

Economic Cooperation

Workshop on Reducing Food Loss and Waste through Packaging Innovations and Progress Review of FLW in the APEC Region

Member economy report: Progress review on FLW reduction

Chinese Taipei

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June 05 2025

Background

- 1. Population: 23.4 millions (2024), 23.2 millions (2022)
- 2. Total FLW: 4 million tonnes (2022)
- 3. Total Domestic Supply of Food: 29 million tonnes (2022)
- 4. FLW per capita: 184 kilograms (2022)
- 5. Domestic Supply of Food per capita: 1,257 kilograms (2022)





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Target of reducing FLW

In 2019, Chinese Taipei's Council for Sustainable Development announced the SDG target 12.3 for the economy is to "Reduce food loss in the production and supply chain and reduce food waste in consumption." Among other things, the government aims to achieve the following specific targets:

Measure	2021 Baseline	2025	2030
Food loss (vegetables & fruits)	9%	8.9%	8.8%



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Measurement of reducing FLW

Food Loss

According to statistics from the Ministry of Agriculture, the loss of vegetables dropped from 281,000 tonnes in 2020 to 278,000 tonnes in 2021; and the loss of fruits dropped from 313,000 tonnes in 2020 to 302,000 tonnes in 2021.

Food Waste

According to statistics from the Ministry of Environment, the total of leftovers in 2023 is 478,000 tonnes, compared to 609,000 tonnes in 2015, decreased of 131,000 tonnes.



Food Loss and Waste (FAO Mass Flow Model)

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Commodity	Production		Handling & Storage		Processing & Packing		Distribution		Consumption		Total FLW	
Unit: 1000 tonnes	2015	2022	2015	2022	2015	2022	2015	2022	2015	2022	2015	2022
Cereal	22	22	109	107	306	311	52	53	514	522	1,003	1,015
Roots & Tubers	71	74	20	21	16	10	23	16	31	22	161	143
Oilseeds & Pulses	2	3	1	1	34	33	11	10	42	40	90	86
Vegetables	217	220	156	158	2	2	171	161	299	281	845	822
Fruits	212	209	153	151	5	4	161	150	288	268	819	782
Meat	30	28	8	7	63	58	95	82	262	227	458	403
Fish	81	131	4	6	41	62	95	101	349	369	570	669
Eggs	19	16	0	0	2	1	9	8	67	57	97	82
Milk	17	14	2	2	5	4	8	4	244	119	276	143
Total FLW											4,319	4,145



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Actions of reducing FLW

Actions (Domestic)



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Government Policy_1

Food and Agricultural Education (FAE) Act

- 1. Announced on May 2022.
- 2. This was enacted to promote food and agricultural education as well as to strengthen linkages between diet, environment, and agriculture in order to enhance citizens' health; to pass along and draw attention to dietary and agricultural culture; to promote the sustainable development of agricultural and fishing communities, agriculture, and the environment; and to improve the food and agricultural education system and training of relevant personnel.
- 3. According to article 12.3: Putting into practice consumption of locally produced agricultural products, reduction of food waste, reduction of the amount of food used, and reduction of leftovers.



Government Policy_2

Guidelines for the Safe and Hygienic Donation of Food, Food Safety and Sanitation Management Act

The Food and Drug Administration released the "Guidelines for the Safe and Hygienic Donation of Food" in 2023, which noted that donated food should be consumed within its validity period and comply with the Food Safety and Sanitation Management Act. Private organizations or enterprises donating soon-to-expire items to food banks will distribute them as quickly as possible to avoid waste.



Government Policy_3

The Ministry of Agriculture

Strategies: Reducing Disaster Losses, Reducing Distribution Losses, Cold Chain Facilities, Post-harvest Processing, and Circular Economy sites

- 1. Encourage farmers/private sectors to improve postharvest processing of vegetables and grains and invest in improving the packaging of fruit and grain products
- 2. Support to establish low-temperature system to store the public stock paddy
- 3. Support the factory to extend the retention period by processing technologies

Ministry of Health and Welfare

- 1. Support food sector in deploying First-In, First-Out (FIFO) method for stock management
- 2. Support food banks to develop food donation network.

Local Government

- 1. Establish Biomass energy centers
- 2. Support private sector to develop the Organic Fertilizers

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Project / Investment





Cold Chain Logistics

In 2021, the Ministry of Agriculture launched a new five-year project for cold chain logistics to enhance Chinese Taipei's competitiveness in exports of processed food and agricultural products.

- 1. The new projects are mainly aimed at Chinese Taipei's farming products, including fruit and cereal grains, which supply chain management has shown are prone to disruptions.
- 2. Two flagship distribution centers have been established in Taoyuan and Pingtung County.
- 3. Eight regional distribution centers would be established to increase handling capacity and boost export volumes.
- 4. Heat treatment of food products and low-temperature quarantine testing labs would be upgraded continually in the centers.



Smart Cold Chain Fresh Food Logistics Center

Fu-Fruit Co., Ltd.

- In 2022, it invested 2.5 billion NTD to build a "smart cold chain fresh food logistics center" in Tucheng Industrial Zone, New Taipei City.
- 2. The new factory has full-temperature storage, rapid freezing equipment, and aseptic automatic cutting and packaging production lines.
- 3. The X-ray foreign object detection machine is equipped for food safety checks, and then for the automatic weighing scale, filling, vacuum and sealing packaging, etc., to make sure the highest standard of food cold chain operation specifications.

Biomass Energy Center

Biomass energy centers and food waste compost facilities have been set up in different areas:

- 1. Food waste compost facilities: Hsinchu County(operated in 2021), Yilan County(operated in 2020) and Tainan City(operated in 2021).
- 2. Wai-Pu Green Energy Ecological Park
 - Located in Taichung City ullet
 - Operated in 2021 ullet
 - Until 2024, provide 12,979,835 kWh electric ullet
- 3. Taoyuan Biomass Energy Center
 - Located in Taoyuan City ullet
 - Operated in 2021 lacksquare
 - 49,275 tons of anaerobic digestion units per year



Organic Fertilizers

- Since 2023, the Environmental **Protection Bureau of Yunlin County** starts to transform food waste into organic fertilizers which are supplied to local communities and schools to produce organic vegetables.
- Since 2020, Yuland Biological Agriculture Co. Ltd starts to feed black soldier fly(Hermetia illucens) leftovers, the larvae are used to convert the food waste into valuable product: animal feed.



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Activities_1

1. Ministry of Agriculture

- APEC Multi-Year Project Workshop on Strengthening Public-Private Partnership to Reduce Food Losses in the Supply Chain
- APEC 2019 Expert Consultation on Reducing Food Loss & Waste (FLW) for Addressing Interlinked Challenges of Food Security and Climate Change
- 2021 Workshop on Reducing Food Loss and Waste along the Food Value Chain in APEC during and post COVID-19 Pandemic
- 2022 Webinar on Drafting the Implementation Plan for Reducing Food Loss and Waste
- 2023 APEC Workshop on Reducing Food Loss and Waste by Strengthening Resilience and Digitalization in APEC Food System



Activities_2

2. Ministry of Health and Welfare

- Foodbank experience conference
- Cherishing Food Festival, Recycle Leftover Award from leftover to compost
- Restaurants effectively use food materials conference
- 3. Ministry of Environment
 - Dedicated webpage for food waste
- 4. Loal Government
 - Sustainable Food Forum in New Taipei City
 - Surplus-Food Network in New Taipei City

In APEC

In line with APEC's Food Security Roadmap Towards 2030, paragraph 17(e), the Project Overseer of the "Reducing Food Loss and Waste through Packaging Innovations and Progress Review of Food Loss and Waste in the APEC Region" (ATCWG_202_2024) has planned to review the progress of reducing food loss and waste (FLW) in APEC region by 2025.

Chinese Taipei has drafted progress reviews for all the member economies to revise and update until 31 July 2025.

Upon receiving updates and revisions from member economies, the drafts will be finalized and published as the APEC Member Economies Reducing Food Loss and Waste Progress Report in the first quarter of 2026.





Thank You