# Steps for Revitalization in Fukushima

< June 7, 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 May 30, 2016

◆ Deaths: 3,873

(This number includes 2,045 disaster-related deaths(X1)

♠ Missing: 3 (※2)

(X1)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. (X2) For the 227 people missing, 224 have had death notifications issued, and are counted as deaths.

## <Cost of damage in Fukushima prefecture> As of March 23, 2012

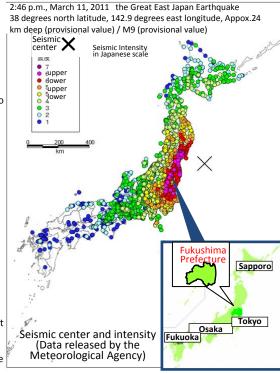
- Reported cost of damage for public works facilities: About JPY 316.2 billion
- ◆ Reported amount of damage on agricultural, forestry and fishery facilities: About JPY 245.3 billion
- Reported amount of damage on educational facilities: About JPY 37.9 billion
- ◆Total of reported amount of damage on 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 Headquarte for Great East Japan Earthquake











Iwaki city

Aizu Region

Soma city

**Central Region** 

Shirakawa-Toba line

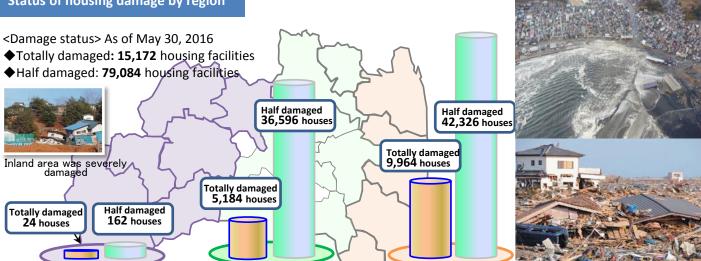
Coastal Region

in Kagamiishi town

Extensive damage

caused by Tsunami

## Status of housing damage by region



## Fukushima Prefecture Disaster Situation - Evacuation

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' ( 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 [March 11, 2011]

- ◆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.

## [March 12, 2011]

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

Kawamata Village

- ◆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.

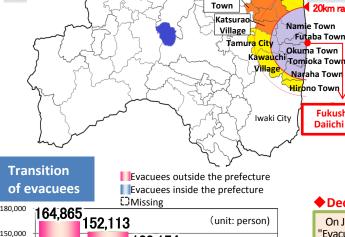
#### [April 22, 2011] Evacuation-designated areas (Restricted areas)

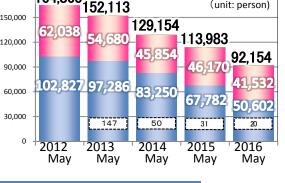
Deliberate evacuation areas

are designated as specific spots recommended for evacuation.

- **Emergency** evacuation preparation areas

(The order was lifted on September 30, 2011) \*Part of Date City, Minamisoma City and Kawauchi Village





## **Estimation of population**

	Number of	Population		
	households	(unit:person)	male	female
March 1 2011	721, 535	2, 024, 401	982, 427	1, 041, 974
May 1 2016	740, 977	1, 903, 704	940, 991	962, 713
comparison	19, 442	<b>▲</b> 120,697	<b>▲</b> 41, 436	<b>▲</b> 79, 261

Difficult-to-return zone

Restricted residence zone

Evacuation order cancellation preparation

Minamisoma City

30km radius

**Fukushima** 

Daiichi NPS

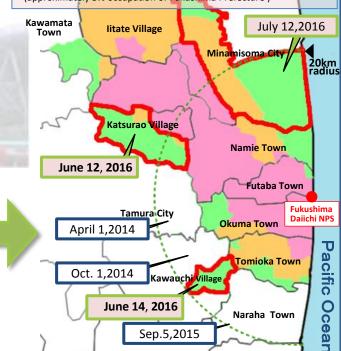
Futaba Town

Hirono Town

- Annual integrated doses are over 50mSv • Entry is prohibited with some exceptions Lodging is prohibited.
- 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 Annual integrated doses are below 20 mSv.
- Entry is permitted, and business operation is permitted as well
- Lodging is prohibited with some exceptions

\*Date on the map: Evacuation Instruction (being) Cancelled

On July 12, 2016- Evacuation Instruction areas: 726Km2 (approximately 5% occupation of Fukushima Prefecture )



Sep.5,2015

#### Decision to lift evacuation orders

On June 12, 2016, evacuation orders for "Restricted residence zone" and the "Evacuation order cancellation preparation zone" in Katsurao Village will be lifted. This is the first time evacuation orders will be lifted for Restricted residence zone. On June 14, 2016, Kawauchi Village and on 12, 2016, Minamisoma City will follow.

Decision to develop a robot test field site, Minamisoma City and Namie Town

The prefecture decided to develop a "robot test field" and "International Industry-Academia-Government Collaboration Center (robots)" which will promote research and development of disaster response robots and demonstrative tests for industrial revitalization . As an additional facility, the test runway for taking-off and landing of unmanned aircrafts will be developed in Namie Town.



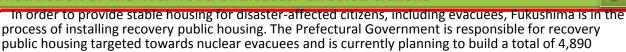
Naraha Town

Naraha Remote Technology Development Center (Mock-up Center) Test Facility completed

On March 30, 2016, a completion ceremony was held for a test facility of the Naraha Remote Technology Development Center constructed by the Japan Atomic Energy Agency (JAEA). The facility is equipped with a mock-up of a part of a nuclear reactor containment vessel, and serves as a hub of decommissioning research by TEPCO. research by TEPCO. Full operation started from



## Reconstruction of the livelihood of disaster-affected citizens





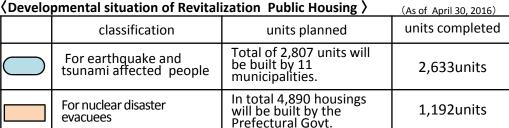
## Reconstruction of housing environment

(Housing environment of disaster-affected citizens )

(As of April 28, 2016)

Temporary housing units built	15,758 units (9,097 units have tenants)
Housings rented by administrations to support affected citizens	12,975 units
Housings reconstructed	<b>20,414 cases</b> (vs 31,615 application, 64.6% progress )







whole in order to save construction time

#### Xnumbers are 22 Fukushima Koori 129 scheduled units 475 citv 64 Shinchi tow town Nihonmatsu 346 city 398 Kawamata town Soma city Otama village 120 Minamisoma Motomiya city 350 city 927 Koriyama city Fukushima Daiichi NPS 570 Tamura 18 citv Aizuwakamatsu Naraha city 134 141 town Miharu 62 town Hirono 58 town Sukagawa ( 100 Kawauchi city village 25 Shirakawa Kagamiishi Iwaki city 16 city 768 town 52 24 40 Yabuki town

## Strengthening of the Futaba Region Emergency Medical System.

From June 1, 2016, emergency doctors of the Futaba Emergency General Medical Support Center (established in the hospital attached to the prefectural medical university) will be

the prefectural medical ustationed in the branch station of Tomioka Fire Station, in order to give the first hand treatment upon emergency call. They are planning to conduct visiting consultations for elderly

people who can hardly move while listening to regional needs to secure the safety and security of medical services in the Futaba Region.

## 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. The Futaba Police Station, Katsurao Police Box was resumed to help secure the safe

secure the safe return of residents of Katsurao Village. (April 1, 2016)



## Introduced an app to support returnees

Providing useful information for those living in evacuated areas and nearby municipalities.



## Taking care of evacuees 303 life support counsellors have been assigned

to social welfare councils in 28 municipalities throughout the prefecture (as of June 01, 2016). In addition to taking care of elderly and preventing isolation, they are also actively involved in working

to help with relieving

(including fears about

residents' health worries

and risk communication.

radiation) rebuild livelihoods,



#### **Providing information to evacuees**

The prefecture cooperates with municipalities and NPOs throughout the country to provide evacuees with a variety of publications about the recovery efforts and support events being held at various evacuation sites. Publications include information magazines and digest versions of local papers, and also a paper featuring the current situation in Fukushima.







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.





\*\*Radiation doses were surveyed with a monitoring car in the former restricted area.

May 13 -June 10, 2015

Transition of measurements

[µSv/h]

2.74 Fukushima
City

(avg fig before the disaster
0.04µSv/h)

2011 2011 2012 2013 2014 2015 2016
Apr Sep Sep Sep Sep Sep June

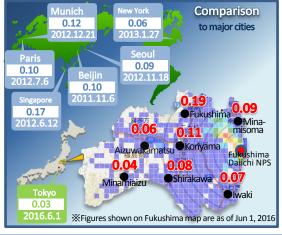
Shown on home page of the prefectural government, releasing results of measurements in major cities in the world http://fukushima-radioactivity.jp/

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

	Fukushima City	Aizuwaka matsu City	lwaki City
Pre - disaster	0.04	0.04~0.05	0.05 <b>~</b> 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
Jun2016	0.19	0.06	0.07

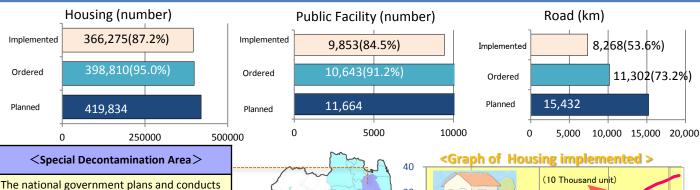
≪Reference≫ Data source: SafeCast

- Seoul, South Korea **0.09μSv/h** (As of Nov.18,2012)
- Beijing, China
  0.10μSv/h (As of Nov.6,2011)
- Munich, Germany0.12μSv/h (As of Dec.21,2012)
- New York, U.S.A.
   0.06μSv/h (As of Jan.27,2013)



## Decontamination Progress in 'Intensive Contamination Survey Area'

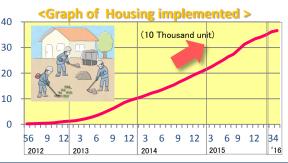
## (as of April 30, 2016)



## decontamination in 11 municipalities.

## <Intensive Contamination Survey Area>

Each municipality plans and does decontamination work. The prefecture's 39 municipalities are designated.



## **Disaster Waste Disposal**

Status of Disaster Waste disposal (As of March 31, 2016) (unit: 1,000 tons)						
	Amount estimated to be generated	Amount estimated to be carried into temporary storage sites	Amount disposed of			
Coastal region	2,925	2,666 (91.1%)	2,122 ( 72.5%)			
Central region	1,056	1,042 ( 98.7%)	1,040 ( 98.6%)			
Aizu region	19	19 (100.0%)	19 (100.0%)			
Total	4,000	3,727 ( 93.2%)	3,181( 79.5%)			





Storage situation of contaminated waste

Incineration disposal of sewage sludge (about 38,000 tons from 5 municipalities located in the upstream of 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 pref.

Sewage sludge	of Sep. 20,2013)
	of Apr. 20,2016)
Incineration ash 56,698 (As	of July 31 ,2012)
(General waste) 267,600 (As	of Mar. 31,2016)







**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

Storage conditions of removed soil generated (unit:site)

	As of March 31, 2014	As of Dec 31, 2015
Temporary storage site based on the decontamination plan	664	856
Storage where it generated, such as house garden, factory site, school ground	53,057	127,361
others	104	71
Total	53.825	128 288



## **Interim Storage facility**

Transportation of excavated soil and other wastes into the Interim Storage Facility

In the pilot (test) transportation conducted in 2015, a total of 45,383 m of removed soil was carried into the interim storage facility from the specified 43 municipalities. In 2016, a total of about 150,000 m of removed soil will be carried in from the 49 municipalities, and as of June 1, the transportation is underway in Okuma Town and Futaba Town. In order to secure safety and security, the Prefecture will confirm the situation of transportation and the interim storage facility based on the Safety Agreement signed between the National Government, Fukushima Prefectural Government, Okuma Town and Futaba Town, and release the results on websites accordingly. .



#### Establishing research centers for environmental recovery

A series of research centers are built and enhanced in order to accelerate the rehabilitation of the environment of the prefecture and create the environment which allows the residents to live safely and securely into the future.

> Fukushima Prefectural Center for Environmental Creation. July 21, 2016, Grand Opening Day





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.

#### (IAEA proposed project)

O Decontamination in Fukushima

O Support for utilization of radiation monitoring data for drawing of easily understandable map

#### (Our proposed projects)

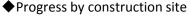
O Project to review the decontamination technology for rivers, lakes and ponds O Behavioral survey of radionuclide in wild lives

On-site inspection by IAEA experts



## Situation of restoration and development of social infrastructure

Reconstruction work has begun for 97% of public works facilities, and 83% 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.



(As of April 30, 2015)

Construction site of bublic works	Number of sites to be assesses			Number of completion	
acilities for estoration rom the disaster	(sites intended for restoration work)		Rate of construction(%)		Rate of completion(%)
Total	2,126	2,052	97%	1,765	83%
River and sand erosion control	271	264	97%	237	87%
Coast	156	154	99%	62	40%
Road and bridge	798	787	99%	746	93%
Port and harbors	331	315	95%	296	89%
Fishing port	473	435	92%	327	69%
Sewage	3	3	100%	3	100%
Park and urban facility	5	5	100%	5	100%
Public housing	89	89	100%	89	100%

## Progress, by Region

Aizu (26 sites)

Central (534)

Coastal (1,566)

[Reference]
Progress inside the evacuation zone

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

Completed 100%

Completed 100%

Completed 77%(1,205 sites)

60%

70% 80%

N. 1 C 11				
Number of sites	starting	ratio	completion	ratio
3///	206	96%	100	55%

## Joban Highway

Agricultural and

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)



## 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,



OPart of Route 288, Part of Iwaki-Namie Route (2015.2.28)

Odaka-Haranomachi [To resume on July 12 2016] Soma-Hamayoshida [Projected to resume in 2016]

JR Joban Line Hirono-Tatsuta [Resumed on June1,2014] JR Joban Line is expected to run

#### Substitute Bus operation ·Soma Sta.-Watari Sta

·Tatsuta Sta.-Haranomachi Sta.

Namie-Odaka [Projected to resume in 2017]

\*Tomioka-Namie [Projected to resume in 2020]

Tatsuta-Tomioka [Projected to resume in 2017]



through the en March 2020.	the sections by
	All Book

Port Onahama

other facilities	Progress rate	Situation of restoration and revitalization/Damage status		
Farmland	33.3%	Area of farmland available for resumption of agricultural management	1,820 ha	
(Ratio of area available for resumption of agricultural management)	(.luly 2015)	Area of farmland affected by tsunami following the Great East Japan Earthquake (Including old Restricted Area)	5,460 ha	
Agricultural management bodies	60.9%	Management body that resumed agricultural management	10,500 management body	
(Resumption status of management)  Xincluding partially resumed bodies	(March,2014)	Management body affected by the Great East Japan Earthquake	17,200 management body	
Fishery management bodies	41.1%	Management body that resumed fishing operation (including test fishing).	304 management body	
(Situation of operational resumption)	(May,2015)	Management body affected by the Great East Japan Earthquake	740 management body	
Restoration construction of	85.4%	District for which construction get started	2,656 district	
farmland and agricultural facilities	(Feb ,2016)	District for which assessment is completed	3,109 district	



ふくしまから はじめよう。

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: 27.4%

Inspection to confirm the present situation of children who aged

18 or younger at the time of the disaster, about 300,000 were

(As of Dec 31.2015) (564,083 respondents against 2,055,326 subjects)

## Citizens residing in the prefecture as of March 11, 2011 (2,055,326 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-July2011)



## Thyroid gland inspections

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

## <Full-scale inspection > (starting FY2014) <Primary inspections > (FY2011 to FY2013)

Primary inspection

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 Dec 31,2015)

Full-scale inspection



examined by N	Narch 2014
Judgement	

Resu	וונ		examinees	portion	examinees	portion
Judgment A Judgmer	(A1)	No node or cyst was observed.			89,565	00.29/
	(A2)	Node smaller than 5.0 mm or cyst smaller than 20 mm was observed.	143,576	99.2%	128,704	99.2%
Judgment B Node larger than 5.1 mm or cyst larger than 20.1 mm was observed.		2,293	0.8%	1,819	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%
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)				tion)		

• 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. (101 had operation: 1 with benign node, 100 with thyroid gland cancer)

**Judgement Contents** 

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 1,087 examinees), 51 examinees were found to be malignant or suspicious malignant. (16 had operation: 16 with thyroid gland cancer)

## Hirosaki City, Aomori Pref. Kofu City, Yamanashi Pref. Nagasaki City, Nagasaki Pref. Persons surveyed Aged 3 to 18: 4,365 examinees

Surveyed in three cities in Japan

Reference Results of survey for findings

on thyroid glands over three prefectures other than Fukushima Prefecture

#### Results of survey

[A1]1,853examinees (42.5%) [A2]2,468examinees (56.5%) (B) 44examinees ( 1.0%)

[C]0examinees (0.0%)

<Source> Data released to press by the Ministry of the Environment



## Internal exposure inspections using whole body counters

Cumulative number of examinees (June 2011 - Mar 2016) 282,688 examinees

【Results of inspection】 Committed effective dose (internal exposure dose radiated within the body throughout one's lifetime)				
Below 1mSv	1mSv	2mSv	3mSv	
282,662 examinees	14 examinees	10 examinees	2 examinees	



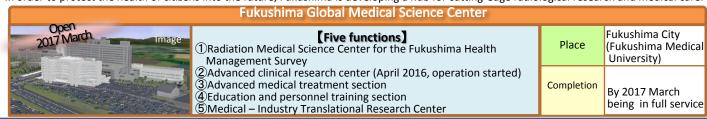
## Free medical care for all citizens aged 18 or under



Fukushima has increased the age range for those eligible to received 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.

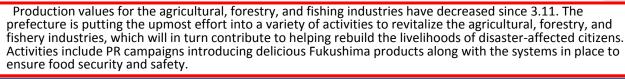
## Development of a hub for cutting-edge radiological research and medical care

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

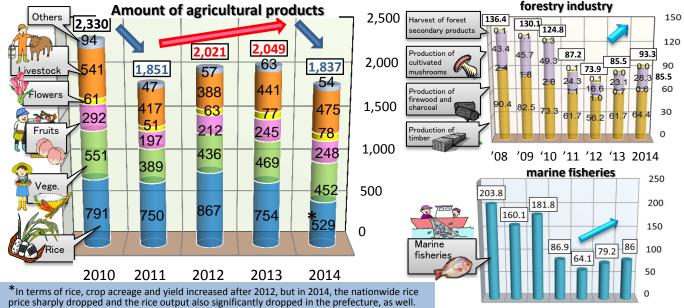


## Situation of the Agricultural, Forestry, and Fishery Industries





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

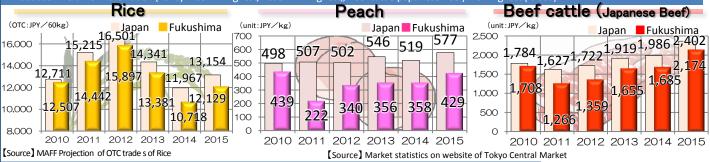


【Source】Prepared based on Statistics of Agricultural Income Produced, Forestry Income Produced and Fisheries Income Produced by the Ministry of Agriculture, Forestry and Fisheries

'08 '09 '10 '11 '12 '13 2014

#### Transition of the price of agricultural products representative of Fukushima

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



## Public relations for products that primary industries produced in the prefecture

In order to restore the reputation of Fukushima's primary industry products, the prefecture is carrying out a variety of PR

activities to appeal a wide variety of delicious products that are safe and secure.



## 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 by the Governor in Thailand 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 for the sales expansion of prefectural products. At the negotiation meeting, they reached an agreement that the prefecture will export about 20 tons of peaches, a record high, produced in Fukushima to Thailand.



#### Fukushima Hall 'MIDETTE in Tokyo

The hall located in Tokyo is hard at work holding a variety of events to show metropolitan area the current Fukushima, including recovery progress, the safety and security of Fukushima products, and the many attractions Fukushima has to offer.

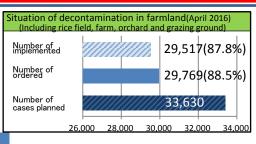
Food safety and security efforts

In order to ensure that no food products containing radioactive materials over the safety standard reach the market, the prefecture has conducted decontamination work for farmland, and strengthened the inspection system in place for safety confirmation. All rice produced in Fukushima undergoes inspection, as it is a staple of the Japanese diet. Labels are placed on rice bags to show that they have been met safety standards.

In order to ensure the safe distribution of marine products obtained through trial fishing operations, the prefectures offers guidance to fishery cooperatives in regards to inspection technology, and are working with producers and distributors to establish an efficient inspection system.

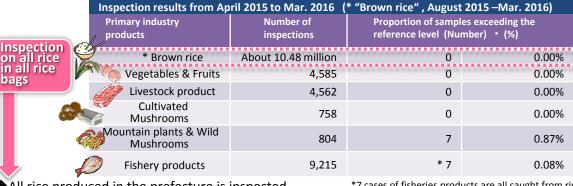
## Decontamination of farmland





## 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.



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



All rice produced in the prefecture is inspected.

\*7 cases of fisheries products are all caught from rivers.







Label showing the bag has passed inspection

Fishing of red salmons resumed at Lake Numazawa

As a result of monitoring,

it was confirmed that the radiation levels were stably below the standards.

Therefore, fishing restriction requirement was removed on March 30, 2016.

On April 9, 2016, fishing season for red salmons Resumed for the first time in 4 years.

In the prefecture, this species live only in Lake Numazawa (Kaneyama Town)



<u> http://www.new-fukushima.jp/</u> foreign\_language\_potal

## 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 March 29 2016, trial fishing is currently being carried out targeting 73 specific species.







In addition, 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) for catches to be sold through trial fishing, and conduct screening for radioactive substances.

Red salmon

ladioactive Cesium Contained

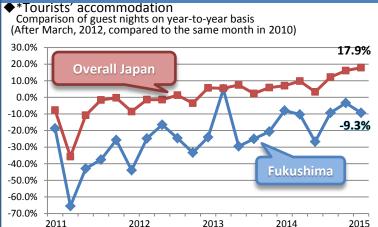


Drinking water

## **Tourism Industry Recovery**

Fukushima Destination Campaign (DC) took place between April and June, 2015, when the inbound tourists recovered to 90 % of the pre-disaster number according to the quick estimation. Fukushima tourism campaign 2016 (After DC), "A Happy Island filled with Blossoms of Happiness "is underway between April and June, 2016. We are committed to stabilizing the achievements from Fukushima DC, including hospitality by all residents in unity, development of regionally driven tourism networks and improvement of tourism resources, and continue to promote tourism.

## Changes of the number on tourism in the prefecture



\* Tourists' accommodation is a facility whose guests with sightseeing purpose accounted for over 50% of all guests.

[Data] Japan Tourism Agency The Survey of Tourist Accommodation Tourism Promotion Bureau, Fukushima Prefectural Government

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

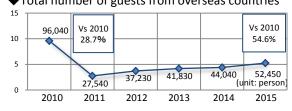
On May 18, 2016, 18 brands of Fukushima brewers were awarded gold prizes at the 104th Japan Annual Sake Awards in which brewers of Japanese sake compete based on the quality of their new sake, and won the largest number of gold prizes in Japan for four consecutive years. This is the 6th time for the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



## Situation of inbound tourism and education tour in Fukushima Prefecture



◆Total number of guests from overseas countries





Pre DC 2014Apr

Fukushima DC 2015 Apr-Jun

After DC 2016 Apr-Jun

We will hold further promotions to attract tourists by implementing round-tour plans, such as tours for food spots including breweries which won the largest number of gold medals in the National New Sake Appraisal Competition, flower spots and hot spring spots.



## Various events are accelerating the recovery of the tourism industry

Koriya city Nishigo

lwaki cit



The prefecture will spread food culture and food ingredients in Fukushima Prefecture to the rest of Japan and the world and communicate the bustling situation of Fukushima through food nationwide

Dunlop Srixon Fukushima Open Will be held from July 21 to 24, 2016. This event has 2016 July

been held since 2014 with the purpose to vitalize egions and support the evitalization of ukushima. Every time top evel professionals participate in the event, drawing attention from all around Japan.



## U-15 Baseball World cup 2016 in Iwaki

2016 July-Aug

The prefecture aims to hold an event which will be a symbol of revitalization by releasing messages for revitalization and hospitality with feeling of appreciation in return for support of restoration



## Industrial promotion and creation of employment



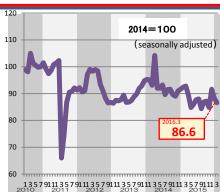
ふくしまから はじめよう。

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**

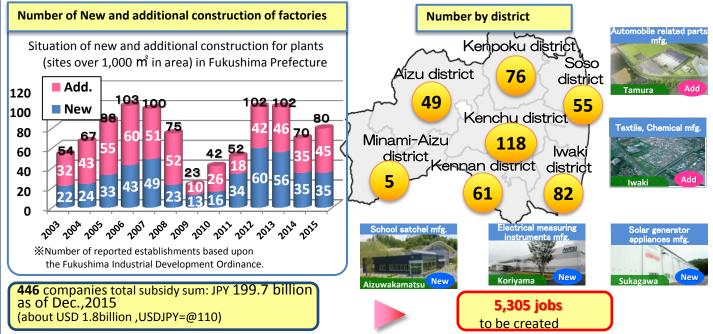
◆ IP index transited around 90 from 2011 to 2016 based on the index of 100 for 2010, not showing the recovery to the pre-disaster level. Particularly, slowdown is apparent in the transportation machinery industry, electronics parts, device, machinery industry.



## 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.



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.

191 companies total subsidy sum: JPY 88.4 billion as of Nov.,2015 (about USD 1.8billion ,USDJPY=@110)



**2,279 jobs** to be created

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

Sum covering from 2011 to 2015: Supported 3,976 cases with 98 billion yen

#### **Employment support**

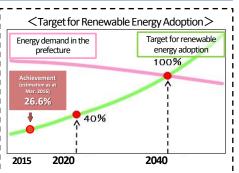
- ◆Emergency Job Creation Project
- Sum covering from FY2011 to 2015: **Employed 70,300 persons**
- ◆ Fukushima Support Project for Industrial Revitalization and Employment Sum covering from FY2011 to 2015: Employed 27,391 persons





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**



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.



energy businesses, and also provided opportunities for business negotiations. It is to be held on 19-20 of

## Signed the Quadripartite Agreement for the applications of CO2 free hydrogen



The Prefecture concluded the "Quadripartite Agreement for the applications of CO2 free hydrogen with the Tokyo Metropolitan Government, National Institute for Advanced Industrial Research and Technology (AIST) and Tokyo Environmental Public Service Corporation (May 17, 2016). We are determined to intensify research and development for commercialization of Fukushima-produced CO2 free hydrogen which does not emit Carbon Dioxide (CO2) in the manufacturing stage by utilizing renewable energy, promote cooperation with Fukushima based companies and enhance the fostering and exchange of the workforce.



In 2014, the National Institute of Advanced Science and Technology (AIST) opened a research and development center for renewable energy in Koriyama City. The center is currently installing a facility to test and evaluate large-scale power conditioning systems.

Place	Koriyama city
Status	Open in April 2014

Demonstrative and research project of Offshore Floating Wind farm technology Photo by : Fukushima Offshore Wind Offshore

offshore wind farm systems. The aim is to build a R&D hub, and cluster the wind power industry. Place Offshore of Hirono and Naraha area 13

Operations are in progress to verify the safety,

reliability, and economic efficiency of floating

1 lacc	Offshore of fill offo and Nataria area		
	[1st stage] 2MW system operating since Nov 201		
Status	[2nd stage] 7MW system operating since Dec 20 [2nd stage] 5MW system to operate from July 2016		

Using a system for effective use of

Place

Place

Promotion of Smart Community Concept

Namie town, Naraha town

Coastal Area Mega Solar Power Project

Minamisoma city

distributed energy by providing heat and electricity with renewables, such as solar power and wind power and LNG for building of towns for revitalization. Shinchi town, Soma city,

# Geothermal Hot-spring binary Tsuchiyu Onsen power plant



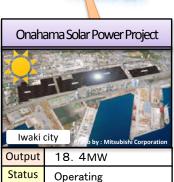
Status Operating

Status

Green Energy Aizu, Biomass Power Station Aizuwakamatsu city 5. 7MW Output

Operating







## **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	( 3rd place in Japan)
Outsourced production volume of medical devices in 2014	43.3 billion yen ( <b>1st</b> place in Japan)
Production volume of parts for medical equipment in 2014	17.7 billion yen ( <b>1st</b> place in

## 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

**Fukushima City** Place (Fukushima Medical University)

## Aizu University Revitalization Support Centre (Advanced ICT Laboratory)



The prefecture is making efforts to help clustering and foster human resources for businesses that are using ICT to promote regional industry. The support center is part of plans to install an R&D hub that will lead to cutting-edge ICT research, and the creation of new ICT industries.

Aizuwakamatsu City Place (Aizu University)

## 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

We are expecting that there will be further development in the medical device industry.

## Opening of "Robot Fiesta Fukushima 2016"



An event was held for the building of "Fukushima, the land of the robotic industrial revolution" in 2015 for the first time, with a purpose to raise awareness of citizens, particularly the young generation, toward robots. In 2016, we plan to hold exhibitions and demonstrations of cutting edge robots and various types of robots which have been developed in the prefecture in the respective fields of disaster-response, decommissioning, medical and welfare services. (Planned to take place on November 19)

## **Innovation Coast Scheme Promotion Committee**

The Robot Testing Fields and the International Industry-Academia-Government Collaboration Facilities for Robots are to be developed starting in FY 2016 as bases that will play core roles under the Fukushima International Research Industrial City (Innovation Coast) Framework. Ministry of Economy, Trade and Industry and the Fukushima Prefectural Government have been jointly holding discussions on the future directions for the development and operation of these bases.





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.

It is scheduled to open in FY 2016.

Place

Koriyama City Site of the former Agricultural Test Center)

 Robot Test Field performance assessments of disaster response robots image Minamisoma city Namie town 2 Okuma Analysis and Research Center (Laboratory for analysis and research of

radioactive substances)

To understand properties of fuel debris and

develop disa 第1棟 Okuma town

3 International Decommissioning Joint Research Center, International Joint Research Building

Decommissioning Tomioka town

## **Other Facilities**

(Re-posting P.2) (Minamisoma City and Namie Town) 5 Naraha Remote Technology Development

Center < Mock-up Center> (Re-posting P.2)



## Basic concepts of the Revitalization Plan and FY2016 Budget

## 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.



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.

## Prefectural Govt. **Budget for Fiscal Year 2016**

# trillion JP1

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

## Revitalization evacuation area

**Acceleration Project** for Evacuation Area

## 82.6 billion JPY

Building of towns based on the hub of revitalization, strengthening of wide-are 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 with peace of mind

Assistance for rebuilding 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



## Protecting the physical and mental health of citizens

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

Countermeasures against reputational damage/ fading memories

Town-building Exchange **Network Strengthening** 

## 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

165.1 billion JPY

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



Countermeasures against depopulation and aging

237 billion

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



## The 69th \*Nine Municipal Government Leaders' Summit held in Fukushima City.

On May 25, 2016, for the support of the revitalization of the prefecture, the summit was held in Fukushima City for the first time.

\*members: Saitama Prefecture, Chiba Prefecture, Tokyo Metropolitan Govt., Kanagawa Prefecture, Yokohama City, Kawasaki City, Chiba City, Saitama City, Sagamihara City



Participants observed "FELIZ LATTE, a revitalization indoor ranch" being jointly run by 6 livestock farmers, all of them are evacuees, from the Soso Region.



At the summit, the "Joint Declaration by the nine municipalities for the reconstruction and revitalization of Fukushima" was adopted, including continued support for reconstruction and positive action to the national government after discussion on the reconstruction and revitalization of Fukushima.



At the luncheon, each leader enjoyed tasting dishes made from Fukushima products. After the conference, Japanese sake and other prefectural products were promoted.

## **Fukushima Prefecture Outlines**



#### Racio Data

O Capital: Fukushima City

O Population: 1,903,704 (May 2016)

O Area: \*13,783km²

(\*Evacuation instructed area: 953km²)

#### Access

O Roughly 200km away from Tokyo

O JR Tohoku Shinkansen Line

•Tokyo-Koriyama Sta. 80 min

•Tokyo-Fukushima Sta. 90 min

O NEXCO Highways

Tohoku expressway

Joban expressway

Ban-Etsu expressway

O Fukushima Airport

Fukushima Airport <->Itami(Osaka )

Fukushima Airport<->New Chitose (Hokkaido)









Future From Fukushima

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