

Steps for Revitalization in Fukushima

< December 5, 2016 >





The Great East Japan Earthquake occurred on 11 March, 2011 at 14:46. Centered off the Sanriku coast in North Eastern Japan, its magnitude was a record high of M9.0, measuring a 7 on the JMA seismic intensity scale. Heavy shaking resulted in a large tsunami that struck a wide area along the coast.

Disaster status after the earthquake and tsunami

<Disaster status in Fukushima Prefecture> As of 2016.11.28

- ◆ **Deaths : 3,927**
(This number includes 2,099 disaster-related deaths(※1))
 - ◆ **Missing: 3** (※2)
- (※1) Disaster-related deaths are not caused directly by the disaster, but occur afterwards due to indirect causes including stress and decline in health from living as evacuees. (※2) For the 227 people missing, 224 have had death notifications issued, and are counted as deaths.

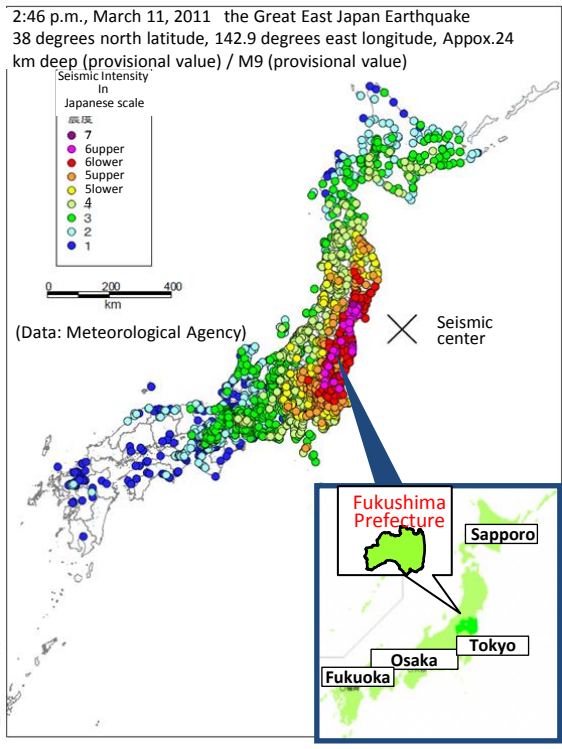
<Cost of damage in Fukushima prefecture> As of 2012.3.23

- ◆ Reported cost of damage for **public works facilities**: **About JPY 316.2 billion**
- ◆ Reported amount of damage on **agricultural, forestry and fishery facilities**: **About JPY 245.3 billion**
- ◆ Reported amount of damage on **educational facilities**: **About JPY 37.9 billion**
- ◆ **Total of reported amount of damage on public facilities**: **About JPY 599.4 billion**

※Areas under the jurisdiction of the prefectural government: for the 30km radius surrounding the Fukushima Daiichi Nuclear Power Station (F1NPS), damage costs were estimated based on aerial photographs.

※Areas under the jurisdiction of municipalities: Excludes approximate cost of damage for a part of Minamisoma City and 8 municipalities located in the Futaba area.

【data source】
Land Rehabilitation & Development Group, Fukushima Restoration & Revitalization Headquarter for Great East Japan Earthquake



Iwaki city



A drainage facility in Soma city



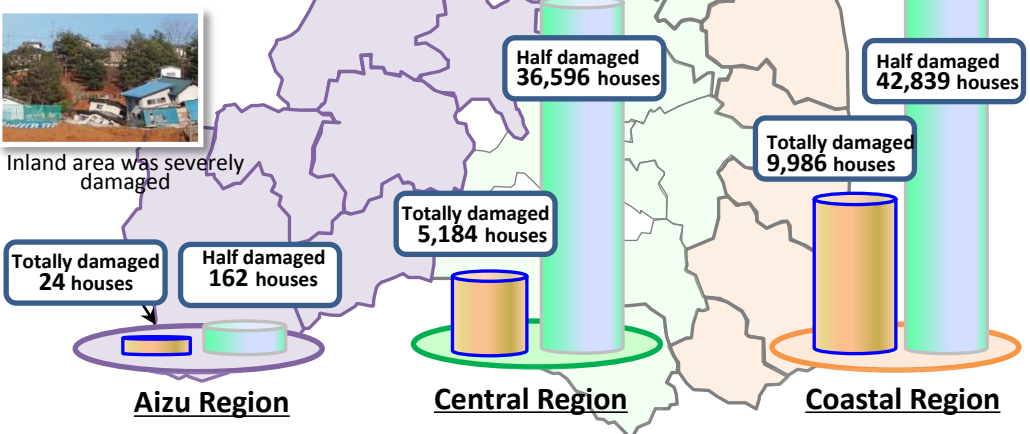
Shirakawa-Toba line



Iwase Agriculture High School in Kagamiishi town

Status of housing damage by region

- <Damage status> As of 2016.11.28
- ◆ **Totally damaged: 15,194** housing facilities
 - ◆ **Half damaged: 79,597** housing facilities



Extensive damage caused by Tsunami



Status of housing damage (Ukedo district, Namie Town)

Evacuees peaked in May, 2012 with 164,865, then gradually decreased. As of January, 2016, the number declined to below 100,000, but still many people continue to evacuate. In 2015 June, the national government announced the goal to lift evacuation orders for all areas excluding 'Difficult-to-return zone' (pink color portion of the map). Along with the progress of lifting evacuation orders, restoration of infrastructure and development of commercial facilities are ongoing in preparation for the return of residents.

Areas to which evacuation orders have been issued in the wake of nuclear power station (NPS) accident

[2011.3.11]

- ◆ Evacuation order was issued for 3 km radius zone from the Daiichi NPS.
- ◆ On the same day, indoor evacuation was issued for 10 km radius zone.

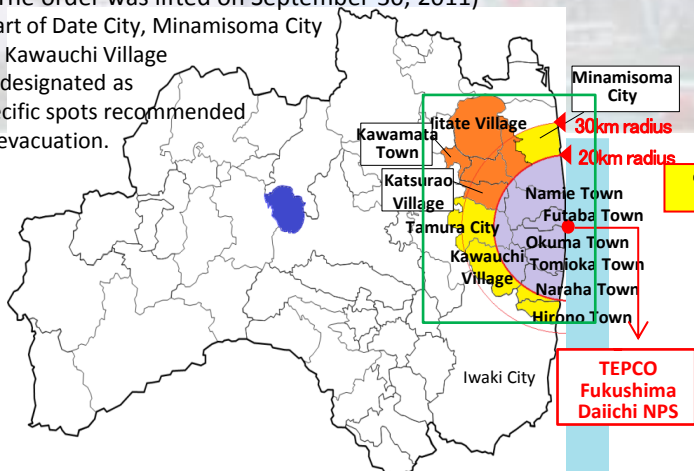
[2011.3.12]

- ◆ Evacuation order was issued for 10 km radius zone from the NPS.
- ◆ On the same day evacuation order was issued for 20 km radius zone.
- ◆ Evacuation order was issued for 3 km radius zone from the Daini NPS.
- ◆ Evacuation order was issued for 10 km radius zone on the same day.

[2011.4.22]

- Evacuation-designated areas (Restricted areas)
- Deliberate evacuation areas
- Emergency evacuation preparation areas (The order was lifted on September 30, 2011)

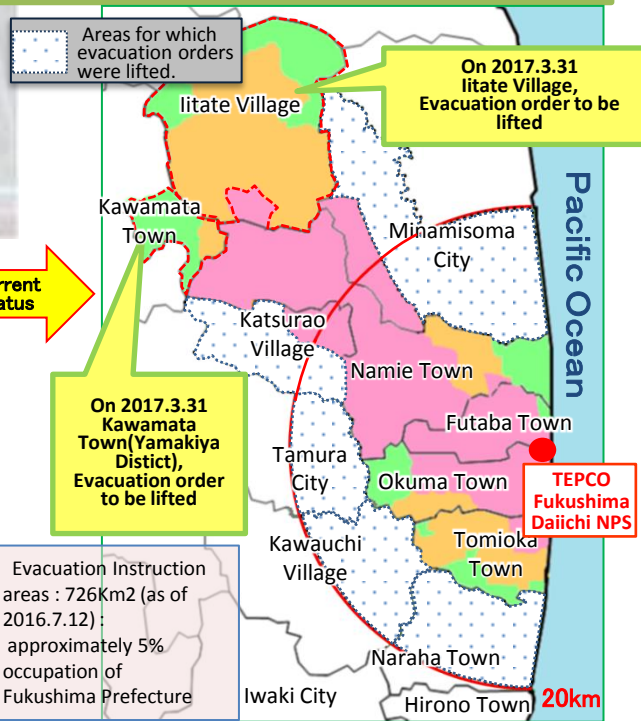
※Part of Date City, Minamisoma City and Kawauchi Village are designated as specific spots recommended for evacuation.



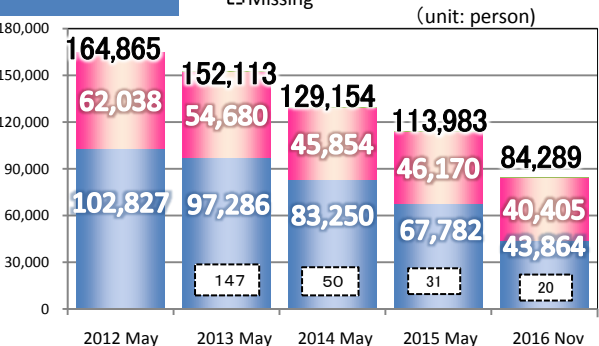
Difficult-to-return zone	<ul style="list-style-type: none"> • Annual integrated doses are over 50mSv • Entry is prohibited with some exceptions • Lodging is prohibited.
Restricted residence zone	<ul style="list-style-type: none"> • Annual integrated doses are between 20 and 50 mSv. • Entry is permitted, and business operation is partially permitted as well. • Lodging is prohibited with some exceptions.
Evacuation order cancellation preparation zone	<ul style="list-style-type: none"> • Annual integrated doses are below 20 mSv. • Entry is permitted, and business operation is permitted as well • Lodging is prohibited with some exceptions..

Management of 'Difficult-to-return zone'
(pink portion of the map)

The National Government presented an idea on management of the areas on August 31 2016, and declared to lift the evacuation order for the designated areas when hubs for revitalization are almost completed for residency of evacuees in five years of time.



Transition of evacuees



Estimation of population

	Number of households	Population (unit: person)	Population	
			male	female
March 1 2011	721, 535	2, 024, 401	982, 427	1, 041, 974
November 1 2016	743, 836	1, 899, 486	939, 933	959, 553
comparison	22, 301	▲ 124, 915	▲ 42, 494	▲ 82, 421

Efforts for the resumption of J-Village (Hirono Town, Naraha Town)

Fukushima Prefectural Government is addressing the recovery of J-Village which is under suspension due to the disaster. We are planning not only to restore the pre-disaster condition but also build a more attractive facility. For that, we are developing a new accommodation building with all weather training field in a scale of the whole soccer ground to partially resume the operation in summer of 2018 and fully resume in April, 2019.



Press conference on August 29, 2016 for kicking off of the J-Village Revitalization Project



In 2020 Tokyo Olympic games, J-Village will be a training camp for representatives of Japanese male and female soccer players. We are reconstructing a new J-Village which will gain popularity among people as a symbol of revitalization of the prefecture.

In order to provide stable housing for disaster-affected citizens, including evacuees, Fukushima is in the process of installing recovery public housing. The Prefectural Government is responsible for revitalization public housing targeted towards nuclear evacuees and is currently planning to build a total of 4,890 units.

Reconstruction of housing environment

Temporary housing units for evacuees

Evacuees from evacuation areas are available until March 2018.



Provision for evacuees from areas other than evacuation-ordered areas will terminate at the end of March, 2017. Accordingly, the prefectural government started to accept applications for subsidy of renting private apartments for those in need of continued evacuation as to support rebuilding of livelihoods from October 3, 2016.

<Housing environment of disaster-affected citizens >

(As of 2016.10.31)

Temporary housing units built	15,746 units (7,592 units have tenants)
Housings rented by administrations to support affected citizens	11,554 units
Housings reconstructed	21,184 cases (vs 32,256 application, 65.7% progress)

<Developmental situation of Disaster Public Housing >

(As of 2016.10.31)

Classification	Units Planned	Applicable	Completed
For earthquake and tsunami affected people	2,807	For earthquake and tsunami affected people	2,644 units
For nuclear disaster evacuees (Revitalization Public Housing)	4,890	For evacuees from evacuation areas	2,069 units
① For returnees	298	For evacuees from evacuation areas	8 units
② For returnees or For people moving in	107	・For evacuees from evacuation areas ・Voluntary evacuee ・New comers	12 units
③ Fostering-child people	20	Household fostering aged 18 or below child (voluntary evacuees)	20 units

Setting up Futaba Medical Center (tentative name)

The Prefectural Government will develop (tentative name) Futaba Medical Center in Ozuka district, Tomioka Town, in order to secure medical care necessary for the region including the secondary emergency medical care in Futaba county, and support an environment where residents and people engaged in revitalization projects can live and work with peace of mind, from a medical aspect. (intended to be open in April, 2018)



Police efforts to protect disaster-affected citizens

After the disaster, support was received from police officers all around the country. Police have continued efforts to protect evacuees and ensure their safety, including patrols of the disaster affected areas, temporary housing, and recovery public housing. To secure the safe return of residents, police officers have been stationed at Kawachi sub-station, Katsurao sub-station and Odaka sub-station before lifting of the evacuation orders, maintaining peace and security.

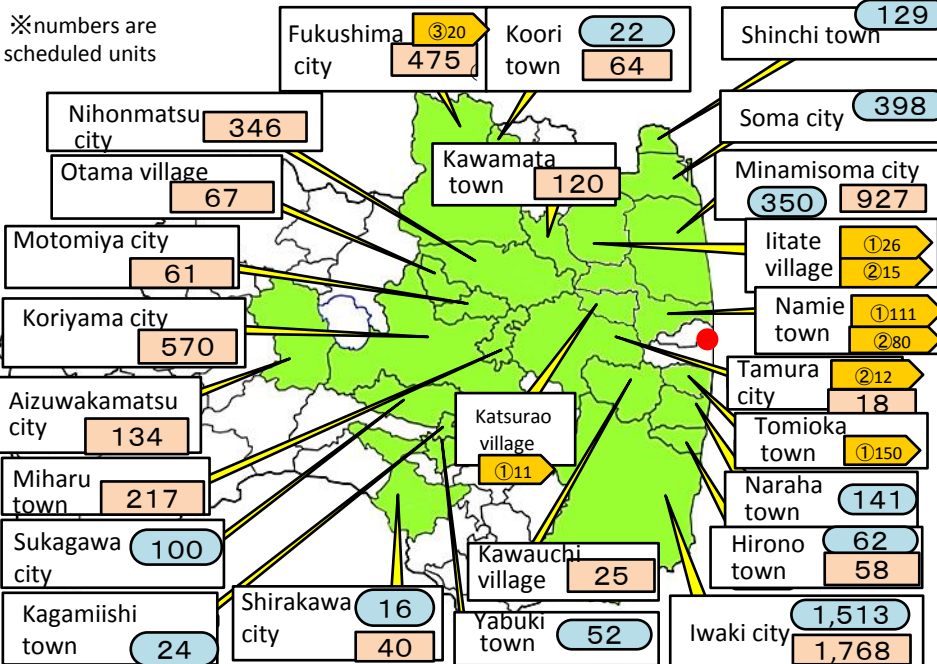


Commercial facilities opened in Namie Town and Tomioka Town.

On October 27, 2016, "Machi Nami Marche" was opened, and later on November 25, "Sakura Mall Tomioka" was opened. The openings were expected to improve convenience of residents returning home, in the perspective of lifting of evacuation orders in the future.



※numbers are scheduled units



Introduced an app to support returnees

Providing useful information for those living in evacuated areas and nearby municipalities. New functions are added in Dec 2016.



Taking care of evacuees

300 life support counsellors have been assigned to social welfare councils in 27 municipalities throughout the prefecture (as of 2016.11.01)

In addition to taking care of elderly and preventing isolation, they are also actively involved in working to help with relieving residents' health worries.



Support for recovery of evacuees' livelihoods

We established "Livelihoods Recovery Support Centers" in 25 spots around Japan in 2016 to help evacuees outside the prefecture collect information or get consultation for their return or rebuilding of livelihoods in communities.

Providing them with information for rebuilding of livelihoods through face-to-face interviews, individual phone consultation and exchange sessions.

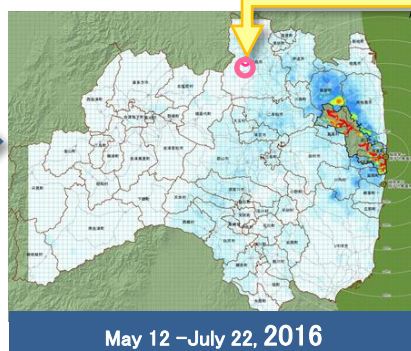
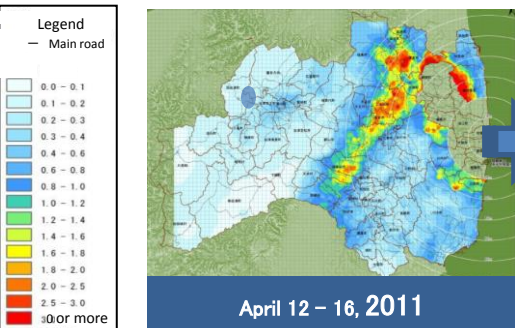




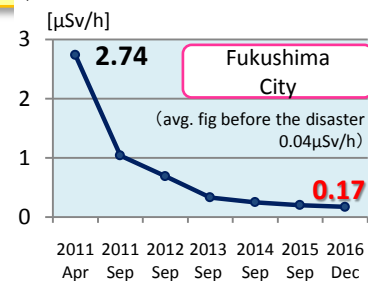
The air radiation dose rates within the prefecture have significantly decreased since April, 2011. In addition to this, steady progress has been made in the decontamination of housing and other areas.

Transition of air radiation dose in Fukushima Prefecture

◆ Radiation dose level map covering the whole area of the prefecture based on the monitoring mesh survey of environmental radiation by Fukushima Prefecture.



◆ Transition of measurements



【Source】 Fukushima Prefecture Disaster prevention Headquarters (provisional value)

[Unit: μSv/h]

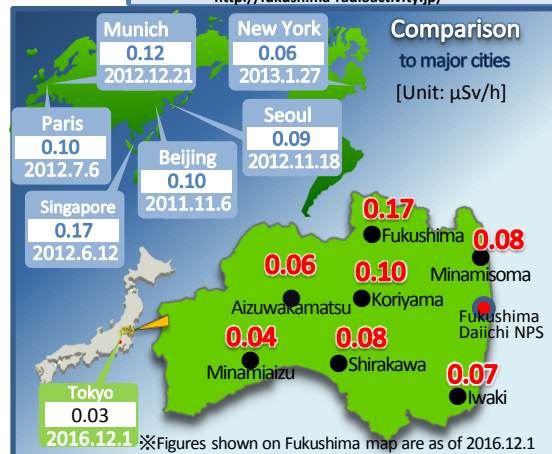
	Fukushima City	Aizuwakamatsu City	Iwaki City
Pre - disaster	0.04	0.04~0.05	0.05~0.06
Apr2011	2.74	0.24	0.66
Sep2011	1.04	0.13	0.18
Sep2012	0.69	0.10	0.10
Sep2013	0.33	0.07	0.09
Sep2014	0.25	0.07	0.08
Dec2016	0.17	0.06	0.07

«Reference»
Data source: SafeCast

- Seoul, South Korea **0.09μSv/h** (As of Nov.18,2012)
- Beijing, China **0.10μSv/h** (As of Nov.6,2011)
- Munich, Germany **0.12μSv/h** (As of Dec.21,2012)
- New York, U.S.A. **0.06μSv/h** (As of Jan.27,2013)

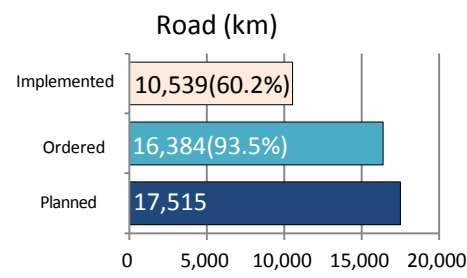
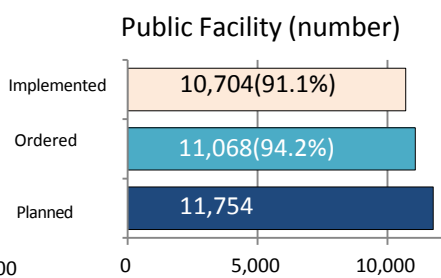
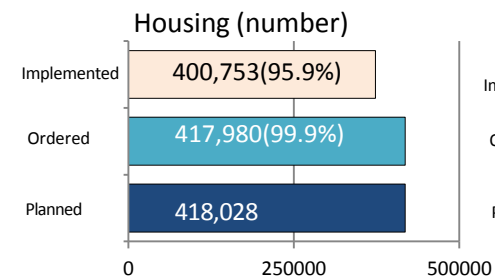
World Map of radiation measurements

Shown on home page of the prefectural government, releasing results of measurements in major cities in the world
<http://fukushima-radioactivity.jp/>



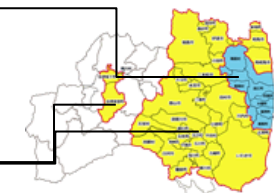
Decontamination Progress in 'Intensive Contamination Survey Area'

(as of 2016.9.30)

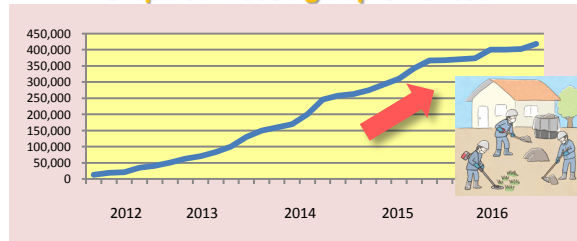


<Special Decontamination Area>
The national government plans and conducts decontamination in **11** municipalities.

<Intensive Contamination Survey Area>
Each municipality plans and does decontamination work. The prefecture's **36** municipalities are designated.



<Graph of Housing implemented>



Disaster Waste Disposal

◆ Status of Disaster Waste disposal (As of 2016.9.30) (unit: 1,000 tons)

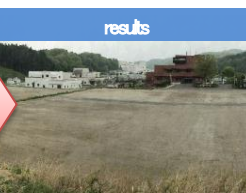
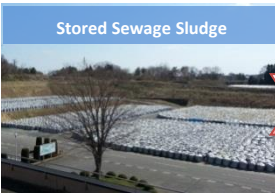
	Amount estimated to be generated	Amount estimated to be carried into temporary storage sites	Amount disposed of
Coastal region	2,944	2,847 (96.7%)	2,431 (82.6%)
Central region	1,056	1,045 (98.9%)	1,040 (98.6%)
Aizu region	19	19 (100.0%)	19 (100.0%)
Total	4,019	3,911 (97.3%)	3,490 (86.8%)



◆ Storage situation of contaminated waste

Incineration disposal of sewage sludge (about 38,000 tons from 5 municipalities located in the upstream of the Abukuma River) which have been kept in the Ken-chu Purification Center was completed on May 31, 2016, steadily furthering the reduction of sludge in facilities in the prefecture.

	Storage amount : tons
Sewage sludge	75,700 (As of 2013.9.20)
	20,500 (As of 2016.10.20)
Incineration ash (General waste)	56,698 (As of 2012.7.31)
	291,900 (As of 2016.9.30)



Temporary Storage site

Total of 52 municipalities in the prefecture, excluding 7 municipalities where the whole areas are designated as special areas for decontamination (Naraha Town, Tomioka Town, Okuma Town, Futaba Town, Namie Town, Katsurao Village and Iitate Village)

◆ Storage conditions of removed soil generated (unit: site)

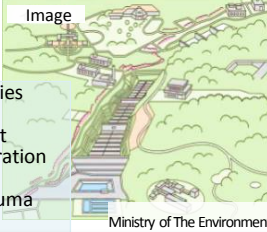
	As of 2014.3.31	As of 2016.6.30
Temporary storage site based on the decontamination plan	664	830
Storage where it generated, such as house garden, factory site, school ground	53,057	145,440
others	104	67
Total	53,825	146,337



Interim Storage facility

◆ Situation of receiving of removed soil and development of facilities

In terms of receiving removed soil and other materials into the interim storage facility, 28 municipalities among 49 municipalities intended for transportation are transporting them. For the development of facilities, the Ministry of Environment started constructing 'Receiving and sorting facility' and 'Soil storage facility' with a purpose to sort removed soil and other materials that were carried in there into burnable and unburnable as well as to safely store them according to the radioactive cesium concentration and properties. The Prefectural Government will confirm the situation of transportation and facilities and post results on the prefectural website based on the safety agreement concluded between the National Government, Prefectural Government, Okuma Town and Futaba Town, in order to secure safety and security.



Ministry of The Environment

Environmental Creation Centre

We have to quickly restore environment in Fukushima to create environment where citizens can live with peace of mind over the future. For that, we are conducting detailed environmental monitoring, research and information release as well as taking measures to help children learn about environment and radiation at the exchange building, "Commutan Fukushima."

Environmental Creation Centre Main Facilities (Miharu Town)

Opens July 2016

Research building

Main building

Exchange building

Environmental monitoring, Education, training, exchanges

Inside the Exchange building

Interaction Wing

Environmental radiation Centre (Minamisoma City)

Wildlife Symbiosis Centre (Otama Village)

Inawashiro Aquatic Environment Centre (Inawashiro Town)

Environmental monitoring Around the NPS

Open in Nov2015

Monitoring of wildlife, Environment learning, Dissemination, awareness-raising activities

Open in Apr 2016

Research for Lake Inawashiro and other lakes and marshes: Environment learning, Dissemination, awareness-raising activities

Open in Apr 2016

Spherical Structure Theater



Fukushima Prefecture is currently proceeding with 10 projects in cooperation with the IAEA (International Atomic Energy Agency). Projects include the review of decontamination technology used for rivers and lakes, and studying the movement of radioactive materials contained in wild animals.

On-site inspection by IAEA experts

【IAEA proposed project】

- Decontamination in Fukushima
- Support for utilization of radiation monitoring data for drawing of easily understandable map ...

【Our proposed projects】

- Project to review the decontamination technology for rivers, lakes and ponds
- Behavioral survey of radionuclide in wild lives ...



Reconstruction work has begun for 98% of public works facilities, and 84% have already been completed. Currently the prefecture is focused on the tsunami affected area, and is aiming to complete reconstruction as soon as possible, while developing and strengthening roads and other infrastructure, and ensuring that recovery efforts proceed in a safe and secure manner.



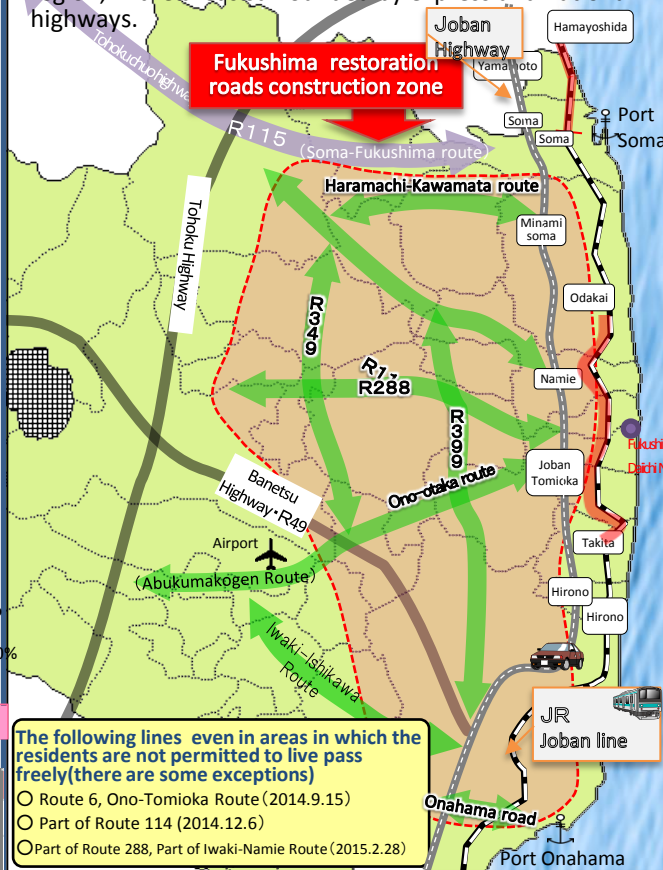
◆ Progress by construction site

(As of 2016.10.31)

Construction site of public works facilities for restoration from the disaster	Number of sites to be assessed (sites intended for restoration work)	Number of sites for construction		Number of completion	
			Rate of construction(%)		Rate of completion(%)
Total	2,126	2,078	98%	1,794	84%
River and sand erosion control	271	268	99%	239	88%
Coast	156	155	99%	73	47%
Road and bridge	798	793	99%	749	94%
Port and harbors	331	317	96%	305	92%
Fishing port	473	448	95%	331	70%
Sewage	3	3	100%	3	100%
Park and urban facility	5	5	100%	5	100%
Public housing	89	89	100%	89	100%

New roads for restoration are under construction

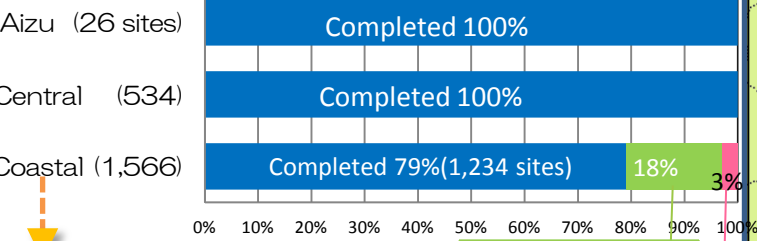
The prefecture is currently installing a road network in order to provide strong support for the revitalization of 'areas to which evacuation orders are ready to be lifted'. The network is aimed to be completed by 2018-2023, and will include 8 main routes covering the coastal region, in the areas surrounded by express and national highways.



The following lines even in areas in which the residents are not permitted to live pass freely (there are some exceptions)

- Route 6, Ono-Tomioka Route (2014.9.15)
- Part of Route 114 (2014.12.6)
- Part of Route 288, Part of Iwaki-Namie Route (2015.2.28)

◆ Progress, by Region



【Reference】 Progress inside the evacuation zone

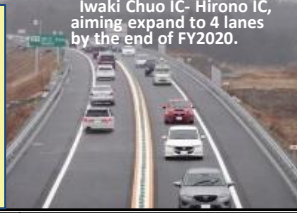
Number of sites to be assessed (sites intended for restoration work)

Number of sites	starting		completion	
		ratio		ratio
344	317	92%	193	56%

Joban Highway

The national government started expanding the expressway between Iwaki Chuo IC and Hirono IC 4 lanes, and aims to complete it in almost 5 years by the end of FY2020. (Source: Ministry of Land, Infrastructure, Transport and Tourism, released at the press conference on March 10, 2016)

NEXCO East Japan announced that they are planning to install added lanes at 6 points between Hirono IC and Yamamoto IC to alleviate traffic congestion.



JR Joban Line

- Hirono-Tatsuta [Resumed on June 1, 2014]
- Odaka-Haranomachi [Resumed on July 12, 2016]
- Soma-Hamayoshida [Resumes on Dec 10, 2016]
- Namie-Odaka [Projected to resume in 2017]
- Tatsuta-Tomioka [Projected to resume in 2017]
- Tomioka-Namie [Projected to resume in 1Q of 2020]

Substitute Bus operation

- Soma Sta. - Watari Sta.
- Tatsuta Sta. - Haranomachi Sta.



Agricultural and other facilities	Progress rate	Situation of restoration and revitalization/Damage status	
Farmland (Ratio of area available for resumption of agricultural management)	40.1% (Jul, 2016)	Area of farmland available for resumption of agricultural management	2,190 ha
		Area of farmland affected by tsunami following the Great East Japan Earthquake (Including old Restricted Area)	5,460 ha
Agricultural management bodies (Resumption status of management) ※including partially resumed bodies	60.9% (Mar, 2014)	Management body that resumed agricultural management	10,500 management body
		Management body affected by the Great East Japan Earthquake	17,200 management body
Fishery management bodies (Situation of operational resumption)	41.9% (Dec, 2015)	Management body that resumed fishing operation (including test fishing).	310 management body
		Management body affected by the Great East Japan Earthquake	740 management body
Restoration construction of farmland and agricultural facilities	88.4% (Sep, 2016)	District for which construction get started	2,729 district
		District for which assessment is completed	3,088 district



The prefecture has implemented the 'Fukushima Health Management Survey' in order to protect the physical and mental health of citizens, and maintain and improve health in Fukushima into the future. The survey includes the estimation of citizens' radiation exposure and thyroid examinations.

Fukushima Health Survey

Basic survey

Self-administered questionnaires: 27.5%
(As of 2016.6.30)
(565,484 respondents against 2,055,350 subjects)

Citizens residing in the prefecture as of March 11, 2011 (2,055,350 persons)

<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 gland inspections

<Primary inspections> (April 2011 to March 2014)

Inspection to confirm the present situation of children who aged 18 or younger at the time of the disaster, about 300,000 were examined by March 2014.

Citizens aged 18 or younger at the time of the disaster (About 380,000 persons)

<Full-scale inspection> (starting April 2014)

The second inspection for the comparison with the primary inspection. The subjects will include infants born till April 1, 2012. The inspection will be conducted every 2 years with the subjects to the age of 20, and after 20 it will take place every 5 years.



(As of 2016.6.30)

Judgement Result	Judgement Contents	Primary inspection		Full-scale inspection	
		number of examinees	portion	number of examinees	portion
Judgment A	(A1) No node or cyst was observed.	154,607	99.2%	108,619	99.2%
	(A2) Node smaller than 5.0 mm or cyst smaller than 20 mm was observed.	143,575		159,491	
Judgment B	Node larger than 5.1 mm or cyst larger than 20.1 mm was observed.	2,293	0.8%	2,217	0.8%
Judgment C	Judging from the conditions of thyroid gland, the examinee is immediately required to take a secondary inspection.	1	0.0%	0	0.0%

【Reference】
Results of survey for findings on thyroid glands over three prefectures other than Fukushima Prefecture

Surveyed in three cities in Japan

Hirosaki City, Aomori Pref.
Kofu City, Yamanashi Pref.
Nagasaki City, Nagasaki Pref.

Persons surveyed

Aged 3 to 18: 4,365 examinees

Results of survey

【A1】1,853 examinees (42.5%)
【A2】2,468 examinees (56.5%)
【B】44 examinees (1.0%)
【C】0 examinees (0.0%)

<Source>

Data released to press by the Ministry of the Environment

Primary inspections • Judgments A 1 and A2 require follow-up till the next (after FY2014) inspection.
• Judgments B and C require the secondary inspection. (Common in the advanced examination and full-scale examination)
• Though a person's condition is diagnosed as being within the Judgment A2, he/she is determined to be the Judgment B if the condition of thyroid gland seems to be in need of the secondary inspection. (Common in the advanced examination and full-scale examination)
• In the secondary examination, 116 examinees were found to be malignant or suspicious malignant. (102 had operation: 1 with benign node, 101 with thyroid gland cancer)

Full-scale inspection • Judgments A 1 and A2 require follow-up till the next inspection. (after FY2016)
• In the secondary examination (results were confirmed for 1,242 examinees), 57 examinees were found to be malignant or suspicious malignant. (30 had operation: 30 with thyroid gland cancer)

Internal exposure inspections using whole body counters

Cumulative number of examinees (June 2011 – October 2016) 307,208 examinees

【Results of inspection】

Committed effective dose (internal exposure dose radiated within the body throughout one's lifetime)

Below 1mSv	1mSv	2mSv	3mSv
307,182 examinees	14 examinees	10 examinees	2 examinees



Whole body counter

Free medical care for all citizens aged 18 or under



Fukushima has increased the age range for those eligible to receive medical subsidies. This is part of an effort to support child-raising in the prefecture through creating an environment focused on child health, where it is easy to give birth to and raise children. As of October 2012, free medical care is provided to citizens aged 18 or younger.

Development of a hub for cutting-edge radiological research and medical care

In order to protect the health of citizens into the future, Fukushima is developing a hub for cutting-edge radiological research and medical care.

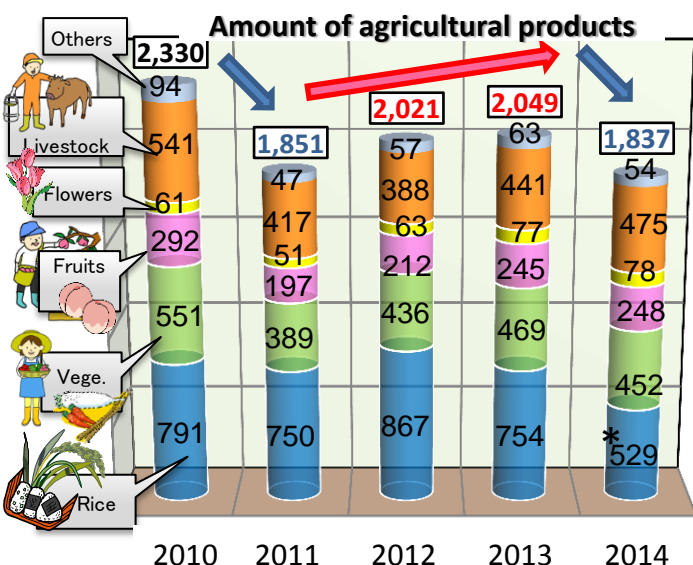
Fukushima Global Medical Science Center - main functions

	①Radiation Medical Science Center for the Fukushima Health Management Survey	Place	Fukushima City (Fukushima Medical University)
	②Advanced clinical research center (April 2016, operation started) ③Advanced medical treatment section (Dec 2016, operation starts) ④Education and personnel training section ⑤Medical – Industry Translational Research Center (Sep 2016, operation started)	Completion	2016 December being in full service



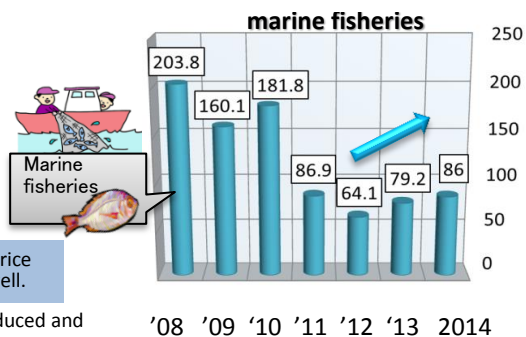
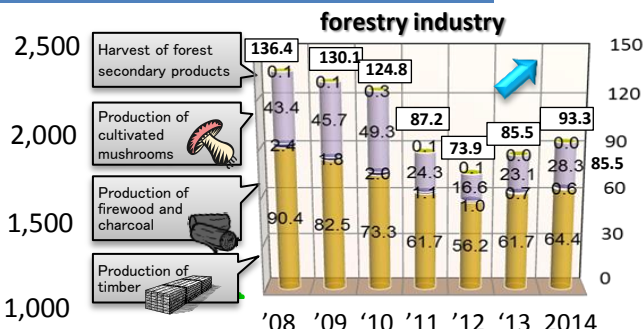
Production values for the agricultural, forestry, and fishing industries have decreased since 3.11. The prefecture is putting the utmost effort into a variety of activities to revitalize the agricultural, forestry, and fishery industries, which will in turn contribute to helping rebuild the livelihoods of disaster-affected citizens. Activities include PR campaigns introducing delicious Fukushima products along with the systems in place to ensure food security and safety.

Transition in the amounts of agricultural products produced in the prefecture (Unit: 100 million Jpy)



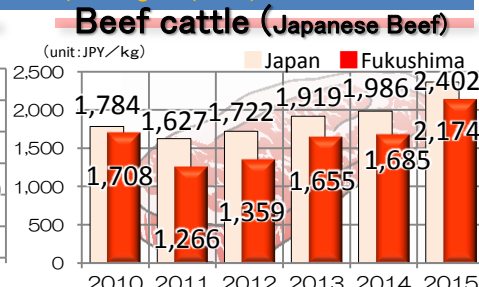
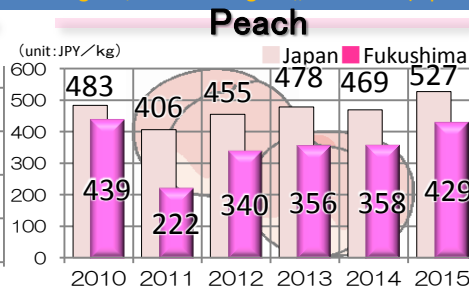
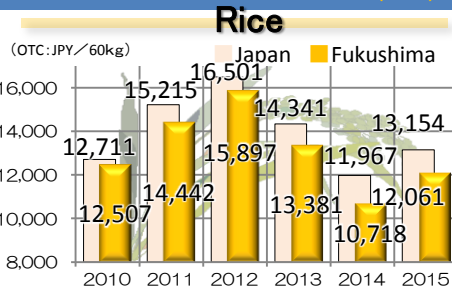
*In terms of rice, crop acreage and yield increased after 2012, but in 2014, the nationwide rice price sharply dropped and the rice output also significantly dropped in the prefecture, as well.

[Source] Prepared based on Statistics of Agricultural Income Produced, Forestry Income Produced and Fisheries Income Produced by the Ministry of Agriculture, Forestry and Fisheries



Transition of the price of agricultural products representative of Fukushima : Negative Reputation Impact

- Production Volume in the nation (2010) Rice : 4th highest, Peach : 2nd highest,, Beef cattle (Japanese Beef) : 10th highest (raised)



[Source] MAFF Projection of OTC trades of Rice

[Source] Market statistics on website of Tokyo Central Market

Public relations for products that primary industries produced in the prefecture

In order to restore the reputation of Fukushima's products, the prefecture is carrying out a variety of PR activities to appeal a wide variety of delicious products that are safe and secure.



Tasting of Fukushima's sake provided to members of the press

Kawamata silk



Governor's presentation at the tourism exchange seminar



Provided Japanese sake produced in Fukushima Prefecture

At the reception

Promotion of prefectural products at the G7 Summit Japan 2016



At the G7 Japan Summit held from May 26 to 27 in 2016, Fukushima brewed sakes were chosen as souvenirs for leaders of the world. In addition, Kawamata Silk goods were displayed, and natural carbonated water from Kaneyama Town was provided. Fukushima sakes were provided to members of the press from all around the world to promote prefectural products.

Promotion of trading in Thailand by the governor



On May 30, 2016, the Governor promoted trading targeting retailers and tourism agencies in Bangkok in Thailand through opening of a tourism exchange seminar and negotiation meeting. At the negotiation meeting, about 20 tons of peaches. Exporting was reached agreement.

Evening for appreciation from Fukushima (New York)



The Governor visited America from October 16 to 21 2016. He expressed gratitude for support given over the past years and conveyed the real situation of Fukushima steadily heading for revitalization. Fukushima sake, Fukushima beef and buckwheat noodles were prepared for 200 participants including people relevant to New York City and operators of food related industry at the exchange reception held in New York. There prefectural food won the best appraisal in their taste and safety.

For the prevention of distributing foods containing radioactive materials over the standard level, we are decontaminating farmland and intensifying the screening system to confirm the safety. Particularly, rice which is a staple food, has to go through radiation monitoring. All rice bags produced in the whole prefecture and shipped must be monitored before the shipment, and only rice bags meeting the standard level are marked with certificate stickers.

We have to secure distribution of marine products caught during trial fishing more safely. For that, we give guidance to fishermen's cooperative on the monitoring technology in terms of voluntary monitoring. Also we discuss with producers and distributors for the structuring of more efficient monitoring systems. In order to ensure the safe distribution of marine products obtained through trial fishing operations, the prefecture offers guidance to fishery cooperatives in regards to inspection technology, and are working with producers and distributors to establish an efficient inspection system.



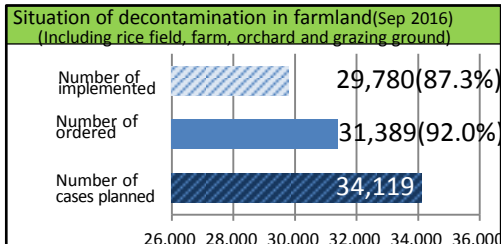
Decontamination of farmland



scraping off surface soil

Reverse plowing

Cleaning of tree bark



Monitoring of Fukushima's agricultural, forestry and fishery products

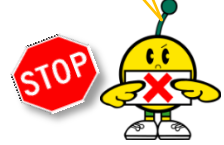
Fukushima's primary products undergo monitoring inspection before being shipped. Any product that is found to exceed the safety standard is banned from being shipped based on the product type and produced area. Products being distributed are confirmed to be safe.

Inspection on all rice in all rice bags

Primary industry products	Number of inspections	Proportion of samples exceeding the reference level (Number) * (%)
* Brown rice	About 8.6 million	0 0.00%
Vegetables & Fruits	2,998	0 0.00%
Livestock product	2,496	0 0.00%
Cultivated Mushrooms	562	0 0.00%
Mountain plants & Wild Mushrooms	1,031	2 0.19%
Marine Fishery products	4,908	0 0.00%
Inner water-cultivated fish	66	0 0.00%
Inland water Fishery products	502	4 0.80%

Inspection results from April 2016 to October 2016
(* "Brown rice", August 2016 - November 2016)

Distribution of food products exceeding the reference level is not allowed.



All rice produced in the prefecture is inspected, and the results are on our website.



These inspection results are released to the public.

<http://www.new-fukushima.jp/monitoring/en/about.php/>
<http://www.new-fukushima.jp/>

品名	検査項目	検査結果	検査日	検査場所
...

Fishing of left-eyed flounders resumed off the coast of Fukushima.

On September 2, 2016, we started trial fishing of left-eyed flounders which are popular and called "Jobanmono". It is the first time in 5 years and 6 months since the last operation of catching left-eyed flounders.
On November 30, we also started trial fishing of Slime flounders.



Trial Fishing Conducted by the Fishing Industry

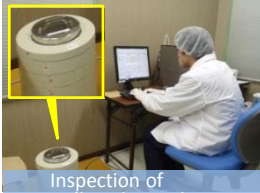
Fishermen in Fukushima Prefecture were forced to place a ban on coastal and trawl fishing; however the safety of certain species of fish has been confirmed based on over 20,000 items tested during monitoring inspections. As of November 29 2016, trial fishing is currently being carried out targeting 94 specific species.



Catch landing through test fishing



Measuring and retreatment of fish body



Inspection of radioactive cesium

All fish produced from the trial fishing that is planned to be sold undergoes inspection for radiation. The Fishery Cooperative Association set voluntary standards stricter than that of the national government (50Bq/kg vs 100Bq/kg for the national standard of "General foods" for catches to be sold through trial fishing, and conduct screening for radioactive substances.

Japanese Safety Standard for Radioactive Cesium Contained in Foods

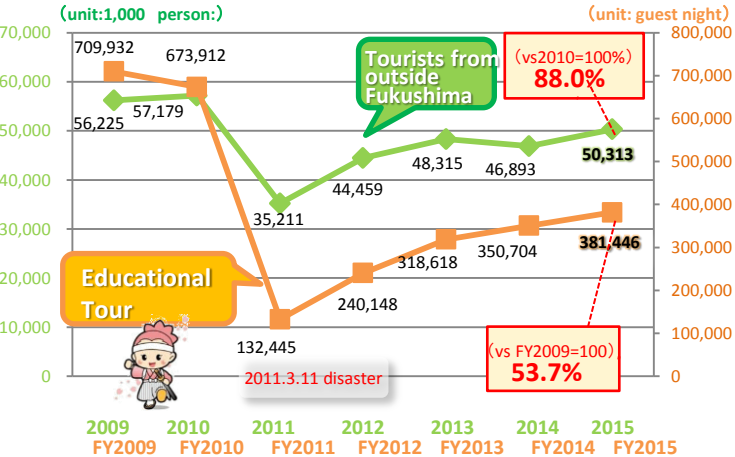
Category	Limit (Bq/kg)
Drinking water	10
Milk	50
General foods	100
Infant foods	50



Between April and June 2016, we held a tourism campaign 2016 (After DC), "Island of fortunes in full bloom" and had many sightseeing tourists visiting the prefecture. We are committed to making efforts for the success of Tokyo Olympic and Paralympic Games, namely Revitalization Olympic Games. We hope that many people will visit Fukushima prefecture and see our situation steadily moving forward toward revitalization. To that end, we will strive for the promotion of tourism through improvement of hospitality together with all citizens and development of receiving system and polishing of tourism elements.

Changes of the number on tourism in the prefecture

◆ Situation of **Tourism (from outside Fukushima)** and **Education tour** in Fukushima Prefecture



[Data] Fukushima Tourism Promotion Bureau

Ranked top in the Japan Annual Sake Awards for 4th straight year

On May 18, 2016, 18 brands of Fukushima brewers were awarded gold prizes at the 104th Japan Annual Sake Awards in which brewers of Japanese sake compete based on the quality of their new sake, and won the largest number of gold prizes in Japan for four consecutive years. This is the 6th time for the prefecture to win the largest number of gold prizes.



Various events are accelerating the recovery of the tourism industry

The largest scale cultural festival, "Magical Fukushima" Transmit vital and cheerful Fukushima to the world!

Nov 2016
From November 3 to 6, 2016, a shuttle bus was calling at each site in 12 municipalities to hold music live, film festival, cosplay (costume play) event and deepened exchange and friendship among participants coming from inside and outside the prefecture.

NPB Great East Japan Earthquake Support Project, "Baseball Fiesta in Fukushima"

Dec 2016
Held in the Iwaki City General Gymnasium on December 10, 2016. This is the third opening of the event with an aim to support revitalization in the prefecture. This is an event that elementary school children in the prefecture enjoy sport with professional ball players.



2020 Tokyo Olympic Flag Tour (Revitalization - Transmit to the world)

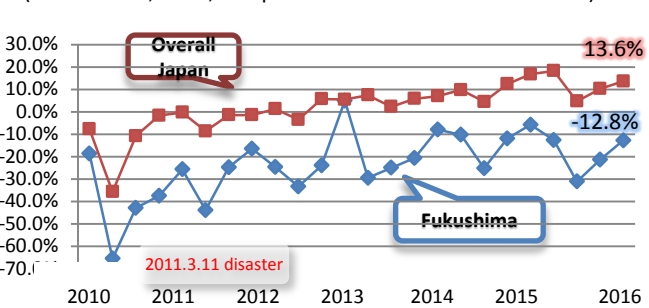
In 2020, Tokyo Olympic and Paralympic Games, which is placed as Revitalization Olympic Games will be held. On November 2, 2016, Fukushima Prefecture received a flag of Olympic and Paralympic for the first time in Japan, and it has been delivered to six municipalities that requested to receive it. In addition, it was determined that male and female soccer players representing Japan will train at J-Village (Hirono Town and Naraha Town) before the Olympic games, and four municipalities were registered as host towns that exchange with participating countries personally, economically and culturally.

We are addressing relevant projects so that many people will visit Fukushima and observe the revitalization progress going on steadily.

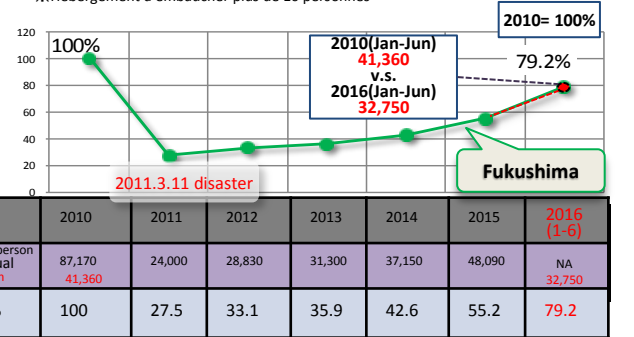


Flag Tour Ceremony taking place at the prefectural government on November 2, 2016.

◆ *Tourists' accommodation Comparison of guest nights on year-to-year basis (After March, 2012, compared to the same month in 2010)



◆ Total number of guests from overseas countries



Year	2010	2011	2012	2013	2014	2015	2016 (1-6)
Unit: person Annual Jan-Jun	87,170	24,000	28,830	31,300	37,150	48,090	32,750
%	100	27.5	33.1	35.9	42.6	55.2	79.2

Fukushima Great Exchange Fair



This is the largest event ever held in the metropolitan area that features local gourmet, sales of specialties and migration consultation offered in 100 booths.

JR Joban Line Reopening Event

Dec 2016
On December 10, 2016, JR Joban Line will reopen the section between Soma Station and Hamayoshida Station, Miyagi Prefecture. The Prefectural Government will hold a commemorative event in front of JR Shinchi Station on the next day, December 11. There will be an air show and antenna shop for local products from municipalities.

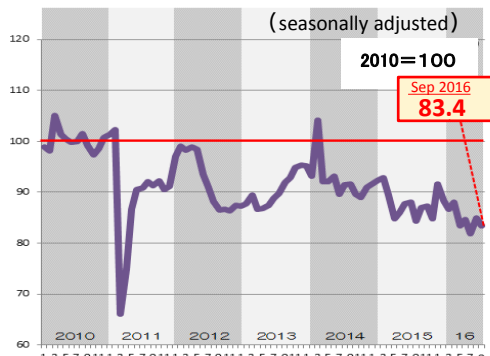


After the disaster the number of offices has shown a declining trend. According to the industrial production index which indicates the production situation for the manufacturing industry, levels have not yet recovered to pre-disaster conditions. There have also been employment mismatches occurring, depending on the type of occupation.

For the sustainable development of Fukushima industries, the prefecture will provide proactive support for the continuation and resumption of small and medium sized companies, which are the core of the regional economy. In addition, there are also efforts in place to secure employment opportunities, including attracting business investment within the prefecture.

Industrial Production Index

◆ IP index transited around 90 from 2011 to 2016 based on the index of 100 for 2010, not showing the recovery to the pre-disaster level. Particularly, slowdown is apparent in the transportation machinery industry, electronics parts, device, machinery industry.



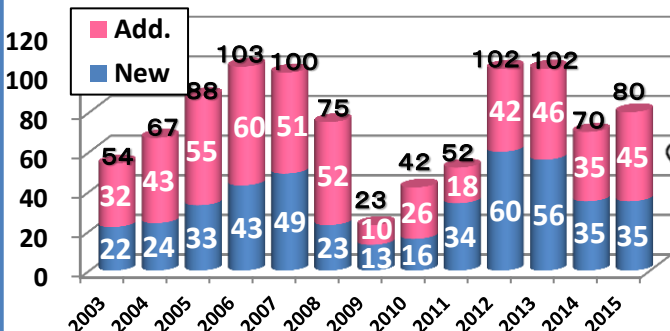
Subsidies for restoration

◆ Fukushima business investment subsidy for revitalization of industries

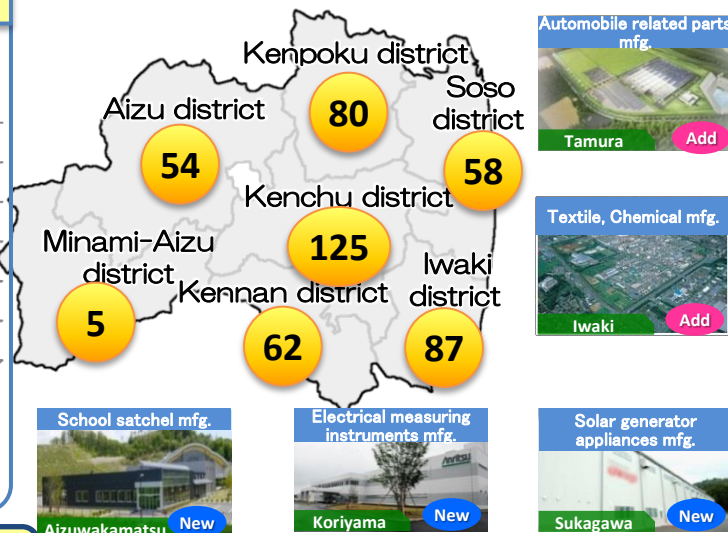
We support companies that set up new factory or additional factory inside the prefecture. Those activate business and create jobs.

Number of New and additional construction of factories

Situation of new and additional construction for plants (sites over 1,000 m² in area) in Fukushima Prefecture



※Number of reported establishments based upon the Fukushima Industrial Development Ordinance.



471 companies assigned- total subsidy sum: JPY198.9 billion as of September 2016 (about USD1.8 billion, USDJPY=@113.00)

5,923 jobs (projected to create)

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

Companies that are based in Fukushima Prefecture for business operation
Cumulative total of adopted companies by the first to the third public offerings.

164 companies assigned- total subsidy sum: JPY81.1 billion as of September 2016 (about USD 0.72 billion, USDJPY=@113.00)

2,134 jobs (projected to create)

Measures for restoration and revitalization of small and mid-sized companies as well as securing employment

Support for restoration of facilities and equipment

◆Subsidized project for restoration and maintenance of group facilities including small and mid-sized companies

Sum covering from 2011 to 2015: Supported 367 groups 3,674 companies with grants of JPY109.8 billion

◆Support project for restoration and revitalization of small and mid-sized companies

Sum covering from 2011 to 2015: Supported 3,761 cases with JPY8.6 billion

Employment support projects

◆Emergency Job Creation Project

Total Sum of covering FY2011 - 2015: created **70,307 jobs**

◆Fukushima Support Project for Industrial Revitalization and Employment

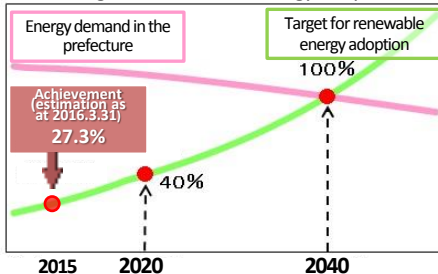
Total sum of covering FY2011 - 2015: created **27,391 jobs**



For the revitalization and recovery of Fukushima, it is necessary not just to restore things to how they were before the disaster, but create new, leading enterprises. Revitalization of the prefecture is currently being propelled by the development of hubs for R&D and industrial creation in a wide variety of fields.

Renewable Energy Promotion

<Target for Renewable Energy Adoption>



Fukushima has a target to produce enough renewable energy to supply 100% of the energy demand in the prefecture by 2040. This will be achieved by increasing renewable energy adoption, and building hubs through the clustering and development of relevant industries.



The 5th *REIF Fukushima 2016
(* Renewable Energy Industrial Fair)

Exhibiting products and parts made by renewable energy businesses, and also provided opportunities for business negotiations. It was held on 19-20 of October, 2016. A record high 177 groups exhibited there.

Geothermal Hot-spring binary Tsuchiyu Onsen power plant



Fukushima city

Output 0.4 MW
Status Operating

Green Energy Aizu, Biomass Power Station



Aizuwakamatsu city

Output 5.7 MW
Status Operating

Koriyama Nunobiki Kogen Wind Farm



Koriyama city

Output 65.98 MW
Status Operating

Onahama Solar Power Project



Iwaki city

Output 18.4 MW
Status Operating

Okuma Town Furusato Revitalization Mega Solar



Okuma town

Output 1.89 MW
Status Operating

Four-party collaboration for the utilization of CO2 free hydrogen



The Prefectural government concluded a four-party agreement for the utilization of CO2 free hydrogen with the Tokyo Metropolitan government, AIST and Tokyo Metropolitan Public Service Corporation. (May 17, 2016). We are committed to intensifying R&D for the commercialization of Fukushima-produced CO2 free hydrogen that does not emit carbon dioxide (CO2) in the manufacturing stage by using renewable energy. Promotion of cooperation with Fukushima-based companies and fostering of human resources and exchange.

Fukushima Renewable Energy Research & Development Center



Koriyama city

Photo by : AIST

National Institute for Advanced Industrial Science and Technology (AIST) developed R&D hub centers for renewable energy. Smart System Research Building started operation on April 1, 2016.

Place	Koriyama city
Status	Open in April 2014

Demonstrative and research project of Offshore Floating Wind farm technology



7MW system
Height: 189m

Offshore of Fukushima Pref. Photo by : Fukushima Offshore Wind Consortium

Operations are in progress to verify the safety, reliability, and economic efficiency of floating offshore wind farm systems. The aim is to build a R&D hub, and cluster the wind power industry.

Place	Offshore of Fukushima Prefecture
Status	[1st stage] 2MW system operating since Nov 2013 [2nd stage] 7MW system operating since Dec 2015 [2nd stage] 5MW system is set up on 2016.8.01

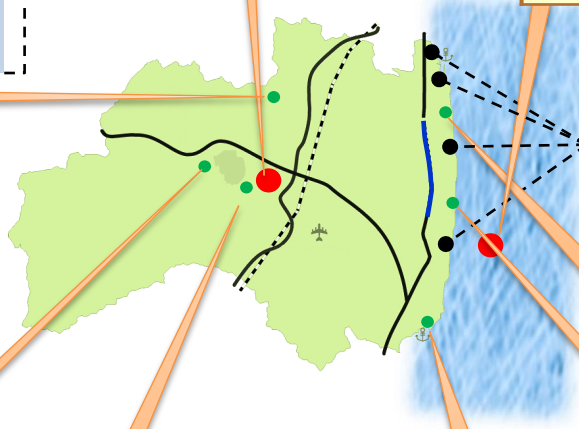
Promotion of Smart Community Concept

Using a system for effective use of distributed energy by providing heat and electricity with renewables, such as solar power and wind power and LNG for building of towns for revitalization.

Place	Shinchi town, Soma city, Namie town, Naraha town
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Coastal Area Mega Solar Power Project

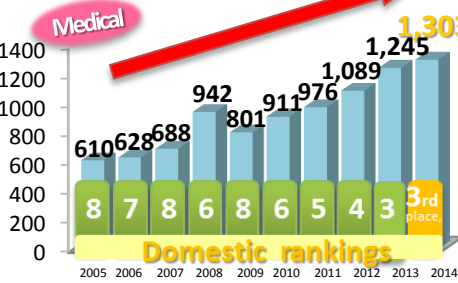
Place	Minamisoma city
Output	70 MW
Status	Plan to operate in 2018



Promotion of Industrial Recovery and Clustering

< Production volume of medical devices >

[Unit: 100 million yen]



Since before the disaster, Fukushima has been one of the top producers of medical devices and parts in Japan. The prefecture plans to develop an even greater production base, through promoting both industry and employment.

Production volume of medical devices in 2014	130.3 billion yen (3rd place in Japan)
Outsourced production volume of medical devices in 2014	43.3 billion yen (1st place in Japan)
Production volume of parts for medical equipment in 2014	17.7 billion yen (1st place in Japan)

Collaboration with internationally advanced area International Cooperation with German state North Rhine-Westphalia (NRW)



The prefectural government is promoting business exchange in the field of medical devices with the Minister of Economic Affairs, Energy and Industry, NRW, Germany. Both parties signed MOU on September 1, 2014. It will help transmit profound technology of companies in the prefecture to the German State as well as promote various exchange including joint research by medical and research institutions of both sides. We are expecting that there will be further development in the medical device industry.

Opening of "Robot Fiesta Fukushima 2016"



For the building of "Fukushima, land of robotic industrial revolution", we held the event as a place of industrial creation in the prefecture to enhance awareness of citizens, particularly young generation. Cutting edge robots were displayed and demonstrated at the industrial LOBO booth, and the experience zone offered a school for robot programming and drone operation. 30 cooperative companies and groups, and 7,200 visitors participated in the whole event.

Innovation Coast Initiative

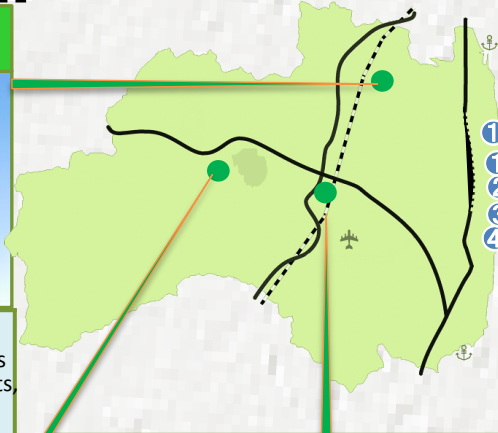
Within Fukushima prefecture, the Hama-dori (Coastal) region especially suffered severe damage from the earthquake disaster and nuclear accident. This initiative aims to create new industries and jobs in this region by establishing an energy industry hub where research and development on robot technology and nuclear reactor decommissioning are centralized.

Medical – Industry Translational Research Center (Radiation Medical Science Center)



In order to serve as a bridge between the medical and industrial fields, the center acts as a hub to promote the creation of reagents, therapeutic, and diagnostic drugs used mainly for cancer treatment.

Place	Fukushima City (Fukushima Medical University)
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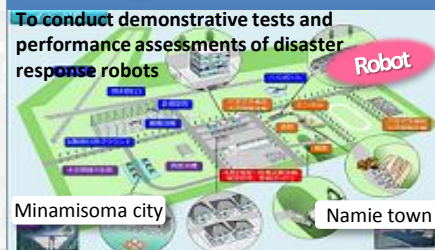
Fukushima Medical Device Development Support Centre



The center will be established to provide comprehensive support for medical devices from development to commercialization. Support includes safety assessment using large animals, and machine operation training for medical personnel, which opened on 2016.11.07.

Place	Koriyama City (Site of the former Agricultural Test Center)
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① Robot Test Field



② Okuma Analysis and Research Center (Laboratory for analysis and research of radioactive substances)



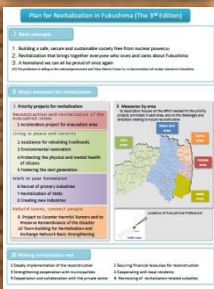
③ International Decommissioning Joint Research Center, International Joint Research Building



④ Naraha Remote Technology Development



Revitalization Plan



The prefecture formulated Fukushima Revitalization Plan (the 3rd edition) in December, 2015

5 years on from the Great East Japan Earthquake and the nuclear accident, and situations on revitalization of the prefecture are changing with rearrangement of evacuation areas and lifting of evacuation order to some municipalities. In line with such change, the prefecture formulated Revitalization Plan (the 3rd edition) on December 25, based on opinions from citizens and municipalities for implementation of projects required for revitalization.

We will promote revitalization of Fukushima by addressing 10 priority projects.

[Outlines] is available on <http://www.pref.fukushima.lg.jp/site/portal-english/rev-plan-3.html>

Fiscal Year 2016 initial budget is 2nd largest following the FY2015 initial budget which marked record high in the prefectural administration. The FY 2016 is an important year to step out for a new stage in order to form the future of the prefecture and steadily achieve revitalization. We will address "Revitalization Plan (3rd edition)" revised at the end of the last year and "Fukushima Comprehensive Strategy for Revitalization" to control depopulation for revitalization, rehabilitation and regional creation.



Fukushima Prefectural
Govt. Budget for Fiscal
Year 2016
(April 2016-March 2017)

JPY1.88 trillion

Incl. East Japan Earthquake and Nuclear
disaster portion: JPY 1.038 trillion

Revitalization evacuation area

Acceleration Project for Evacuation Area

82.6 billion JPY

Building of towns based on the hub of revitalization, strengthening of wide-area infrastructure, promotion of wide-area cooperation, reconstruction of system for provision of medical care, recovery of industry and jobs, promotion of Innovation Coast Concept, fostering of human resource for the future

Living in peace and security

Assistance for re- building livelihoods

95.3 billion JPY

Assistance for evacuees, measures for returning of evacuees to their homes, rebuilding of livelihoods after returning. Fulfillment of a support system for evacuees



Environmental restoration

254.5 billion JPY

promotion of decontamination, securing of food safety, disposal of waste, Promotion of research at the Environmental Creation Center, Safety surveillance for decommissioning



Protecting the physical and mental health of citizens

26.2 billion JPY

Maintenance and promotion of citizens' health, reconstruction of regional medical services, development of systems providing cutting edge medical service and mental care for the disaster affected residents



Fostering The Next Generation Project

17.7 billion JPY

Development of the best environment in Japan for people to give birth and raise children, human resources who remain viable, and workforces who are responsible for the future industry



Work in your hometown

Primary industry revival

53.6 billion JPY

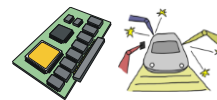
Measures to provide safety and peace of mind, recovery of agricultural, forestry and fisheries industries and response for reorganization of designated areas



SMEs revitalization

143.5 billion JPY

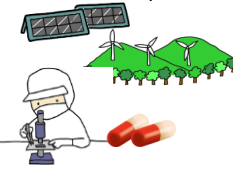
Vitalization of SMEs in the prefecture, promotion of business investment



New industry creation

33.9 billion JPY

Promotion of renewable energy, clustering of medical and welfare devices, clustering of robotics industry



Rebuild towns, connect people

Project to Counter Harmful Rumors and to Preserve Remembrance of the Disaster

7.5 billion JPY

Recovery and opening up of market channel of our products, such as primary products; promotion to increase tourists and recovery of educational tours; Release of accurate information to the rest of Japan and the world; Promotion taking the opportunity of Tokyo Olympic Game and Paralympic Game

Town-building for Revitalization and Exchange Network Basis Strengthening

165.1 billion JPY

Promotion of town-building for tsunami-affected areas, development of traffic infrastructure, counter-measures for disaster reduction and prevention.



Countermeasures against depopulation and aging

**237 billion
JPY**

Building of a prefecture where people can comfortably live, work, give birth and raise children; elderly people can easily live and youths and women can actively join the social activities.

Including
projects
reposting

Collaboration with UCL, Fukushima Prefecture hosts a symposium in London



Students from Fukushima give Presentation at the symposium



At the disaster symposium held on July 28, 2016, in a session "Report from Fukushima" - speakers from, and recently visited Fukushima, discussed current state. Our staff and students of Fukushima Senior High School disseminated accurate information of Fukushima to the symposium participants. After that, a reception was held. We introduced food and crafts of Fukushima there.

Introduction of Fukushima in U.S.A.



Seminar at CSIS, Washington DC



Seminar at UN Headquarters, NY

On October 2016, we held Fukushima revitalization seminars at CSIS(Center For Strategic & International Studies), Washington D.C. and at United Nations (UN) headquarters, New York. In the seminars, Governor Uchibori himself gave a speech on the current situation, challenge of Fukushima and efforts for the new industries. Also, we held the reception to introduce Fukushima's charms including Sake in New York.

Fukushima Prefecture Outlines



Basic Data

- Capital : Fukushima City
- Population: 1,899,486 (November 2016)
- Area: *13,783km²
(*Evacuation instructed area: 726km²)

Access

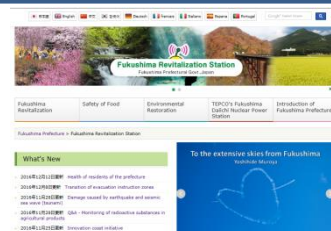
- Roughly 200km away from Tokyo
- JR Tohoku bullet train
 - Tokyo-Koriyama Station 80 min
 - Tokyo-Fukushima Station 90 min
- NEXCO Highways
 - Tohoku expressway
 - Joban expressway
 - Ban-Etsu expressway
- Fukushima Airport
 - Fukushima Airport <->Itami(Osaka)
 - Fukushima Airport<->New Chitose (Hokkaido)



Fukushima Revitalization
to update Fukushima 's information

<http://www.pref.fukushima.lg.jp/site/portal-english/>

Steps for Revitalization in Fukushima the latest version is available on
<http://www.pref.fukushima.lg.jp/site/portal/ayumik-1.html>



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