



FACTSHEET

UPDATES TO SINGAPORE'S FOOD WASTE MANAGEMENT SYSTEM

Updates:

- The National Environment Agency (NEA) is exploring a reporting framework for owners and occupiers of large commercial and industrial premises which generate large amounts of food waste, to measure and report the amount of food waste segregated for treatment.
- If implemented, the reporting requirements will take effect in 2024, in tandem with the food waste segregation requirements under the Resource Sustainability Act which was announced at the Committee of Supply (COS) debate 2019.
- NEA will be consulting the industry in the second quarter of this year. More details on the reporting framework will be released thereafter.

Background

- Singapore's Zero Waste Masterplan, launched in 2019, maps our path towards a Zero Waste Nation. It sets out national waste targets to: (i) achieve a 70 per cent overall recycling rate; and (ii) reduce the amount of waste sent to Semakau Landfill (SL) per capita per day by 30 per cent by 2030. Under the Singapore Green Plan 2030, our goal is to frontload our efforts and achieve a 20 per cent reduction in waste-to-landfill per capita per day within five years (or by 2026). Our efforts to close the waste loops of our three priority waste streams e-waste, packaging (including plastic) waste and food waste will contribute to achieving our national waste targets and help to extend the lifespan of SL beyond 2035.
- Food waste is a major waste stream with high generation tonnage and low recycling rate. In 2019, Singapore generated 744,000 tonnes of food waste, of which 18 per cent was recycled. Commercial and industrial (C&I) premises account for approximately 40 per cent of the food waste generated in Singapore each year.
- 3 The landmark Resource Sustainability Act (RSA) was enacted in October 2019 to give legislative effect to new measures to address our priority waste streams, including food waste. The requirements relating to food waste are:
 - Since Jan 2021: Developers of new large commercial and industrial premises must allocate and set aside space for on-site food waste treatment systems in their design plans.
 - From 2024: Large commercial and industrial food waste generators must segregate their food waste for treatment.
- During the COS debate in 2020, NEA announced that the food waste treatment requirements would be applied to hotels, shopping malls and industrial premises that meet

certain thresholds. The thresholds were finalised through consultations with industrial food waste generators and data gathered from commercial and industrial food waste audits conducted in 2018/19. More details on the prescribed premises and thresholds are in **Annex A.**

These requirements will ensure that food waste from large food waste generators is segregated for treatment or converted into useful products such as animal feed, compost/fertiliser or biogas for energy generation instead of being incinerated. The segregation of food waste will enable greater resource recovery, reduce waste sent for incineration and conserve landfill space. It will also minimise the contamination of dry recyclables by food waste, thereby contributing to improved recycling efforts.

New Food Waste Reporting Framework Being Explored

- To complement food waste segregation and treatment requirements, NEA is exploring a reporting framework to help companies gain better awareness of the amount of food waste that they produce so that they can pay greater attention to the potential for sustainable food waste management. In addition, reporting would facilitate the verification process to ensure food waste is properly segregated and treated by owners and operators of prescribed premises. The data collected will aid future review and development of policies and programmes. NEA will be consulting the industry in the second quarter of this year on this proposal. More details on the reporting framework will be released thereafter.
- NEA will continue to support premises to implement food waste segregation and treatment in the lead-up to the mandatory requirements in 2024. Businesses are encouraged to adopt food waste segregation and treatment early to reap the cost savings from avoided waste disposal fees. In addition, the 3R Fund is available to help premises owners and occupiers defray the capital cost of installing on-site food waste treatment systems.
- NEA has also developed a guidebook to share best practices and case studies in food waste segregation and treatment. The guidebook explains in a step-by-step manner how food waste segregation can be implemented, and the considerations for selecting a suitable type of food waste treatment system. In addition, NEA has worked with various industry stakeholders to publish food waste minimisation guidebooks for food retail establishments, supermarkets and food manufacturing establishments to reduce food waste at the onset across the supply chain. The food waste minimisation and segregation guidebooks are available online at https://www.nea.gov.sg/our-services/waste-management/3r-programmes-and-resources/food-waste-management/food-waste-management-strategies.

Upcoming Plans for Food Waste Treatment Facilities

- Today, about 12 tonnes of source segregated food waste from 25 premises is sent to a demonstration facility at Ulu Pandan Water Reclamation Plant per day. The food waste is co-digested with used water sludge to generate biogas. This co-digestion process will be scaled up and implemented at the upcoming Integrated Waste Management Facility and Tuas Water Reclamation Plant collectively known as Tuas Nexus. The food waste treatment facility at Tuas Nexus is expected to be operational in 2024 and will serve as an off-site treatment option for owners and operators of premises segregating their food waste.
- As announced at the COS debate today, NEA and PUB will start feasibility studies for the co-location of a food waste treatment facility at Changi Water Reclamation Plant. The facility will provide additional capacity for food waste treatment, including those from premises that are required to segregate food waste under the RSA.

ANNEX A

Types of Premises and Thresholds for Food Waste Segregation and Treatment

Types of Premises	Threshold		Exemptions
Shopping Malls	F&B Area	>3,000m ²	NA
Hotels	F&B and Function Area	>3,000m ²	NA
Single-user Factory (SUFs)	Large Food Manufacturers	Operation area > 750m ²	Manufacturers of spices, dried foodstuffs, additives, bottled water, high pressure processing
Multi-user Factory (MUFs)	GFA and food tenants	GFA > 20,000m ² and with > 20 food tenants	NA
	At least one large food manufacturer	Operation area > 750m ²	Manufacturers of spices, dried foodstuffs, additives, bottled water, high pressure processing