

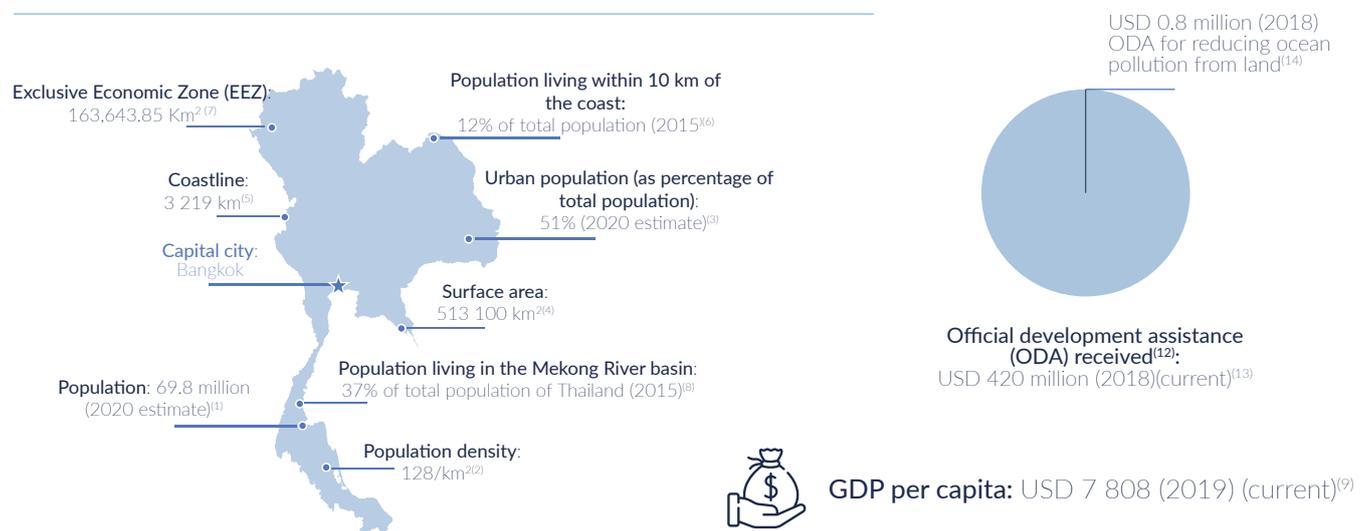
THAILAND

Thailand plans to reduce marine plastic debris by 50% by 2027.

Millions of tonnes of plastics enter the ocean every year, with tremendous environmental, economic and social costs that are difficult to quantify. However, the marine plastics pollution problem cannot be solved just by cleaning up the ocean. Most marine plastics are not discarded directly into the sea but derive from land-based sources. They end up in the sea due to a multitude of reasons, such as the inadequate filtering of wastewater, improper or illegal disposal, or unexpected natural disasters. Land-based initiatives are therefore essential to addressing marine plastics pollution.

The OECD stands ready to help develop policy advice and financing strategies to address marine plastics pollution in Southeast Asia, a region where this problem is particularly acute.

Figure 1. Thailand: Key demographic, geographic, and economic indicators



In Thailand, several government ministries and agencies are involved in addressing marine plastics pollution:

- **At the national level,** the Ministry of Natural Resources and Environment (MNRE) has overall responsibility for municipal solid waste management. The Pollution Control Department (PCD), under the MNRE, develops policies and plans for pollution control as well as standards and monitoring for environmental quality. The Department of Environmental Quality Promotion, under the MNRE, provides information on municipal solid waste management

and develops technical guidelines and processes.⁽¹⁰⁾ The National Environment Board develops mechanisms to address plastic waste, such as public campaigns and promotions and research and development for plastic waste recovery technologies.⁽¹¹⁾ The Department of Local Administration, Department of Provincial Administration and Department of Disaster Prevention and Mitigation, under the Ministry of Interior, administer the finances of local government organisations and provide support for local development plans.⁽¹²⁾

1. United Nations Population Division (2019), *World Population Prospects 2019*.
 2. United Nations Statistics Division (2019), *Demographic Yearbook 2018*.
 3. United Nations Population Division (2018), *World Urbanization Prospects: 2018 Revision*.
 4. United Nations Statistics Division (2019), *Demographic Yearbook 2018*.
 5. CIA (2020), *The World Factbook*.
 6. OECD (2020), OECD Statistics (OECD calculations based on Florczyk et al, 2019), <http://dx.doi.org/10.2760/062975>
 7. Department of Marine and Coastal Resources (DMCR) Thailand (2020), <https://www.dmcr.go.th/detailLib/267/>
 8. Mekong River Commission. (2018). *State of the Basin Report 2018*.
 9. World Bank. (2020). *World Development Indicators Database*.
 10. Borongan, G., & Huno, S. (2020). *Capacity Mapping for Monitoring and Assessment of Plastic Pollution in the Lower Mekong*.doi:<http://www.rrcap.ait.asia/Publications/CapMapPlasticPollution.pdf>
 11. Akenji, L., Bengtsson, M., Kato, M., Hengesbaugh, M., Hotta, Y., Aoki-Suzuki, C., . . . Liu, C. (2019). *Circular Economy and Plastics: A Gap-Analysis in ASEAN Member States*. https://www.iges.or.jp/en/publication_documents/pub/policyreport/en/10382/FINAL_CE+and+Plastics+-+A+gap+analysis+in+ASEAN+Member+States_1004.pdf
 12. Net ODA for Thailand was negative in 2018 because loan repayments were greater than new, incoming ODA.
 13. OECD. (2020). Detailed aid statistics: Official and private flows. *OECD International Development Statistics (database)*. <https://doi.org/10.1787/data-00072-en>
 14. OECD (2020), *Sustainable Ocean for All Initiative based on OECD/DAC Data Platform on Development Finance for the Sustainable Ocean Economy*, <https://www.oecd.org/dac/developing-countries-and-the-ocean-economy/sustainable-ocean-for-all-data-platform.htm>

- **At the subnational level**, provincial governments/provincial offices of the MNRE co-ordinate between policy setting at the national level and policy implementation at the local level.⁽¹⁵⁾ Local Administration Organizations and Wastewater Management Authorities provide wastewater management, including operation of treatment plants, construction and improvement of wastewater systems, and plastics waste management in Thailand.

Government Policies

Thailand has several **national policies, strategies and action plans** in place to address plastic litter. The National Waste Management Master Plan 2016–2021 has three pillars: encouraging individuals and businesses to follow the 3Rs, establishing centralised facilities for clusters of municipalities to dispose of municipal solid waste and hazardous waste, and participation of all relevant sectors in SWM (Solid Waste Management) management.⁽¹⁶⁾ The Roadmap on Plastic Waste Management (2018-2030) serves as a framework and direction for preventing and solving of plastic waste country-wide.

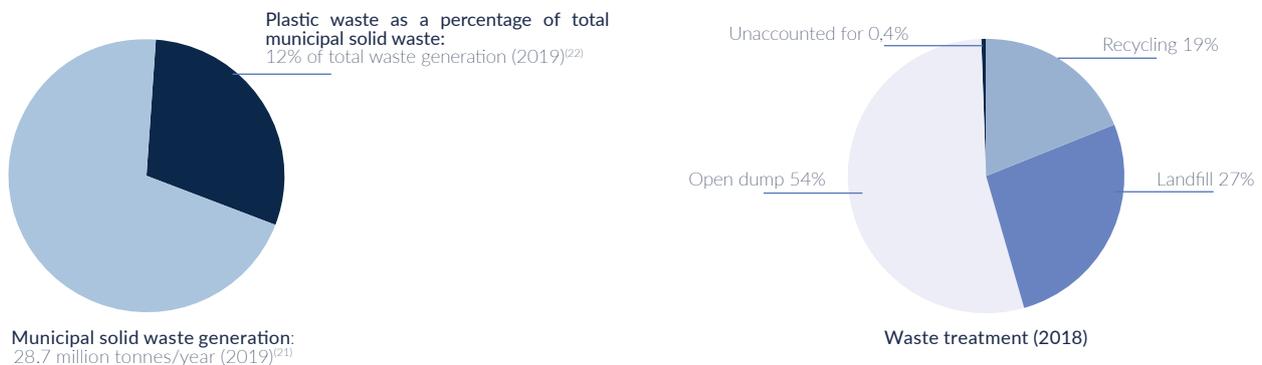
Several targets are in place under the National Waste Management Master Plan, including: 75% of municipal solid waste properly disposed of by 2021; 100% of

accumulated waste properly disposed of by 2019; 30% of household hazardous waste collected and properly disposed of by 2021; 100% of infectious and hazardous industrial waste collected and properly disposed of by 2020; and 50% of local governments with systems for waste separation at source by 2021.⁽¹⁷⁾

The Roadmap on Plastic Waste Management (2018-2030) targets 100% reutilisation of plastics/recycling of plastic waste by 2027, a shift to alternative eco-friendly materials/reduction or halt in usage of various plastic products including cap seals, oxo-degradable plastic, plastic microbeads (by 2019), plastic shopping bags thinner than 36 microns, single-use plastic cups thinner than 100 microns, foam meal boxes, plastic straws (by 2022),⁽¹⁸⁾ **and the reduction of marine plastic debris by 50% 2027.**

Starting in 2021 the Thai government has decided to reduce the import of plastic waste and totally ban its import by 2026, so as to promote the use of domestic waste. In 2021 the import of plastic waste would be allowed only 50% of production capacity or no more than 250,000 tons. The amount of imported plastic waste will decrease 20% in each year until 2026.⁽¹⁹⁾ Single-use plastic bags were banned in stores starting in 2020, though they are still allowed in fresh markets and rural areas.⁽²⁰⁾

Figure 2. Thailand: Waste and plastics waste statistics at the national level and for Bangkok



Waste collection and disposal

Approximately 34% of municipal solid waste is separated at source (2018).⁽²³⁾ Approximately 37% of waste is collected in urban settings, whereas just 6%

of rural waste is collected.⁽²⁴⁾ Over half (64%) of local administration organizations provided waste transport and disposal services in 2019.⁽²⁵⁾

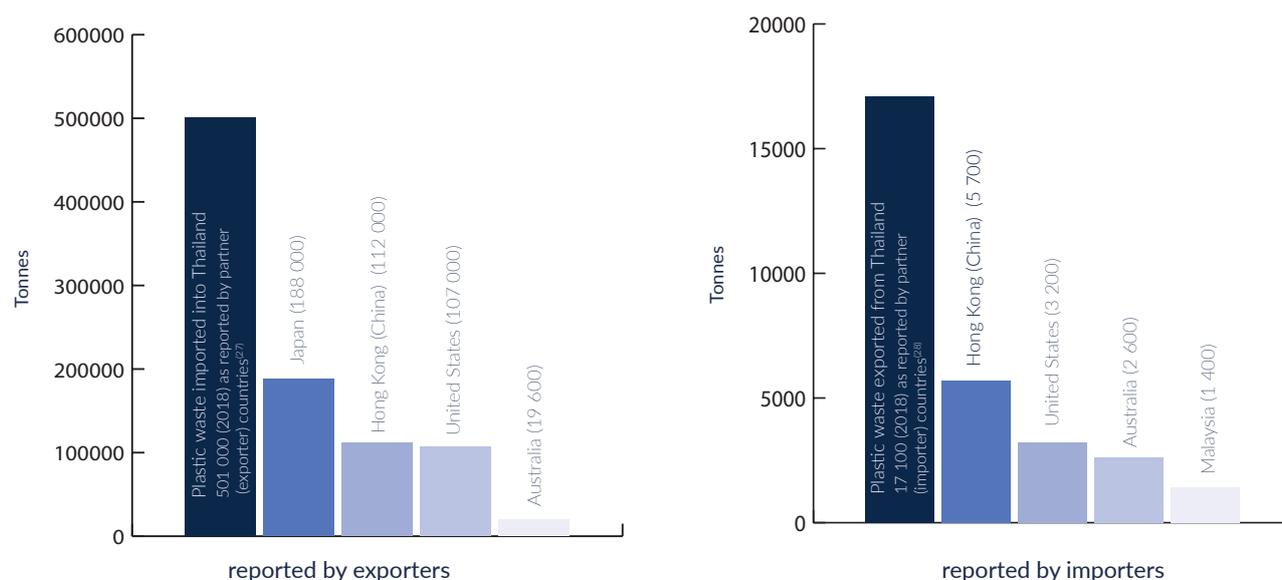
15. Ibid. 10
 16. Ibid. 10
 17. Pollution Control Department. (n.d.). *Municipal Solid Waste Management Policy in Thailand*. https://www.unescap.org/sites/default/files/PCD_MSWM%20policy.pdf
 18. Pollution Control Department. (2020). *Booklet on Thailand State of Pollution 2019*. <http://pcd.go.th/file/Booklet%20on%20Thailand%20State%20of%20Pollution%202018.pdf>
 19. Pollution Control Department (n.d.). https://www.pcd.go.th/pcd_news/14361
 20. Pollution Control Department (n.d.). https://www.pcd.go.th/pcd_news/14361
 21. Ibid. 15
 22. Thai PBS World. (2020). *Positive response to Thailand's 'Everyday Say No to Plastic Bags' campaign*. <https://www.thaipbsworld.com/positive-response-to-thailands-everyday-say-no-to-plastic-bags-campaign/>
 23. Ibid. 15
 24. Pollution Control Department, 2020
 25. World Bank. (2018). *What a Waste Global Database*.

In 2018, Thailand produced 2 million tonnes of plastic pollution, of which 0.5 million tonnes were recyclable plastic (mostly plastic bottles), 1.2 million tonnes were plastic bags and 0.3 million tonnes

were other plastic garbage (e.g. boxes, trays, bottles, lids).⁽²⁵⁾ A quarter of plastic waste is recycled, with the remaining 75% sent to landfill.⁽²⁶⁾

Figure 3. Thailand: Key plastics waste trade indicators

Major exporters and importers of plastic waste



Measures to address marine plastic waste

The Thailand **Public-Private Partnership** for Plastic and Waste Management, or **PPP Plastic**,⁽²⁹⁾ was established by the Plastic Industry Club and the Federation of Thai Industries with the Thailand Business Council for Sustainable Development. Two pilot projects have been established to study and improve plastics waste circularity. 388 of 2,786 municipal solid waste disposal/transfer sites are privately-operated.

Some **clean-up efforts** are underway in Thailand. In 2018, efforts in 48 areas across 24 provinces

collected almost 570,000 pieces of plastic waste amounting to 33 tonnes. Plastics accounted for at least 65% of the total waste collected.⁽³⁰⁾

Prevention projects are still limited although they are mandated by legislation.⁽³¹⁾ Waste banks started in schools, colleges and universities in 1999, and are now established throughout the country to buy back waste, then segregate it.⁽³²⁾ The Zero Baht Shop allows people (often recycling collectors/waste pickers) to exchange recyclable goods for other items without spending money.⁽³³⁾

26. Pollution Control Department, 2019

27. RUN Comtrade (2020), *UN Comtrade Database International Trade Statistics*.

28. RUN Comtrade (2020), *UN Comtrade Database International Trade Statistics*.

29. Thailand Public Private Partnership for Plastic and Waste Management (PPP Plastic) (2020), https://optoce.no/wp-content/uploads/2019/09/Thailand-PPP-Plastic-for-Plastic-and-Waste-Management_as-of-Sep-2019.pdf

30. Ibid. 15

31. Borongan, G., & Huno, S. (2020). *Capacity Mapping for Monitoring and Assessment of Plastic Pollution in the Lower Mekong*. <http://www.rrcap.ait.asia/Publications/CapMapPlasticPollution.pdf>

32. Kamaung, T., & Siriratpriya, O. (2017). *Country Chapter: State of the 3Rs in Asia and the Pacific: The Kingdom of Thailand*. [https://www.unrcd.or.jp/content/documents/5695\[Nov%202017\]%20Thailand.pdf](https://www.unrcd.or.jp/content/documents/5695[Nov%202017]%20Thailand.pdf)

33. Oestereich, C.; UN ESCAP (2018), Case Study – Green Growth: Zero Baht Shop, <https://sdghelpdesk.unescap.org/sites/default/files/2018-08/GG%20-%20Zero%20Baht%20Shop.pdf>

Education and awareness-raising efforts are also important in helping to address marine plastic waste. For example, many campaigns promote the 3Rs, including [Magic Eyes from the 1980s](#) and the [3R Foundation](#). There is also collaboration between the Department of Environmental Quality Promotion of the MNRE and the Ministry of Interior to raise public awareness and conduct education campaigns in schools, government offices, department stores, convenience stores and open markets.⁽³⁴⁾

34. Akenji, L., Bengtsson, M., Kato, M., Hengesbaugh, M., Hotta, Y., Aoki-Suzuki, C., . . . Liu, C. (2019). *Circular Economy and Plastics: A Gap-Analysis in ASEAN Member States*. https://www.iges.or.jp/en/publication_documents/pub/policyreport/en/10382/FINAL_CE+and+Plastics+-+A+gap+analysis+in+ASEAN+Member+States_1004.pdf