

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

2013.9.30 Ministry of the Environment

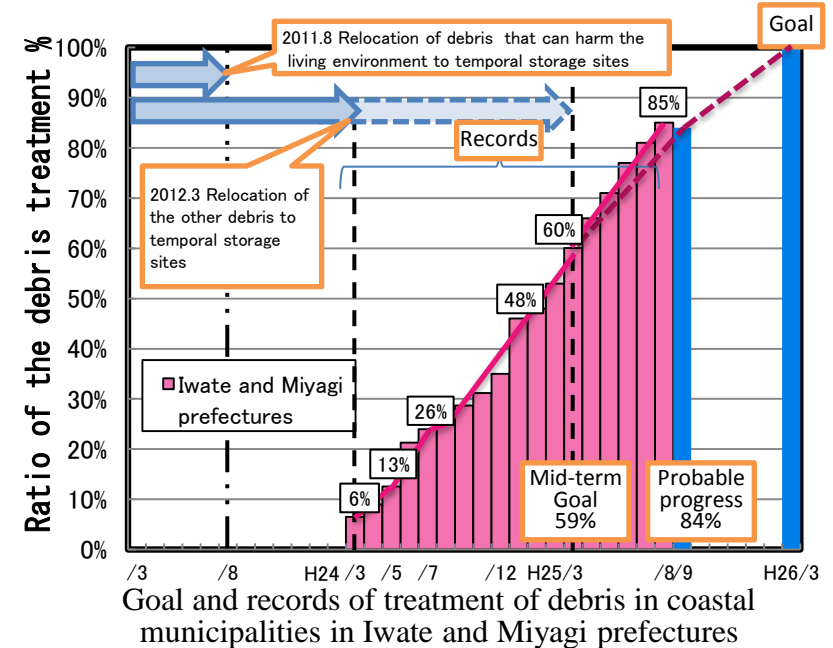
## 3 most affected prefectures (excludes Evacuation Area)

### (1) Debris

- Progress of treatment of debris in coastal municipalities is: 75% (Iwate), 88% (Miyagi), 57% (Fukushima) [82% (3 prefectures)]
- Treatment ratio of debris is over 80% 3 prefectures. And Miyagi prefecture's treatment ratio of debris of August is over 87% that is the probable progress of September, too.
- Treatment of debris has progressed steadily. For example, treatment ratio of debris is over 80% in coastal municipalities which have about 75% of the estimated quantity.

### (2) Tsunami deposit

- Progress of treatment of tsunami deposit is: 53% (Iwate), 71% (Miyagi), 33% (Fukushima) [62% (3 prefectures)]
- Treatment ratio of tsunami deposit is over 60% 3 prefectures. Treatment of tsunami debris has progressed steadily, and Iwate and Miyagi prefecture will be over the probable progress of September.



Progress on treatment of debris from coastal municipalities as of the end of July 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	527	376	281(261)	75(69)	78	151	81(66)	53(44)	56	38
Miyagi	1,766	1,061	936(910)	88(86)	87	705	502(450)	71(64)	76	51
Fukushima	337	171	97(93)	57(54)	—	166	55(50)	33(30)	—	29
<b>Total</b>	<b>2,630</b>	<b>1,608</b>	<b>1,314(1,263)</b>	<b>82(79)</b>	—	<b>1,022</b>	<b>637(566)</b>	<b>62(55)</b>	—	<b>118</b>

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

## Treatment in affected areas

- Approx. 94% of debris has been removed to temporary storage sites. 14 municipalities finished removal of debris. The number of temporary storage sites has decreased to 118 (37% 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, 32 temporary incinerators and 23 sorting and shredding facilities are being in operation. In Koizumi district, Kesenuma area, Miyagi prefecture, the treatment of burnable debris have been finished in the end of August.

## Cooperation from non-affected areas on debris treatment

- Minamiashigara city and Hakone town (Kanagawa) started to treat debris (fishing nets) from September 12, 2013.
- Iwate and Miyagi prefectures have requested other prefectures to cooperate in the disposal of a part of their debris (0.66 million tons). All arrangement of cooperation has finished. 85 projects in 18 prefectures have already started and treated 0.48 million tons of debris. 60 projects have been finished their treatment.
- Gunma and Osaka prefecture's treatment have been finished their treatment of burnable debris of Miyako district (Iwate) by early September, 2013.
- All cooperation from non-affected areas on debris treatment by municipality have been finished (35 projects in 12 prefectures).

Major public works using recycled material from debris

	Projects	Recycled material	Quantity (including plan)
Iwate	Coastal or river embankment restoration	Concrete debris	16
	Disaster prevention forests restoration	Tsunami deposit	17
		Concrete debris	
	Agricultural field restoration	Tsunami deposit	65
	Park restoration	Concrete debris	21
	Fishing port projects	Tsunami deposit	15
	Temporary storage sites	Concrete debris	32
Others	Tsunami deposit	80	
Miyagi	Coastal or river embankment restoration	Tsunami deposit	64
	Disaster prevention forests restoration	Concrete debris	
		Tsunami deposit	109
	Agricultural field restoration	Concrete debris	15
		Tsunami deposit	
	Park restoration	Tsunami deposit	225
	Fishing port projects	Concrete debris	28
Temporary storage sites	Concrete debris	83	
Others	Tsunami deposit	123	
Fukushima	Coastal embankment restoration	Concrete debris	9
	Park restoration	Tsunami debris	16
	Others	Tsunami debris	11

## Recycling etc.

- Using recycled concrete debris is started in the city park restoration work in Noda village (Iwate).
- Using recycled concrete debris is started in Takahama area Coastal embankment restoration work in Miyako district (Iwate).
- Recycled materials from debris are being used in public works, implemented by the central government, prefectures, and municipalities.



The city park restoration work in Noda village (Iwate).

## 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.
- For the debris and tsunami deposit in Fukushima Prefecture, promote removing to temporary storage sites in order to complete by the end of March, 2014(goal), and , promote treatment in order to complete as early as possible before the end of March, 2015(goal),