

# Economic Impact of the Great East Japan Earthquake and current status of Recovery

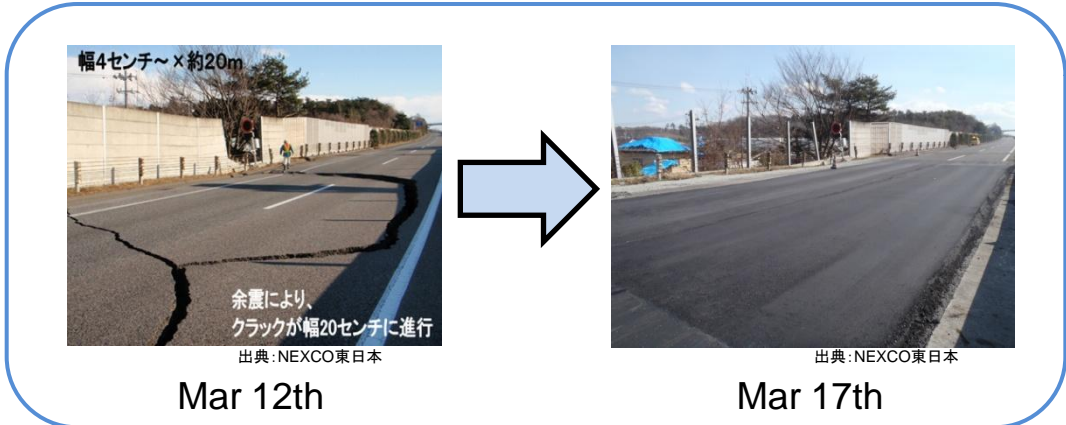
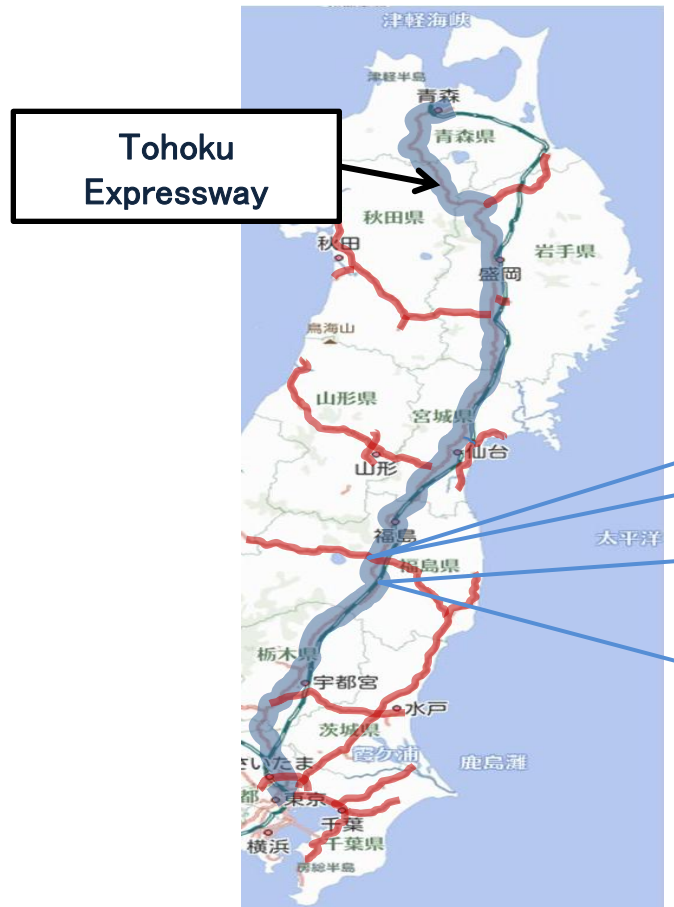
Embassy of Japan in Denmark

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# 1. Reconstruction from the Present Earthquake: (1) Tohoku Expressway

- Tohoku Expressway is a traffic and commercial artery which connects Tohoku and Kanto.  
Numerous factories are located along the route.
- 347 km out of 675 km of the expressway was destroyed by the earthquake on March 11, but the traffic restriction was lifted on March 24<sup>th</sup> following the completion in emergency restoration measures.



# 1. Reconstruction from the Present Earthquake: (2) Railroads

- None of 26 trains operated at the moment of the earthquake was derailed. Neither serious destruction of elevated bridges and stations , nor tunnel collapse occurred.
- The entire Tohoku Shinkansen is going to resume its operation by the April 30<sup>th</sup>.

Scheduled resumption of the operation as of April 18th



Morioka to Shin Aomori  
Resumed Operation in April 13th

Ichinoseki to Morioka  
Around April 23th

Sendai to Ichinoseki  
Around April 30th

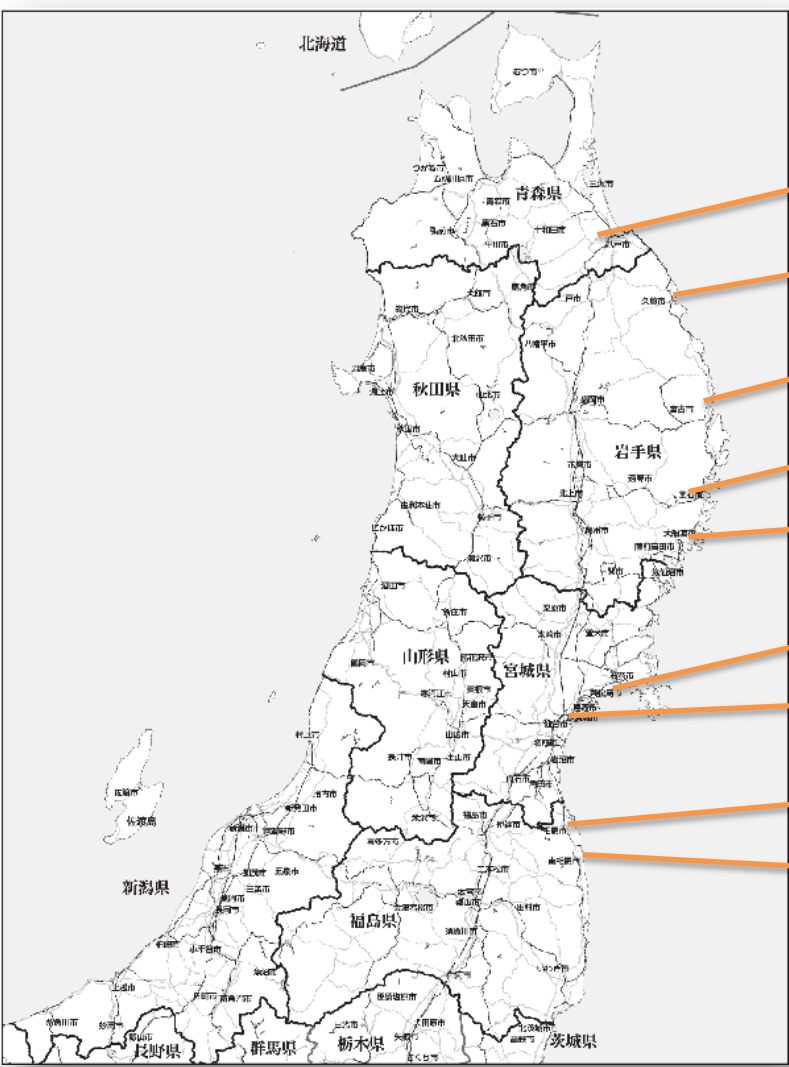
Fukushima to Sendai  
Around April 25th

Nasushiobara to Fukushima  
Resumed Operation in April 12th



# 1. Reconstruction from the Present Earthquake: (3) Sea Ports

- Quays of major ports in the quake-hit pacific coast from Aomori to Ibaragi became available by May 24<sup>th</sup>
- The ports damaged by the tsunami are subsequently recovering its functions.



Hachinohe

Kuji

Miyako

kamaishi

Ofunato

Ishinomaki

Sendai-Shiogama

Soma

Onahama

Quays of all the major ports became available on March 24<sup>th</sup>

# 1. Reconstruction from the Present Earthquake: (4) Air Ports

- The reconstruction of Sendai air port which was badly damaged by the tsunami showed surprisingly rapid progress. The entire runway was restored and became available by March 28<sup>th</sup>.
- Passenger flights of Haneda-Sendai and Osaka(Itami)-Miyagi resumed operation on April 13<sup>th</sup>.



Sendai air port damaged by the tsunami as of March 13th



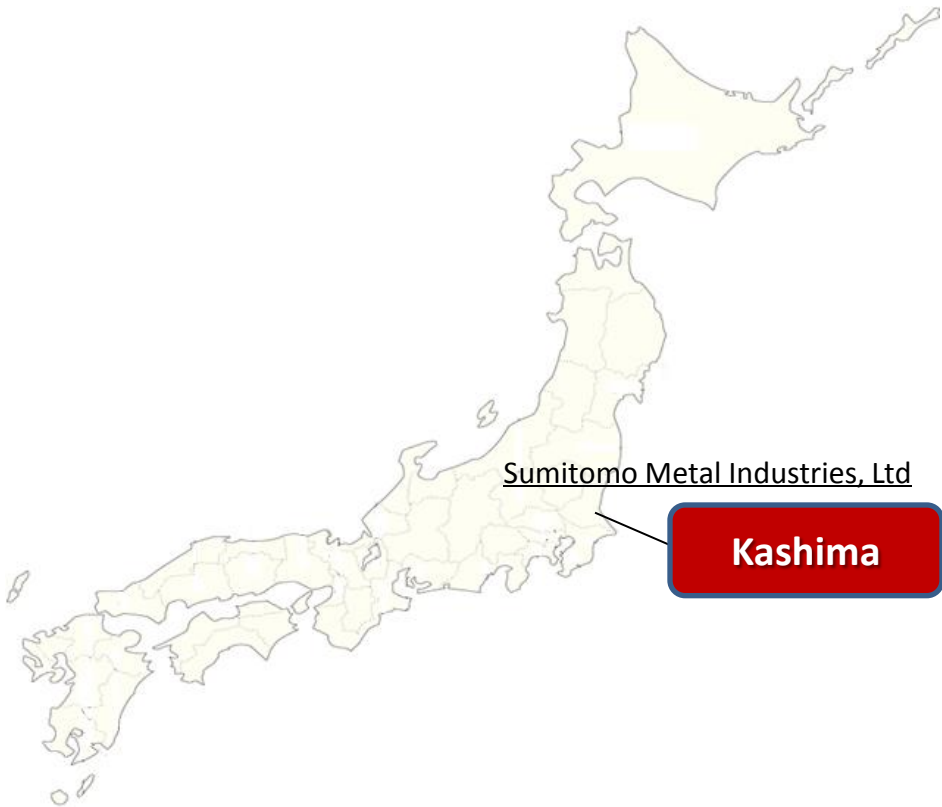
The first landing to Sendai airport since the earthquake on April 13<sup>th</sup>.

Reference: Kyodo

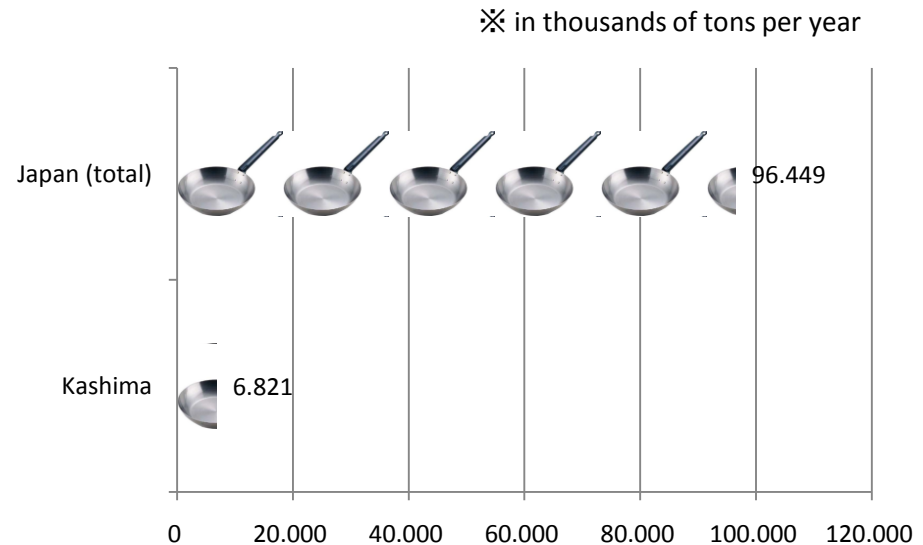
## 2. Effect to Specific Industries : (1) Steel

- Although Sumitomo Metal's Kashima Plant has stopped production, other Japanese iron works can still produce plenty of crude steel.

Geographical Locations of Damaged Iron Works



Production Capacity for Crude Steel  
(As of March, 2010)



## 2. Effect to Specific Industries: (2) Petrochemicals

- Mitsubishi Chemical's Kashima Plant, which has suffered some damage from the Great East Japan Quake, is responsible for about 10% of Japan's ethylene production. Even if it cannot be repaired soon, Japan has many other complexes which can produce more than the necessary volume of petrochemicals.

Production Capacity for Ethylene  
(As of December, 2009)

※ in thousands of tons per year

Location	Company	Capacity	Share
Kashima	<u>MITSUBISHI CHEMICAL CORP.</u>	<u>828</u>	<u>11.4%</u>
Goi	MARUZEN PETROCHEMICAL CO., LTD.	480	6.6%
Ichihara	KEIYO ETHYLENE CO., LTD	690	9.5%
	MITSUI CHEMICALS, INC.	553	7.6%
Chiba	IDEMITSU KOSAN CO., LTD.	374	5.1%
Anegasaki Sodegaura	SUMITOMO CHEMICAL CO., LTD.	380	5.2%
Kawasaki	JX NIPPON OIL & ENERGY CORP.	404	5.6%
	TONEN CHEMICAL CORP.	491	6.7%
Yokkaichi	TOSOH CORP.	493	6.8%
Osaka	MITSUI CHEMICALS, INC.	455	6.3%
Mizushima	MITSUBISHI CHEMICAL CORP.	450	6.2%
Fukuyama	ASAHI KASEI CHEMICALS CORP.	443	6.1%
Shunan	IDEMITSU KOSAN CO., LTD.	623	8.6%
Ohita	SHOWA DENKO K. K.	615	8.4%
Total Capacity		7279	100.0%

※ Underlined plants shut their naphtha crackers after the quake.

Ratio of Export & Import to  
Production of Petrochemicals





## 2. Effect to Specific Industries : (3) Auto / Electronics Industries

- Several weeks after the earthquake, certain major factories producing core parts and materials temporally ceased the operation, but sequentially resume its operation. For factories that need more time to recover, companies seek substitution by other factories.
- Most of motor production companies restarted production operation, depending on the supply level of core parts and materials.

Toyota Motor	All factories resume production from April 18
Nissan	All factories, including seismic-damaged Engine factory in Iwaki-city , resume production from April 18
Honda	All factories, except seismic-damaged Tochigi R&D center, resume production from April 11. Operation of Tochigi center is substituted by Saitama Factory.
Hitachi Automotive Systems	Seismic-damaged Sawa and Fukushima Auto-parts manufacturing factories partially resume production from March 25. Manufacturing facilities has been almost completely repaired.
Hitachi Vehicle Energy	Seismic-damaged Headquarter Factory at Hitachinaka-city resume production of Lithium-ion batteries from March 28.
Hitachi Ltd.	Seismic-damaged factory at Hitachi partially resumes manufacturing of turbine for electricity power plants from March 29 . 90% Production level has recovered.
Renesas Electronics	6 of 7 factories that suffer seismic damage already resume production. All the stakeholders concerned try to make every effort to restart the operation of NAKA Factory as soon as possible. Originally they announced “ before July, now try to accelerate the schedule)
Shinetsu Chemicals	Seismic-damaged Shirakawa Factory resumed production by the end of April. Right now, substituting by other group factories.
IHI	Seismic-damaged Soma Factory, producing engines and gas turbine, now resume operation since march 29.