

Practice to be assessed and included in the Guidelines

Number/code: OM/E16

Title: GOLD, SILVER AND BRONZE MEDALS WITH METALS RECOVERED FROM USED ELECTRONIC APPLIANCES

Guidelines section:

<input type="checkbox"/>	Governance	<input checked="" type="checkbox"/>	Operational management
		<input type="checkbox"/>	<i>Context of the event</i>
		<input checked="" type="checkbox"/>	<i>Event</i>
		<input type="checkbox"/>	<i>Stadium management</i>
		<input type="checkbox"/>	<i>Procurement</i>
		<input type="checkbox"/>	<i>Mobility and logistics</i>

Description:

Through the “Tokyo 2020 Medal Project: Towards An Innovative Future For All”, gold, silver and bronze medals for use at the Tokyo 2020 Games will be manufactured from metal materials recovered and extracted from used consumer electronic appliances such as used mobile phones, so-called “urban mines”, donated by people across Japan. This project which is supported by people’s effort will be a good demonstration of ways to build a more sustainable society using resources more efficiently.

Activities are implemented considering social backgrounds and meanings.

Project Background and Purpose:

Scientific surveys suggest that the estimated remaining amount of gold and silver-containing resources stored on ground is in the ratio 7: 3 compared to that of underground. The demand for metal materials from the ground resources called “urban mines”, i.e., consumer electronics such as mobile phones, is increasing every year.

Table: Content of of gold and silver Type	Content	Content per ton
Gold mine	5 ppm	5 g
Cell phones	340 ppm	340 g
Silver mine	250 ppm	250 g
Cell phones	1400 ppm	1400 g

There are 68 times more gold and 5.6 times more silver in cell phones, in terms of content ratio, compared to the underground mine. Utilisation of urban mines is promoted globally as they contain far more minerals than the underground resources (mines).

In Japan, although laws and regulations to promote the reuse of precious metal, such as the Act on Promotion of Recycling of Small Waste Electrical and Electronic Equipment enacted in 2013, have been prepared, only less than 20% of cell phones discarded for instance is recycled in a year. Implementation of this project could raise attention of Japanese citizens again to recycling and stimulate recycle of useful resources abandoned in Japan, eventually becoming one of the legacies.

Environmental benefits

Under such circumstances, “Tokyo 2020 Medal Project: Towards an Innovative Future for All” aims to use 100% recycled gold for the Tokyo 2020 medals. Such gold will be collected from donated consumer electronic appliances.

Through these activities, the Tokyo 2020 Games encourage the Japanese to re-discover the value of recycling (recycled products can maintain the quality) and be a starting point of reuse and recycling of useful resources in Japan. This could be a great legacy if the Games can promote circulation of useful precious metals in the nation. Tokyo 2020 is calling for extensive support from the Japanese citizens to gather enough amount of precious metals for this project in cooperation with NTT DoCoMo, the Japan Environmental Sanitation Centre, the Ministry of the Environment, the Tokyo Metropolitan Government and other organisations.

Economic benefits

The major economic benefit is preventing the loss of precious and rare metals used in electronic appliances.

Applicability and replicability potential

The practice can be easily replicated.

Source

[TOKYO 2020](#) (p.85 – 86)