Eliminating Negative Reputation Impact

 \sim Reconstruction from Nuclear Disaster & the History of Safety and Revitalization of Fukushima \sim

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Changes in Air Dose Rate

• The average air dose rate at 1m in height from the ground surface at a distance within 80km from Fukushima Daiichi Nuclear Power Station nuclear power plant decreased by about 65% compared to levels in November 2011.



November 2011



September 2015

Most recent data: http://radioactivity.nsr.go.jp/en/

Source: The Secretariat of the Nuclear Regulation Authority : Aircraft monitoring of areas near Fukushima Daiichi Nuclear Power Station

Reconstruction and Recovery of Fukushima: Status of the Areas under Evacuation Orders (1)

• Dimension of areas under evacuation order is 5% of the whole prefecture. People in 95% of the prefecture can live a normal life.



Source: Created by the Reconstruction Agency based on materials from Fukushima Prefecture and the Support Team for Residents Affected by Nuclear Incidents

Reconstruction and Recovery of Fukushima: Status of the Areas under Evacuation Orders (2)

• Successive lifting of evacuation orders after the disaster.



Current State of Air Dose Rates within Fukushima: Comparisons with Other Parts of the World

• The air dose rate in Fukushima Prefecture is about the same level as other major cities overseas.



Source: Created by the Reconstruction Agency based on Fukushima Prefecture "Steps for Revitalization in Fukushima (17th)", "Basic Information on Radiation Risk", Japan National Tourism Organization, United States Environmental Protection Agency and Institut de radioprotection et de sûreté nucléaire.

Improvement of Transportation Infrastructure in Areas under Evacuation Orders and the Innovation Coast Initiative

- As of September 2014 and March 2015, traffic is permitted in all lanes on National Rt. 6 and the Joban Expressway, respectively.
- Average traffic per day is about 16,000 vehicles on National Rt. 6 and about 10,000 vehicles on the Joban Expressway.
- The Innovation Coast Initiative and the Fukushima plan for a new energy society are in progress in the Hamadori area, with decommissioning, cutting-edge robot technologies, and installation of transmission lines for the wind power etc.





 CLADS (Collaborative Laboratories for Advanced Decommissioning Science) International Joint Research Building (Tomioka Town)
 (To be completed in March 2017)



Floating Offshore Wind Farm Demonstration Project (Offshore from Fukushima) (Start of demonstration in November 2013)

Progress of Innovation Coast Initiative



 Naraha Remote Technology Development Center (Naraha Town) (Start of full-scale operation in April 2016)



Robot development/demonstration base (Minamisoma City, Namie Town) (Future development plans to be facilitated)

Contaminated Water Measures at Fukushima Daiichi Nuclear Power Station

- There has been safe and steady progress of measures for decommissioning and contaminated water.
- Concentrations of radioactive substances outside of the port continue to be sufficiently low even in comparison with global drinking water quality standards (WHO Guidelines for Drinking-water Quality). (IAEA has also recognized that public safety is ensured.)



Concentrations of radioactive substances in seawater in the surrounding ocean area (outside the port) have <u>dramatically reduced in the few</u> <u>months immediately after the accident.</u>



Environmental Improvement at Fukushima Daiichi Nuclear Power Station

• Regular work clothes can be worn in about 90% of areas as a result of decontamination within the premises, etc. (Full-body protective suits and full-face masks are not required.)

<Area maps by types of work clothes inside the premises of Fukushima Daiichi Nuclear Power Station>

<Work scenes in regular work clothes>





Adoption of the World's Strictest Level of Standard Limits as Set in Scientific Basis

• Food safety is ensured through a thorough inspection of radioactive substances based on the strictest level of standard limits in the world as set in scientific basis.

(Unit:Bq/kg/										
Japan Standard Limits		E U Council Regulation		U.S. CPG Sec. 560.750		CODEX CODEX STAN				
under Food Sanitation Act		(Euratom) 2016/52		Radionuclides in Imported Foods - Levels of Concern		193-1995				
Drinking water Milk Infant foods General foods	10 50 50 100	Liquid food Dairy produce Infant food Other food except minor food	1,000 1,000 400 1,250	Food	1,200	Infant foods Foods other than infant foods	1,000 1,000			

X Standard Limits in the above table are used to make radiation doses received be below a certain level and are not necessarily the boundaries between safety and danger.

Source: Created by the Reconstruction Agency based on material from Ministry of Health, Labour and Welfare

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%CODEX: Intergovernmental organization established by Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) to develop international food standards. (Member countries : 187 countries and the EU (as of March 2016))

Initiatives for the Safety and Security of Food in Fukushima Prefecture

- Announcement of results of thorough monitoring of agriculture, forestry, and fishery products prior to shipment.
- Significant reduction of products that exceed standard limits (100Bq/kg) in recent years, in comparison to immediately after the disaster.
- Shipments of products that exceed standard limits are restricted. Products on the market are safe.
- The lifting of restrictions on distributions is carried out on the basis of strict criteria.



Source: Created by the Reconstruction Agency based on Fukushima Prefecture "Steps for Revitalization in Fukushima (17th)" and materials from the Ministry of Agriculture, Forestry and Fishries.

Initiatives for Inspections of All Bags of Rice in Fukushima Prefecture

The world's first inspections for radioactive substances have been carried out on all bags of rice since 2012.
Results in 2015 show that all bags of rice were within the standard limit (100Bq/kg).





Evaluation of monitoring, etc. by IAEA (Excerpts from IAEA report (November 2015))

- According to the information provided, although many food restrictions remain in force, it has not been necessary to implement new food restrictions over the reporting period and several such restrictions have been lifted where extensive testing confirms that food collected no longer exceeds the regulatory limit.
- The IAEA continues to acknowledge that systems are in place and are being implemented to prevent food and agricultural products with levels of caesium radionuclides in excess of the national regulatory limits from entering the food supply chain.
- The Joint IAEA / FAO Division understands that the measures taken to monitor and respond to issues regarding radionuclide contamination of food are appropriate, and that the food supply chain is under control.

Results of Surveys of Marine Fishery Products in Fukushima Prefecture

• Between April and June 2011 immediately after the disaster, the percentage of marine fishery products in Fukushima Prefecture that exceeded the standard limit (100Bq/kg) was 57.1%. This percentage has continued to decline, and has fallen to 0% since April 2015.



Voluntary Testing of Marine Fishery Products in Fukushima Prefecture

- Voluntary restrictions of fishing operations and implementation of test operations and sales* in Fukushima Prefecture.
- Restrictions on distributions are imposed upon items that exceed the standard limit to ensure the safety of marine fishery products reaching consumers.
- Fishery cooperatives give due attention to safety and security by conducting voluntary inspections based on voluntary standard limits (50Bq/kg) that are stricter than national standards.
- * Test operations and sales: As a result of inspections of radioactive substances in marine fishery products during voluntary restrictions since March 2011, operations and sales in ocean areas and fish species that are stably below standard limits are being conducted on a trial basis.



Source: Created by Reconstruction Agency based on Fukushima Prefectural website

Evaluation of monitoring by the IAEA (Excerpt from IAEA report (February 2014))

Japan adopted a limit of 100 Bq/kg in combined Cs-134 and Cs-137 for food products in 2012, which also applies for marine fishery products, to keep public dose below the international standard level. Accordingly, the comprehensive monitoring system has been developed by Japan, both for seawater and for the products in the food chain. Additionally, Japan has introduced limits for food controls that are based on the international standard level. This systematic approach, together with the distribution restrictions by relevant local governments, ensures the safety of the marine fishery products in the market.





New Stage towards Reconstruction & Revitalization

