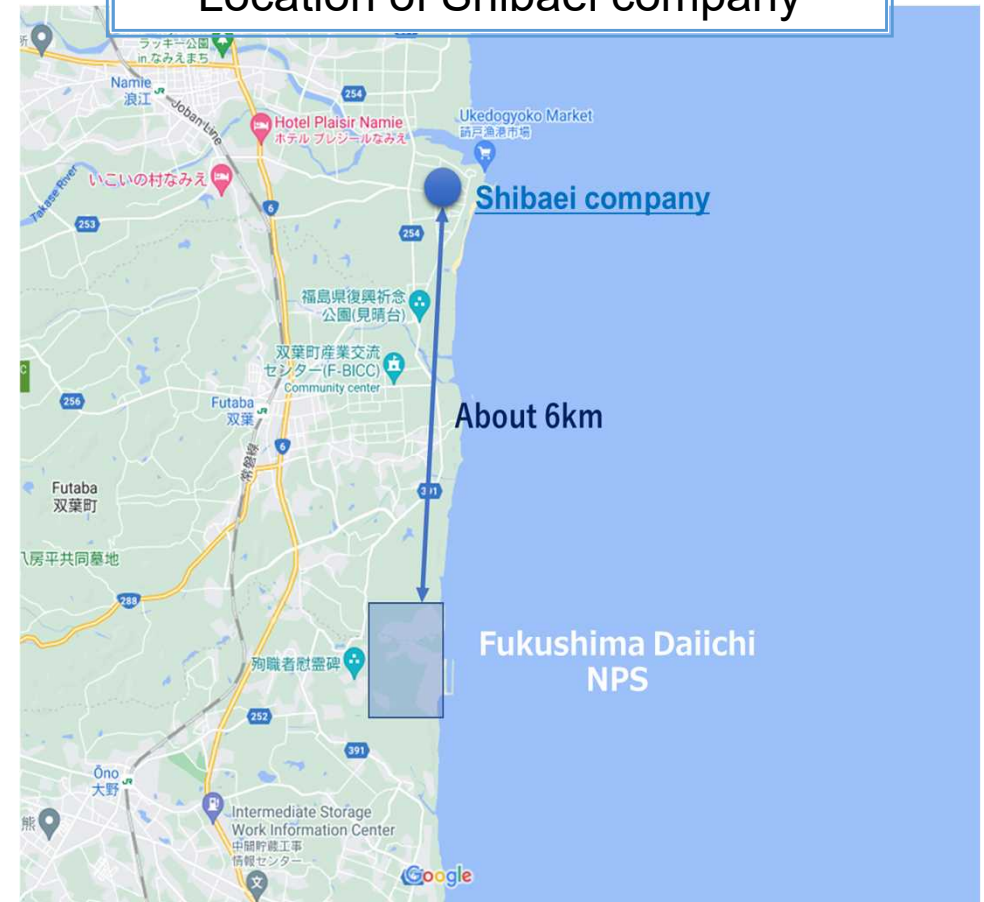


Marine product processing Industries

- A marine product processing company, Shibaei, resumed its business in 2020. The new factory was constructed nearby Ukedo harbor in February 2020.



Location of Shibaei company



Revival of Tradisional Sakura Festival and Gathering People

- In April 2022, Yonomori Sakura Festival was held in Tomioka, another town near the Fukushima Daiichi NPS.
- A row of beautiful cherry blossoms trees was loved by many people.



Promoting New Industries and Innovation (the Fukushima Innovation Coast Framework)

- According to the new policy concept, GoJ aims to create new industries (6 areas) and innovation in the coastal Fukushima (Hamadori).
- GoJ establish new research institute in coastal Fukushima in April 2023.



Fukushima Institute for Research, Education and Innovation (F-REI)

Functions

(1) Research and development

- ① robotics
- ② agriculture, forestry and fisheries
- ③ energy
- ④ radiation science
- ⑤ collection/dissemination of knowledge/ data related to the nuclear disaster

(2) Human resources development

- ❑ Promote human resources development for graduate students, etc.
- ❑ Cooperation with international organization

Thank you for your support for Fukushima

More info from here

<https://www.meti.go.jp/english/earthquake/index.html>