

# Latest Report on Efforts towards Stabilize Nuclear Power Station & Reconstruct

By Japan SPOTLIGHT Editorial Section

Our readers must surely be interested in the latest developments in the stabilization efforts in both Fukushima Dai-ichi and the Japanese economy. Here we provide you with some updated information on these efforts, following our July/Aug. issue, to show you how quickly Japan is recovering.

METI, a key player in restoring our economy, provided us with this information.

On the question of stabilizing efforts at the Fukushima Dai-ichi nuclear power station, there are four key challenges: cooling down the reactor; containing the spread of radioactive substances (into the sea, soil and atmosphere); rigorous and intensive monitoring; and ensuring the safety of food, products, and on-site workers.

The following charts explain how a sustainable reactor cooling and stabilizing process is achieved. (Chart 1)

The Japanese Government and TEPCO are making their utmost efforts to prevent the dispersion of radioactive substances into the atmosphere, soil and water.

The following chart and photo summarize these efforts. (Chart 2)

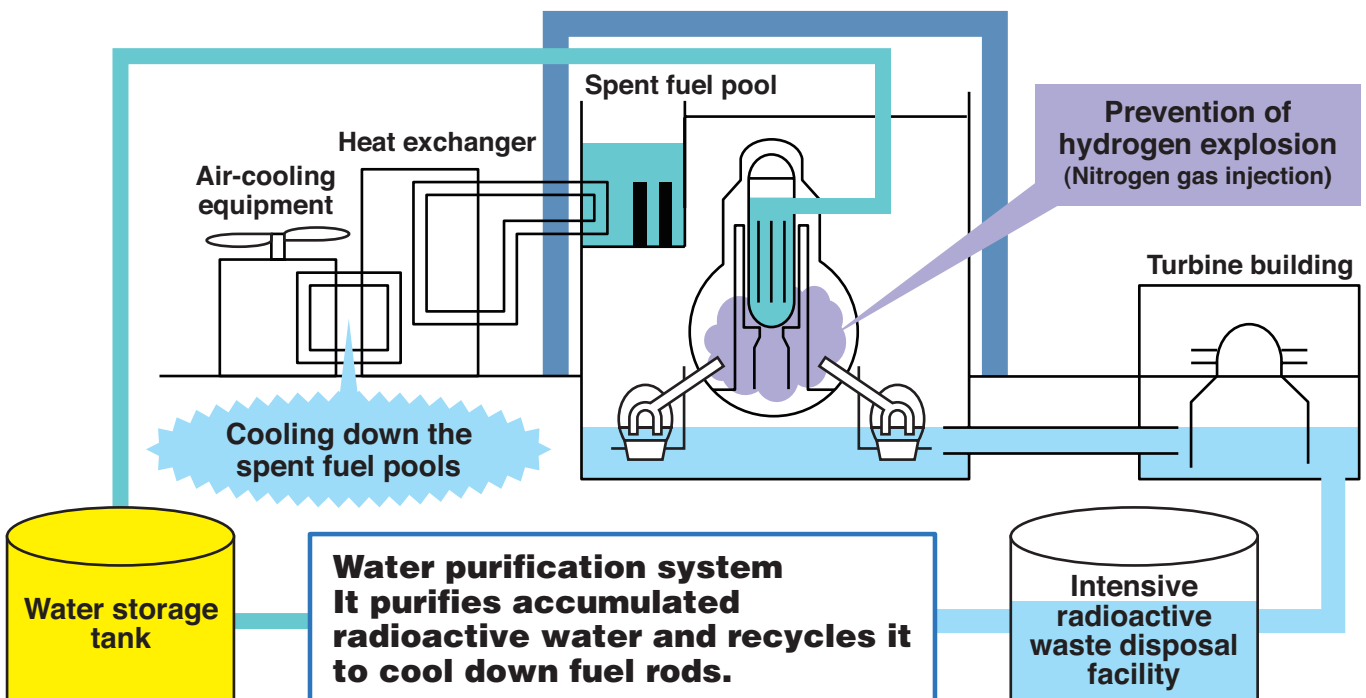
Rigorous and intensive monitoring shows us a decline in the environmental radioactivity level at the nuclear power station site and various regions, in particular the cities that many foreign tourists or business-people visit such as Tokyo, Sapporo and Osaka. (Chart 3)

Japan inspects the radioactivity in food every day, and restricts the distribution of food that fails to meet provisional regulation values in order to avoid the spread of contamination. It has been detected that beef from Fukushima exceeded the provisional

CHART 1

## Summary of the process

### Installation of reactor covers (Currently under process at Unit 1)



Source: METI

# Stabilization of Fukushima Dai-ichi Recovery of Japanese Economy

regulation value of cesium (500Bq/kg). Because a traceability system had been established in Japan, the Japanese government could determine the location and status of all the meat concerned. Shipment restrictions and a blanket-testing system were implemented for food safety. Japanese manufacturing industries spare no effort to ensure the safety of their products. Inspection institutions and industry associations provide a testing service of the radiation levels of export products.

Meanwhile, in the TEPCO Roadmap towards Restoration from the Accident (below), they have succeeded in fulfilling all the targets set in Step 1. On July 19, TEPCO declared completion of Step 1. (Table 1)

On the question of Japan's economic recovery from the earthquake, first of all, the following photos show clearly that infrastructure such as roads, railroads,

seaports, airports and utilities such as electricity, gas and water have been rapidly and steadily recovering. (Photos 1 & 2)

The economic outlook for the Japanese economy in FY2011 and FY2012 has been influenced by the earthquake, as shown in Table 2; namely, it has been revised downward in 2011 and revised upward in 2012. (Table 2)

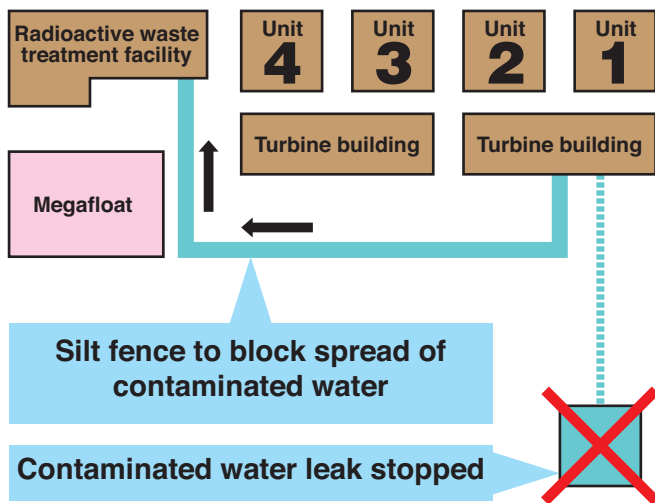
It is to be noted lastly that, as Chart 7 shows, restoration of production bases has been further accelerated and now the restoration process is almost completed. (Chart 4)

To sum up, the stabilization process of the Fukushima Dai-ichi NPS is on schedule and Japanese business recovery from the earthquake is steady and rapid.

At this moment, there should be very little concern about coming to Japan for tourism or business.

CHART 2

## Efforts to contain spread of radioactive substances



Source: METI

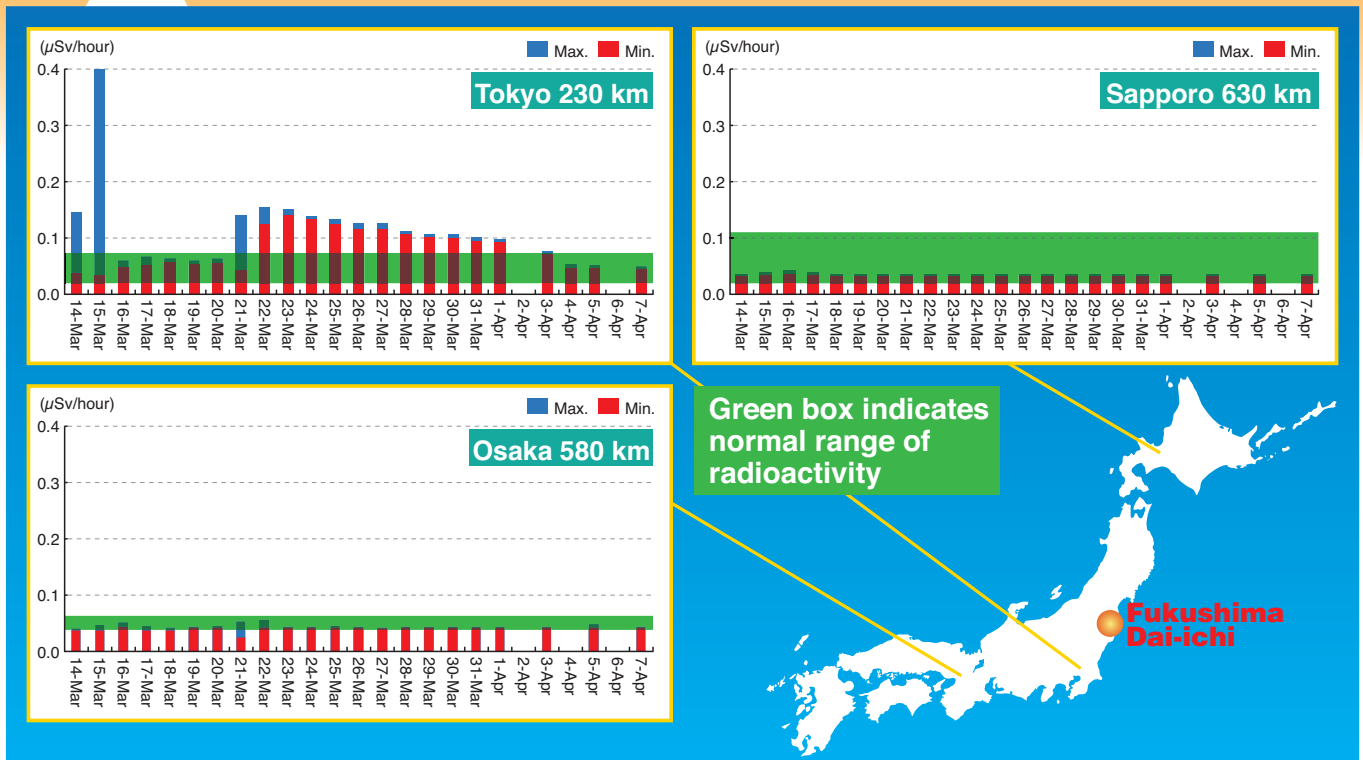
Photos: TEPCO



Spraying synthetic materials

CHART 3

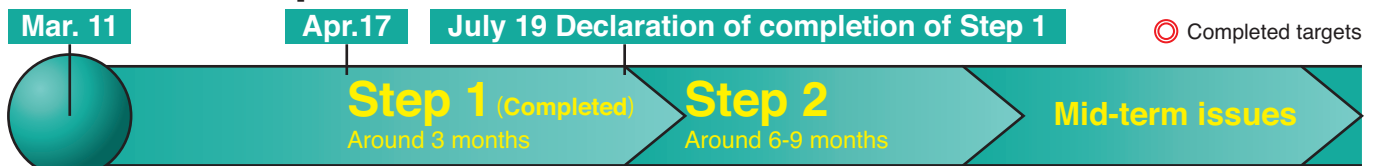
### Atmospheric readings in Tokyo, Osaka & Sapporo



Source: METI

TABLE 1

### TEPCO's roadmap towards restoration from the accident



Target	Radiation dose in steady decline	Controlling release of radioactive materials	
<b>Reactors</b>	<ul style="list-style-type: none"> <li>☉ <b>Stable cooling</b> <ul style="list-style-type: none"> <li>Prevention of hydrogen explosion</li> <li>Establishment of circulating injection cooling</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Cold shutdown</b> <ul style="list-style-type: none"> <li>Establishment of circulating injection cooling (continued)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Protection against corrosion of cracking structural materials</li> </ul>
<b>Spent fuel pools</b>	<ul style="list-style-type: none"> <li>☉ <b>Stable cooling</b> <ul style="list-style-type: none"> <li>Remote-control operation</li> <li>Circulating cooling system (installation of heat exchanger)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>More stable cooling</b> <ul style="list-style-type: none"> <li>Remote-control operation (continued)</li> <li>Circulating cooling system (continued)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Removal of fuels</li> </ul>
<b>Accumulated water</b>	<ul style="list-style-type: none"> <li>☉ <b>Secure storage place</b> <ul style="list-style-type: none"> <li>Installation of storage/processing facilities</li> <li>Installation of storage facilities/decontamination processing</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Reduction of total amount of contaminated water</b> <ul style="list-style-type: none"> <li>Expansion of storage/processing facilities</li> <li>Decontamination/desalt processing</li> <li>Mitigation of contamination in the ocean</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Installation of full-fledged water processing facilities</li> <li>Completion of processing of accumulated water in building</li> </ul>

Source: METI



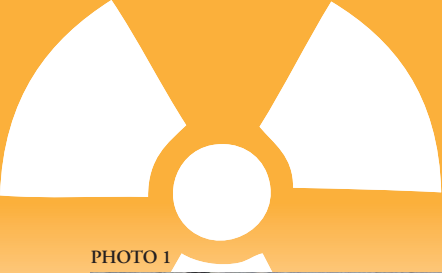


PHOTO 1

Photos: Kyodo News



March 13 Sendai Airport

**1 month later**

PHOTO 2



April 13 Sendai Airport

TABLE 2

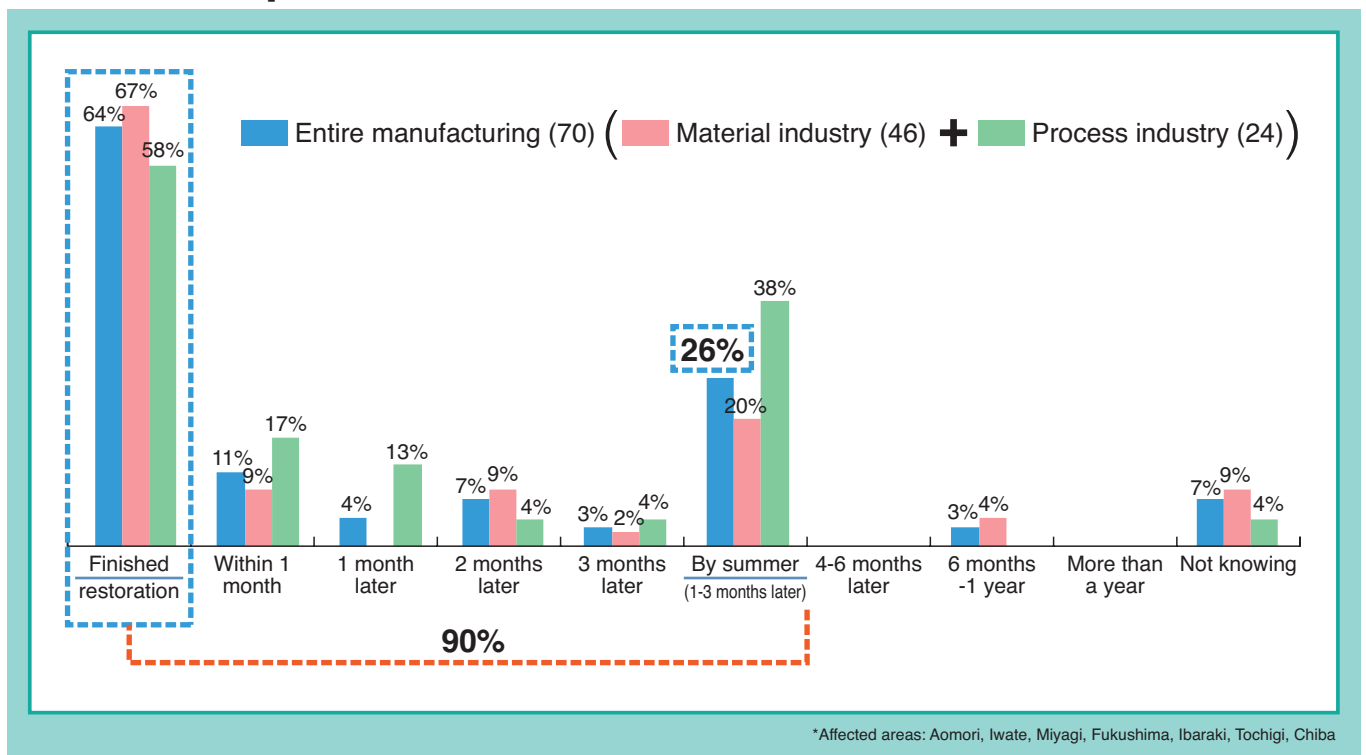
### Economic outlook before & after the quake

		FY 2011	FY 2012
Bank of Japan	Jan. 2011	+1.6%	+2.0%
	Apr. 2011	+0.6%	+2.9%
		by ▲1.0%	by +0.9%
		CY 2011	CY 2012
OECD	Nov. 2011	+1.7%	+1.3%
	May 2011	▲0.9%	+2.2%
		by ▲2.6%	by +0.9%
IMF	Jan. 2011	+1.6%	+1.8%
	Jun. 2011	▲0.7%	+2.9%
		by ▲2.3%	by +1.1%

Source: METI

CHART 4

### Restoration of production bases accelerated



Source: METI