

# Progress on treatment of debris by the Great East Japan Earthquake

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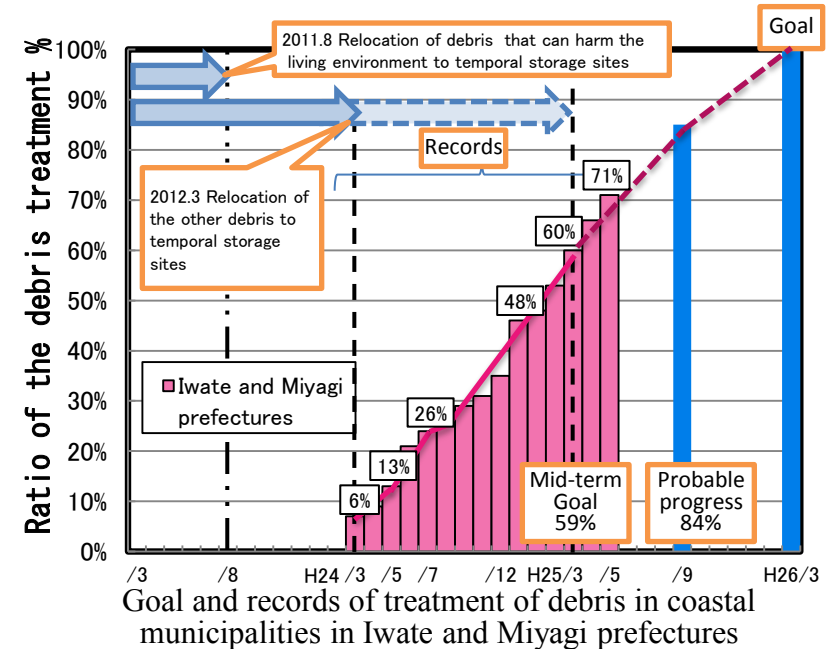
## 3 most affected prefectures

### (1) Debris

- Progress of treatment of debris in coastal municipalities is: 57% (Iwate), 76% (Miyagi), 47% (Fukushima) [68% (3 prefectures)]
- Treatment of debris has progressed by 5% in three prefectures this month, and the treatment of two thirds of all generated debris has completed.
- Treatment progresses steadily to reach the mid-term percentage of this fiscal year (September, 2013)

### (2) Tsunami deposit

- Progress of treatment of tsunami deposit is: 25% (Iwate), 53% (Miyagi), 9% (Fukushima) [41% (3 prefectures)]
- Having progressed the installation of treatment facilities, treatment of tsunami has progressed steadily.



Progress on treatment of debris from coastal municipalities as of the end of May 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 (%)	Probable progress (Sep) (%)		Quantity (10 thousand t)	Ratio (%)	Probable progress (Sep) (%)	
Iwate	525	380	218(199)	57(52)	78	145	36(28)	25(19)	56	48
Miyagi	1,733	1,046	791(737)	76(71)	87	688	366(333)	53(48)	76	73
Fukushima	357	173	80(73)	47(42)	—	184	17(16)	9(9)	—	33
<b>Total</b>	<b>2,616</b>	<b>1,598</b>	<b>1,089(1,010)</b>	<b>68(63)</b>	—	<b>1,018</b>	<b>419(377)</b>	<b>41(37)</b>	—	<b>154</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 April 2013.

## Treatment in affected areas

- Approx. 94% of debris has been removed to temporary storage sites. 11 municipalities finished removal of debris. The number of temporary storage sites has decreased to 154 (48% of maximum sites once set up). The remaining removal and demolition work is being implemented in order that the treatment is completed by March, 2014.
- In Iwate, Miyagi, and Fukushima prefectures, 34 temporary incinerators and 23 sorting and shredding facilities are being in operation.
- In Iwaki city (Fukushima), a private incinerator started operation from June. As for the Contaminated Waste Countermeasure Areas of Fukushima prefecture, the debris in Minamisoma city, Naraha town, and Kawauchi village continues to be removed to temporary storage sites.
- Overall treatment is being implemented corresponding to the changing conditions such as the increase of non-combustible debris and change of debris characteristics, identified through progress of treatment.

## 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 (0.62 million tons). All arrangement of cooperation has finished.
- 79 projects in 17 prefectures have already started and treated 0.37 million tons of debris.
- Local authorities greater Toyama (Toyama) started to treat debris from June 18, 2013.



Millennium hope hills project in Iwanuma city, Miyagi prefecture (Completed on June 9, 2013)

## Recycling etc.

- Completed the first hill of “millennium hope hills project” in Iwanuma city (Miyagi) on June 9, using recycled tsunami deposit and concrete debris (0.42 million tons of recycled material will be used in total in this project).
- Recycled materials from debris are being used in public works, implemented by the central government, prefectures, and municipalities.

Major public works using recycled material from debris

	Projects	Recycled material	Quantity (including plan)
Iwate	Coastal or river embankment restoration	Concrete debris	34
	Disaster prevention forests restoration	Tsunami deposit	20
		Concrete debris	
	Agricultural field restoration	Tsunami deposit	75
		Concrete debris	
	Park restoration	Tsunami deposit	22
	Fishing port projects	Concrete debris	7
Temporary storage sites	Concrete debris	32	
Others	Tsunami deposit	80	
	Concrete debris		
Miyagi	Coastal or river embankment restoration	Tsunami deposit	56
		Concrete debris	
	Disaster prevention forests restoration	Tsunami deposit	79
		Concrete debris	
	Agricultural field restoration	Tsunami deposit	15
		Concrete debris	
	Park restoration	Tsunami deposit	196
	Concrete debris		
Fishing port projects	Concrete debris	28	
Temporary storage sites	Concrete debris	71	
Others	Tsunami deposit	136	
	Concrete debris		
Fukushima	Coastal embankment restoration	Concrete debris	9
	Park restoration	Tsunami debris	17

## Approaches toward the goal

- For the debris and tsunami deposit in Iwate and Miyagi prefectures, promote steady treatment in order to complete as early as possible before March, 2014 (goal). Also, manage monthly progress carefully with referring to a newly set probable progress ratio of the mid-term of this fiscal year.
- In some parts of Fukushima prefecture, the completion of treatment by March, 2014 is difficult. Therefore, clarify the schedule of treatment this summer, through acceleration of treatment by the national government.
- Secure storage sites of recycled materials and promote detailed arrangement for the usage with authorities of reconstruction projects according to tsunami deposit treatment plan.