Policy theme

Waste management and recycling policy in the era of population onus

Target audience

Policymakers and consultants dealing with municipal waste

The problem

- Population decrease can lower efficiency in waste collection systems.
- Population aging can increase difficulties of the elderly in taking out trash and those of neighborhood associations in managing waste collection points.

Policy options for resolving the problem

Evidence-based policy target setting; Promotion of recycling appropriate for different characteristics of municipalities; Downscaling and consolidation of waste incinerators; Support for the elderly in taking out trash.

Authors: Tomohiro TASAKI, Rokuta INABA, Kosuke KAWAI, Ryo TAJIMA, Kaoru SUZUKI

(Sustainable Material Cycle Systems Section, Center for Material Cycles and Waste Management Research)

^{*} The views expressed in this Policy Brief are those of the author(s) and are not necessarily those of the National Institute for Environmental Studies (NIES) nor the Center for Material Cycles and Waste Management Research (CMW).

Proposal of waste treatment facility plans and regional circular system in response to the decreasing population

- ✓ Future target setting of waste management policy needs to be evidence-based because constraints will become more severe.
- ✓ From the present to around 2030 when the population decrease results in the decrease in the amount of waste generated, the difficulty levels of municipal waste management will be in the following order: reduction of final disposal < reduction of waste generation < increase in recycling rate.
- In order to increase the recycling rate of municipal waste in the era of population onus, it is necessary to consider specific conditions in each municipality and the characteristics of waste to recycle. It is also necessary to reduce dependence on incineration and maintain efficient waste treatment through downscaling and consolidation of waste treatment facilities and combined treatment of wastes with similar properties.
- ✓ Current consolidation of waste treatment facilities, unlike the one in the 1990s to reduce dioxin, aims at preventing inefficiency of smaller facilities resulted from population decrease.



Proposal of waste collection system to adapt to an aging society

- ✓ Negative effects of the population aging on waste collection systems have been growing as revealed by two perspectives: difficulties of the elderly in taking out trash and those of neighborhood associations in managing waste collection points. Policymakers need to take measures to deal with both issues.
- ✓ The institutions and actors in the welfare sector can support the elderly in taking out trash. For the
 introduction of effective waste collection measures that can produce synergy with the welfare sector,
 close cooperation with the senior welfare section of each municipal government and visiting
 careworkers is required.
- As a short-term measure for the aging society, introduction of a support program that suits for actual conditions of a given locality, such as its population size and community ties, will be effective. However, further consideration will be needed to design an appropriate long-term waste collection plan in view of declining collection efficiency as a result of increasing number of collection points and decreasing population.

[Suggested citation]

Tasaki, T., Inaba, R., Kawai, K., Tajima, R., Suzuki, K. (2021) Waste management and recycling policy in the era of population onus. NIES-CMW Policy Brief #2 (https://www-cycle.nies.go.jp/eng/report/policy_brief_002.html)

- * The content of this Policy Brief is a proactive interpretation and presentation of policy implications by the authors based on the results of a 2016-2020 research project "Proposal of transition paths and adaptation measures for a circular society."
- * This Policy Brief is an open access article distributed under the terms and conditions of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) license.

https://creativecommons.org/licenses/by-nc/4.0/deed.en

