

# Progress on treatment of debris by the Great East Japan Earthquake (in coastal municipalities of the three most affected prefectures)

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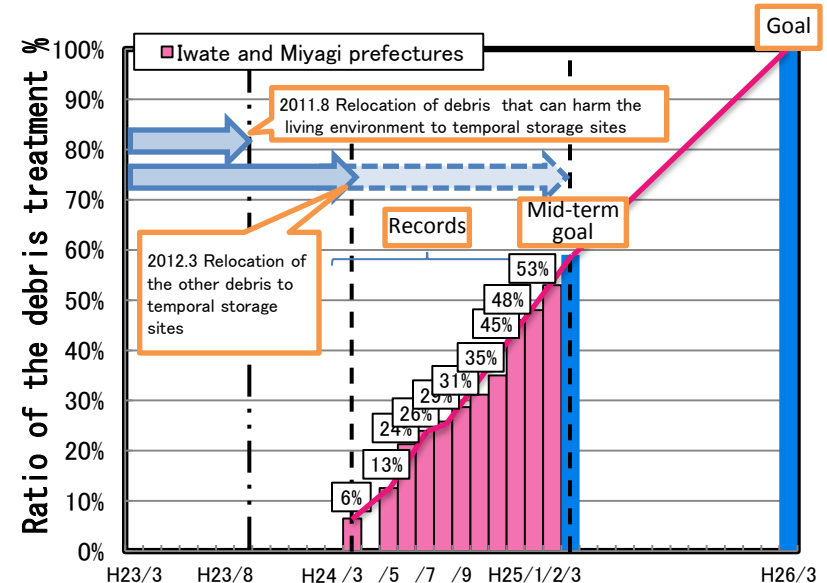
## Treatment of debris and tsunami deposit

### (1) Debris

- Progress of treatment of debris in coastal municipalities of the three most affected prefectures is:  
44% (Iwate), 56% (Miyagi), 35% (Fukushima).
- The overall ratio of the debris treatment in three prefectures reached 51%. The treated quantity increment of February 2013 was 0.82 million ton (5%). In Miyagi prefecture, the mid-term goal (59%) is likely to be achieved.
- Both Iwate and Miyagi prefectures have already established treatment facilities and advanced the arrangement of cooperation from non-affected areas. Therefore, the treatment of debris is likely to be completed by the end of March, 2014.

### (2) Tsunami deposit

- 22% of generated tsunami deposit has been treated. The treated quantity increment of February 2013 was 0.40 million ton (4%). The progress has been improved, but still needs to be accelerated.
- Having progressed the installation of treatment facilities, the treatment of tsunami deposit is likely to be completed by the end of March, 2014



Goal and records of treatment of debris in coastal municipalities in Iwate and Miyagi prefectures

Progress on treatment of debris from coastal municipalities as of the end of February 2013

Prefecture	Estimated quantity of debris and tsunami deposit (10 thousand t)	Debris				Tsunami deposit				No. of temporary storage sites
		Estimated quantity (10 thousand t)	Treatment			Estimated quantity (10 thousand t)	Treatment			
Quantity (10 thousand t)	Ratio (%)		Midterm goal (%)	Quantity (10 thousand t)	Ratio (%)		Midterm goal (%)			
Iwate	525	366	159(42)	44(39)	58	159	16(14)	10(9)	50	62
Miyagi	1,830	1,103	621(563)	56(51)	59	728	210(171)	29(24)	40	90
Fukushima	315	161	56(49)	35(31)	—	153	3(3)	2(2)	—	30
<b>Total</b>	<b>2,670</b>	<b>1,630</b>	<b>836(754)</b>	<b>51(46)</b>	—	<b>1,040</b>	<b>229(189)</b>	<b>22(18)</b>	—	<b>182</b>

※Figures for Fukushima excludes those for the Contaminated Waste Countermeasure Areas, where the national gov. conducts treatment directly.

※Figures in ( ) is the data as of the end of January, 2013.

## Treatment in affected areas

- Approx. 90% of debris has been removed to temporary storage sites. Each municipality is implementing the removal based on the request of demolition of houses and groundworks from owners. The removal is to be finished by March, 2013.
- In Iwate, Miyagi, and Fukushima prefectures, 34 temporary incinerators have been installed.
- Treatment facility for tsunami deposit in Kamaishi city has been installed. Two additional facilities (in Rikuzentakata city and Kesenuma bloc) will be established in near future.
- As for the Contaminated Waste Countermeasure Areas of Fukushima prefecture, the debris in Minamisouma city and Naraha town started to be removed to temporary storage sites.



Treatment facility of tsunami deposit in Kamaishi city, Iwate prefecture  
(Installed on March, 2013)

## Cooperation from non-affected areas on debris treatment

- Iwate and Miyagi prefectures have requested other prefectures to cooperate in the disposal of a part of their debris (0.70 million tons). The arrangement of cooperation has finished 0.66 million tons.
- 66 projects in 15 prefectures have already started and treated 0.28 million tons of debris.
- Rokkasho village (Aomori) started to treat debris from March 14, 2013.

## Recycling etc.

- Recycled materials started to use in fishing port restoration project in Kesenuma city (Miyagi) from March 5, and coastal embankment restoration project in Iwaki city (Fukushima) from March 15.
- Recycled materials from debris are being used in public works implemented by the central government, prefectures, and municipalities.

## Approaches toward the goal

- In Iwate and Miyagi prefecture, complete arrangement of all debris treatment including cooperation from non-affected areas by March, 2013.
- Promote the arrangement of the use of recycled materials in reconstruction projects.



Coastal embankment restoration project in Iwaki city  
(Started on March 15, 2013)

Major public works using recycled material from debris

	Projects	Recycled material	Quantity (including plan)
Iwate	Disaster prevention forests restoration	Tsunami deposit Concrete debris	14
	Coastal embankment restoration	Concrete debris	29
	Agricultural field restoration	Tsunami deposit Concrete debris	10
	Others	Tsunami deposit Concrete debris	27
Miyagi	Coastal embankment restoration	Tsunami deposit Concrete debris	43
	Disaster prevention forests restoration	Tsunami deposit Concrete debris	53
	Park restoration	Tsunami deposit Concrete debris	191
	Fishing port projects	Concrete debris	20
	Temporary storage sites	Concrete debris	34
	Others	Tsunami deposit Concrete debris	33
Fukushima	Coastal embankment restoration	Concrete debris	9