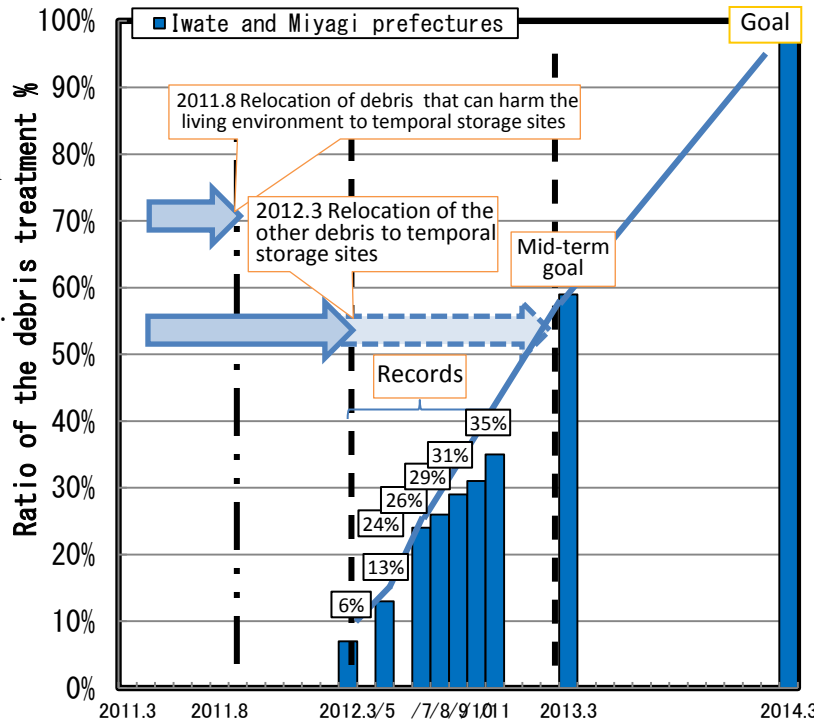


Progress on treatment of debris in coastal municipalities of the three most affected prefectures by the Great East Japan Earthquake

Treatment of debris and tsunami deposit

- In coastal municipalities of the three most affected prefectures, more than one third of generated debris (6.05 million tons (approx. 34%) out of 18.02 million tons) has been treated as of the end of November, 2012. The treatment became accelerated, with 0.67 million tons (4%) of the treated quantity increment in November, 2012.
- Those municipalities listed below have progressed the treatment more than the average.

- More than 50% of generated waste treated: Hirono town, Fudai village, Ofunato city (Iwate prefecture), and Rifu town, Matsushima town, Miyagi East block (Shiogama city, Shichigahama town, Tagajou city) (Miyagi prefecture)
- A little less than 50% of generated waste treated: Kuji city (Iwate prefecture), Sendai city (Miyagi prefecture), Iwaki city (Fukushima prefecture)
- More than one third of generated waste treated: Ishinomaki block (Onagawa town, Ishinomaki city, Higashimatsushima city), Watari-Natori block (Natori city, Iwanuma city, Watari town, Yamamoto town)



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

- 1.40 (approx. 15%) million tons out of 9.56 million tons of tsunami generated deposits have been treated. The treated quantity increment in November, 2012 was 0.33 million tons.

Progress on debris treatment from 37 coastal municipalities in the three prefectures (Iwate, Miyagi, Fukushima) as of the end of Nov. 2012

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 (%)	Mid-term goal (%)	
Iwate	525	395	124	31	58	130	3	2	50	66
Miyagi	1,873	1,200	441	37	59	672	135	20	40	109
Fukushima	361	207	40	19	—	153	3	2	—	31
Total	2,758	1,802	605	34	—	956	140	15	—	206

※Total number may not be consistent because of rounding of fractions.

Cooperation from non-affected areas on debris disposal

- Iwate and Miyagi prefectures have requested other prefectures to cooperate in the disposal of a part of their debris (1.36 million ton). 53 projects in 12 prefectures have already started and treated 0.16 million tons of debris in total (0.51 million ton has been scheduled to be accepted).
- From November, 2012, Machida city (Tokyo Metropolis), Senboku city (Akita prefecture), Mibu town (Tochigi prefecture) started the treatment of debris. Kanazawa city (Ishikawa prefecture) announced the start of treatment of fishing equipment debris.
- Several more non-affected prefectures are preparing / considering to start cooperate projects.

Debris quantity requested by Iwate and Miyagi prefectures for cooperation

(Unit: 10 thousand t)

	Combustible	Waste wood	Non combustible	Fishing equipment	Total
Iwate	18	12	7	8	45
Miyagi	39	39	13	—	91
Total	57	51	20	8	136

Recycling

- Recycled materials from concrete debris and tsunami deposits, etc. are utilized in public works including projects of the central government.
- From November, 2012, recycled materials started to be used in public works in Yamada town, Otsuchi town (Iwate prefecture), and Natori city, Kesennuma city (Miyagi prefecture)

Major public works using recycled material from debris (starting from November 2012)

(Unit: 10 thousand t)

	Projects	Recycled material	Quantity
Iwate	Agricultural field restoration (Yamada town)	Tsunami deposit, Concrete debris	7
	Coastal embankment restoration (Yamada town)	Concrete debris	12
	Fishery port restoration (Otsuchi town)	Concrete debris	2
Miyagi	Coastal embankment restoration (Natori city)	Tsunami deposit	4
	National park restoration (Kesennuma city)	Concrete debris	3

Progress and approach toward the goal (completion by March 2014)

- The rate of debris treated in November 2012 is accelerated but not sufficient for achievement of the mid-term goal. The examination of progress on debris treatment in each debris category specifies debris categories that require accelerated treatment, as written below.
- In Iwate prefecture, besides steady treatment of combustible waste, the progress on concrete debris treatment has been improved. The categories of debris that require accelerated treatment are non-combustible waste and tsunami deposit. Especially, treatment of tsunami deposit has just started since November 2012.
- In Miyagi prefecture, besides steady treatment of concrete debris, the treatment of tsunami deposit has been progressed considerably in these two months. The categories of debris that require accelerated treatment are combustible waste and non-combustible waste.
- In Fukushima prefecture, the construction of temporary storage sites and incinerators is necessary to accelerate the treatment by the central government as alternate or direct implementer. In the management areas designed in accordance with the Act on Special Measures to handle the radioactive pollution caused by the accident of TEPCO Fukushima Daiichi nuclear power station, six temporary storage sites have been decided to be constructed until now, and three sites are already under construction (Minamisouma city and Naraha town). Temporary incinerators for Souma city and Shinchi town are also under construction.
- Therefore, the approaches outlined below have to be addressed.

【Iwate】 Non-combustible waste and tsunami deposit

- Enhancing facilities for non-combustible waste and tsunami deposit: three facilities already enhanced by the end of October, and two facilities will be added
- Implementing steady production of recycled materials and securing new public works projects to accept recycled material
- Promoting the utilization, by clarifying the required properties of recycled material for reconstruction works according to the usage (Amendment of guideline on reconstruction material usage by Iwate prefecture in January 2013)

【Miyagi】 Combustible waste and non-combustible waste

- Promoting full operation of temporary incinerators (22 out of 29 incinerators have been operated, 3 more will be operated within 2012, and full operation from the beginning of 2013.) and implementing cooperation from non-affected areas
- Promoting production of recycled material using sorting and shredding facilities for non-combustible waste (11 out of 12 facilities have been operated, and full operation from the beginning of 2013)
- Starting the landfill of Ishinomaki port with recycled materials from January 2013
- Securing new public works projects to accept non-combustible recycled material and tsunami deposits
- Demolishing affected public buildings and accelerating the production of recycled material

【Fukushima】 Temporary storage sites and incinerators

- Coordinating with affected municipalities to establish temporary storage sites and incinerators for the treatment by central government as alternate or direct implementer, to set the goal as early as possible
- Reinforcing structure of human resources in Fukushima Office in cooperation with related ministries (11 additional officials have been dispatched from central office of the Ministry of the Environment and more staff will be engaged from the next fiscal year.)

(Reference) Strategy for achieving the goal (completion in March 2014) agreed in 5th ministerial meeting

- For achievement of the mid-term goal (due on March 2013), the 5th Ministerial Meeting for the promotion of debris treatment (October 19, 2012) agreed on the approaches below to be tackled by December 2012:
 - a. By December 2012, reinforcing the treatment capacity in affected areas and pursuing the total arrangement of cooperation with municipalities in non-affected areas that currently propose an offer, by implementing test treatment
 - b. Clearing up temporary storage sites, which hinder the reconstruction, by steady usage of recycled materials in public works such as coastal embankments and disaster prevention forests. Especially, moving forward on the approach for making active use of recycled material from non combustibles and tiles, which are still not used, in the specifications of public works directly managed by the related ministries.
 - c. Through these approaches, completing the arrangement of all debris' treatment in Iwate and Miyagi prefectures by March 2013