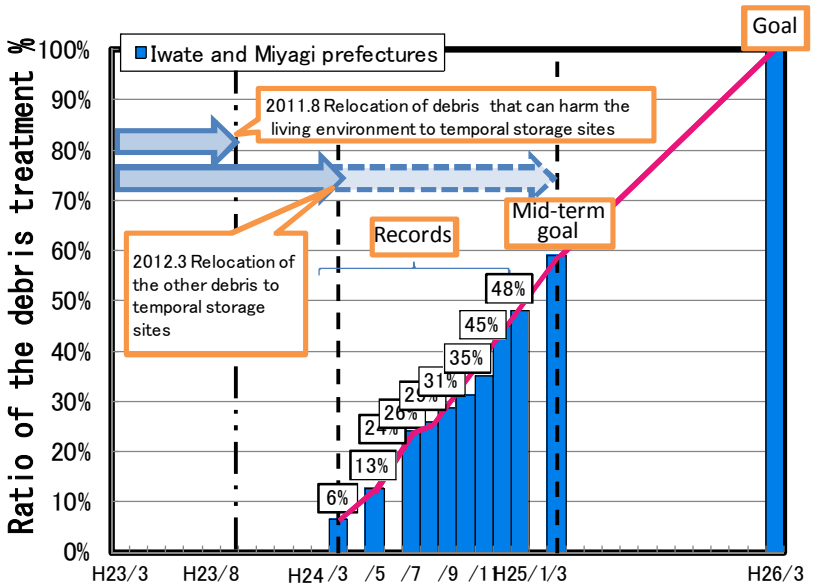
Progress on treatment of debris by the Great East Japan Earthquake (in coastal municipalities of the three most affected prefectures)

2013.2.22 Ministry of the Environment

Treatment of debris and tsunami deposit

- Progress of treatment of debris in coastal municipalities of the three most affected prefectures is:
  39% (Iwate), 51% (Miyagi), 31% (Fukushima).
- In Miyagi prefecture, more than half of the generated debris has been treated. Rifu-town finished the treatment.
- In Iwate prefecture, the progress of treatment was limited due to severe weather conditions, and the progress will continue to be limited until spring.
- Both 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.



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

- The treatment of tsunami deposit was limited due to the delay of installation of facilities and the arrangement of use of recycled materials as well as the influence of severe weather conditions.
- Although the progress will continue to be limited until spring, the treatment of tsunami deposit is likely to be finished using the established facilities by the end of March, 2014

Progress on treatment of debris from coastal municipalities as of the end of January 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	142(129)	39(35)	58	159	14(13)	9(8)	50	63
Miyagi	1,830	1,103	563(530)	51(48)	59	728	171(157)	24(22)	40	105
Fukushima	313	160	49(46)	31(29)	—	153	3(3)	2(2)	—	31
Total	**2,669**	**1,628**	**754(705)**	**46(43)**	**—**	**1,040**	**189(173)**	**18(17)**	**—**	**199**

※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 December, 2012.

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 and Miyagi prefectures, all the 31 temporary incinerators have been installed by the end of January, 2013.
- Treatment facilities for tsunami deposit, which have been delayed so far, have already started operation. Three additional facilities will be established in near future.
- In Fukushima prefecture, the operation of three temporary incinerators have been started in late February, 2013 by the central government as the alternate implementer of the treatment.

Temporary incinerators in Soma city, Fukushima
(Operation started on Feb.20, 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 (0.69 million tons). The arrangement of cooperation has finished 0.62 million tons.
- 65 projects in 15 prefectures have already started and treated 0.25 million tons of debris.
- Hachioji city (Tokyo), Osaka city (Osaka), and Sanjo city, etc (Niigata) started treatment in early January, late January, in mid February, respectively.

Ishinomaki Port embankment project
(Landfill started on Feb.20, 2013)

Recycling etc.

- Recycled materials started to use in road restoration project in Miyako city (Iwate) from late January. Ishinomaki Port Embankment project has started the treatment by landfill of debris, etc. from late February.
- 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	Disaster prevention forests restoration	Tsunami deposit	21
	Coastal embankment restoration	Concrete debris	21
	Agricultural field restoration	Tsunami deposit Concrete debris	10
Miyagi	Coastal embankment restoration	Tsunami deposit Concrete debris	43
	Disaster prevention forests restoration	Tsunami deposit Concrete debris	33
	National park restoration	Tsunami deposit Concrete debris	7
	Fishery port projects	Concrete debris	14
	Memorial park project	Tsunami deposit Concrete debris	36
Fukushima	Coastal embankment restoration	Concrete debris	9

Conversion factor(t/m³) : Concrete debris (2.35), Tsunami deposit (1.8) Unit: 10 thousand t

Approaches toward the goal

- 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.