



The legal, policy and institutional frameworks governing marine plastics in Thailand



ENVIRONMENTAL LAW PROGRAMME



The legal, policy and institutional frameworks governing marine plastics in Thailand

Report prepared by Naporn Popattanachai

November 2020

The designation of geographical entities in this book, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN or Sida concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The views expressed in this publication do not necessarily reflect those of IUCN or Sida.

IUCN is pleased to acknowledge the support of its Framework Partners who provide core funding: Ministry for Foreign Affairs of Finland; Government of France and the French Development Agency (AFD); the Ministry of Environment, Republic of Korea; the Norwegian Agency for Development Cooperation (Norad); the Swedish International Development Cooperation Agency (Sida); the Swiss Agency for Development and Cooperation (SDC) and the United States Department of State.

Published by: IUCN Environmental Law Centre, Bonn, Germany

Copyright: © 2020 IUCN, International Union for Conservation of Nature and Natural

Resources

Reproduction of this publication for educational or other non-commercial purposes is authorised without prior written permission from the copyright

holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is

prohibited without prior written permission of the copyright holder.

Citation: Popattanachai, N. (2020). The legal, policy and institutional frameworks

governing marine plastics in Thailand. Bonn, Germany: IUCN Environmental

Law Centre. 16pp.

Cover photo: Léa Dubois

Layout by: IUCN Environmental Law Centre, Bonn, Germany

Contents

1	Nat	itional background1				
2	Inte	nternational obligations1				
3	Rel	Relevant institutions and processes				
4	Leg	al and policy frameworks	8			
	4.1	Overarching law or strategy	8			
	4.2	Production	9			
	4.3	Trade and transport	10			
	4.4	Retail and consumer use	10			
	4.5	End of life (including recycling, waste management and clean-up)	11			
5	Gap	os and challenges	13			
	5.1	A needed reinforcement of the leadership for integrated and concerted implementation and enforcement of relevant laws and necessary measures	13			
	5.2	A lack of innovative measures dealing with plastic pollution	13			
	5.3	Implementation challenges	15			
	5.4	Perception of plastics as pollution in Thailand	15			

Abbreviations

COBSEA Coordinating Body on the Seas of East Asia

DEQP Department of Environmental Quality Promotion

DMCR Department of Marine and Coastal Resources

DOH Department of Health

FDA Food and Drug Administration

MARPOL International Convention for Prevention of Pollution from Ships

MD Marine Department

NEB National Environment Board

ONEP Office of Natural Resources and Environmental Policy and Planning

PCC Pollution Control Commission

PCD Pollution Control Department

UNCLOS United Nations Convention on the Law of the Sea

UNEP United Nations Environment Programme

Summary

Thai laws addressing plastic pollution are fragmented, involving several pieces of legislation and numbers of institutions. At the forefront of tackling plastic pollution, local administrations, with their limited authorities, are real actors that manage plastic wastes. However, there are several challenges that render the management of plastic waste less effective than it should have been. This includes limited powers given by the constituent legislation, the lack of financial resources, as well as the lack of cooperation and coordinated actions amongst relevant government departments and agencies. In addition to legal and policy challenges, public education and awareness regarding the threats and dangers of marine plastic pollution are highly needed in order to create an informed society, with the aim to enhance and further protect the marine environment from marine plastic pollution.

1 National background

Thailand is a dualist and constitutional monarchy country. The Thai law system is a mixed legal system. Similar to other countries, environmental issues are under the responsibility of the Ministry of Natural Resources and the Environment. Central to the global marine environmental degradation, Thailand is one of the major contributors to the problem. This is particularly the case for land-based pollution especially from plastics.¹ As records show, Thailand is one of the major contributors to marine plastic pollution ranked amongst the top 10 countries polluting the ocean with plastic waste and debris.² According to the Pollution Control Department of the Ministry of Natural Resources and the Environment, during the past 10 years, Thailand has produced approximately 2 million tonnes of plastics litters annually and only 0.5 million tonnes were recycled.³ The remaining 1.5 million tons have not been reused or reintroduced into the circular economy. These mostly are single-use plastic products such as hot/cold-food plastic bags, U-shaped plastic bags, plastic cups, plastic straws, and foam containers. Compared to its decomposing period, these plastic products have very short-life span and are mostly landfilled with other garbage and litters.⁴

Given the sheer size of plastic pollution, Thai environmental law has failed to position plastic as a threat or as pollution. Plastics are treated as part of general waste, garbage and litter. So far, it has not received any special recognition nor consideration by the law. In literature, there is a lack of attempts to give an overview or to provide legal analysis regarding plastic pollution management in Thailand. There is no law specifically designed to deal with marine litter or marine plastic pollution. Plastic pollution is fragmented in several pieces of legislation under both centralised and decentralised government institutions.

2 International obligations

In relation to international agreements relating, directly or indirectly, to the prevention, reduction, and control of plastic pollution, Thailand has become a party to several global legal instruments regulating plastic pollution.

¹ Praiwan, Y. and Apisniran, L. (1 July 2019). *Drowning in a sea of plastic*. Available at https://www.bangkokpost.com/thailand/special-reports/1704904/drowning-in-a-sea-of-plastic (accessed 7 February 2020).

² McCarthy, N. (12 February 2020). *The Countries Polluting the Oceans the Most.* Available at https://www.statista.com/chart/12211/the-countries-polluting-the-oceans-the-most/ (accessed 31 January 2019); Styllis, G. (5 June 2018). *Thailand Falling Behind in Global Battle with Plastic Waste.* Available at https://asia.nikkei.com/Economy/Thailand-falling-behind-in-global-battle-with-plastic-waste (accessed 30 January 2019).

³ Pollution Control Department. นโยบายและแนวทางการจัดการขยะพลาสติก ของประเทศไทย.

⁴ Pollution Control Department (2019), *Thailand State of Pollution Report*, 102 – 104.

Table 1: The international conventions related to plastic pollution ratified by Thailand

Agreement	Ratified	Implementing Legislation
	15 May 2011	 Navigation in the Thai Waters Act, B.E. 2456
		Enhancement and Conservation of National Environmental Quality Act, B.E. 2535
UNCLOS		Marine and Coastal Resources Management Act, B.E. 2558 (2015)
		Emergency Act on Fisheries, B.E. 2558
		National Park Act, B.E. 2562
		Wildlife Preservation Act, B.E. 2562
MARPOL	15 October 2007	Navigation in the Thai Waters Act, B.E. 2456
1994 Fish Stocks Agreement	28 April 2017 (accession)	Emergency Act on Fisheries, B.E. 2558
Basel convention	24 November 1997	 Export and Import of Goods Act, B.E. 2522 (1979) regulating imports and exports of hazardous wastes as goods Factory Act, B.E. 2535 Hazardous Substances Act, B.E. 2535 Enhancement and Conservation of National Environmental Quality Act, B. E. 2535
Stockholm Convention	31 January 2005	

There are several important international agreements regulating plastic pollution to which Thailand is not yet a party. Examples include the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter and its 1996 Protocol.⁵ In addition, although a party to the 1973 International Convention for the Prevention of Pollution from Ships revised by the 1978 Protocol (MARPOL 73/78) by its ratification since 15 October 2007, Thailand has not accepted the optional Annex V regulating garbage from ships which is the principal source of plastic pollution from vessels.⁶ It is worth noting that Thailand is not a party to the Convention on the Conservation of Migratory Species of Wild Animals (CMS) or to the 1997

_

⁵ Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention) (London, 13 November 1972); Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London, 7 November 1996).

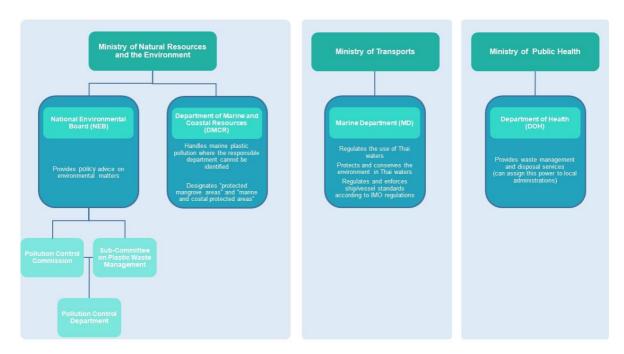
⁶ Protocol of 1978 relating to the International Convention for the prevention of pollution from ships, 1973 (MARPOL) (London, 17 February 1978).

Convention on the Law of the Non-Navigational Uses of International Watercourses (Watercourse Convention).

To date, there are no agreements addressing plastic pollution at a regional level in Southeast Asia. With regard to other non-binding instruments and arrangements, Thailand has been participating in UNEP's Regional Seas Programme, namely, East Asian Seas Region where the Coordinating Body on the Seas of East Asia (COBSEA) has been working on combating marine plastic pollution. The COBSEA aims at "protecting the marine and coastal environment for the health and well-being of present and future generations through the Action Plan for the Protection and Development of the Marine Environment and Coastal Areas of the East Asian Seas Region". Three important non-binding regional instruments for the protection of the marine environment from plastic pollution are the 2019 COBSEA Regional Action Plan on Marine Litter, the Bangkok Declaration on Combating Marine Debris in ASEAN Region (2019) and the ASEAN Framework of Action on Marine Debris (2019).8

3 Relevant institutions and processes

Figure 1: The institutions governing plastics in Thailand



It should be noted, however, that there are several centralised government departments and agencies from different sectors working toward the prevention, reduction, and control of plastic pollution. These departments and agencies are either established or empowered by legislation, meaning that they are hierarchically and legally equal. However, they address different aspects of plastic pollution.

The National Environmental Quality Act establishes two principal government departments responsible for the maintenance of environmental quality and prevention, reduction as well as

⁷ UN Environment. *Coordinating Body on the Seas of East Asia*. Available at https://www.unenvironment.org/cobsea/ (accessed 13 December 2019).

⁸ COBSEA (2019). Regional Action Plan on Marine Litter; ASEAN (2019). Bangkok Declaration on Combating Marine Debris in ASEAN Region; ASEAN (2019). ASEAN Framework of Action on Marine Debris.

control of pollution in Thailand. ⁹ The first department is the National Environment Board (NEB), having the Office of Natural Resources and Environmental Policy and Planning (ONEP) as its Secretariat within the Ministry of Natural Resources and Environment. The NEB is tasked with several advisory and enforcement functions. These mainly consist in providing the cabinets with policy advice on environmental matters; to propose and recommend the national plan for the enhancement and conservation of environmental quality; to establish environmental quality standards; to recommend financial, fiscal, tax including investment promotion measures in compliance with the national policies and plan on the enhancement and conservation of environmental quality; and to give approval for pollution control standards from all sources presented by the Natural Resources and the Environment Minister. 10 It should be noted that a Sub-Committee on Plastic Waste Management was set up in 2018 under auspices of the NEB to deal with plastic pollution. 11 The Sub-Committee on Plastic Waste Management comprises three working groups in combating plastic pollution. This includes 1) the 1st Working Group on Development of Plastic Management Mechanism; 2) the 2nd Working Group on Enhancement, Awareness Raising and Public Relations and; 3) the 3rd Working Group on Development and Utilisation of Plastic Wastes. At present, these bodies are collectively a centralised institution that has become an integral part of plastic waste management in Thailand. An interesting characteristic of these working groups is that they all involve representatives from all stakeholders – public, private, and local administration.

Concerning the 1st Working Group on Development of Plastic Management Mechanism, its mandates are manifold, including (i) study and analyse information from relevant departments including information concerning overall problems, challenges in plastic waste management of all sectors; (ii) prepare a comprehensive framework and guidelines for plastic waste management including economic and financial mechanism, law development for sustainable plastic waste management; (iii) prepare a 20-year draft roadmap for plastic waste management and an action plan on plastic waste management for the prevention and resolution of plastic waste in an integrative manner; and (iv) suggest guidelines and pilot models for an enhancement of a good practice on waste management and segregation.¹² From the work of this working group, the cabinet has already been notified of the draft roadmap and action plan on plastic waste management (2017-2030) and ordered both documents to be revised in line with the 20-year National Strategic Plan. 13 In addition, the working group has helped to prioritise seven plastics products to be voluntarily phased out from usage. These include (i) plastic bottle cap seal; (ii) plastic products using oxo substance in its production; (iii) microbeads; (iv) U-shaped plastic bags with less than 30µm thickness; (v) foam containers; (vi) plastic cup with less than 300µm thickness; and (vii) plastic straws. These prioritised items are to be completely phased out by 2023 at the latest.14

The functions of the 2nd Working Group on Enhancement, Awareness Raising and Public Relations are to (i) enhance a good understanding and create stakeholder participation on plastic waste prevention and resolution; (ii) raise awareness and publicise news and information on plastic waste management through different communication channels; and (iii)

⁹ พระราชบัญญัติส่งเสริมและรักษาคุณภาพสิ่งแวดล้อมแห่งชาติ (B.E. 2535, 1992). Sections 12, 13, 52 and 53.

¹⁰ พระราชบัญญัติส่งเสริมและรักษาคุณภาพสิ่งแวดล้อมแห่งชาติ (B.E. 2535, 1992). Section 13.

¹¹ คำสั่งคณะกรรมการสิ่งแวดล้อมแห่งชาติ ที่ 15/2561 เรื่องการแต่งตั้งคณะอนุกรรมการบริหารจัดการขยะพลาสติก

¹² *Ibid.*, see, รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 1/2561 (26 กรกฎาคม พ.ศ. 2561)

¹³ รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 2/2562 (21 มิถุนายน พ.ศ. 2562), at p. 5.

¹⁴ รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 3/2561 (26 ธันวาคม พ.ศ. 2561), at p. 4.

prepare an action plan on raising a good understanding of plastic waste management.¹⁵ Several campaigns have been initiated by this working group especially those aiming at enhancing a good understanding of plastic waste management. For example, the campaign entitled 'making merits by heart, reduce using, giving away plastic bags' by an alliance of government departments and private sector, especially department and convenience stores, has helped to reduce the number of plastic bags by 600 million since July 2017.¹⁶ In addition, the Department of Environmental Quality Promotion (DEQP) jointly with the Department of Local Administration and 16 regional natural resources and environment offices initiated a campaign for the reduction of plastic bags in 170 markets nationwide.¹⁷ This has helped to reduce plastic bags by 2,529,193 between July and October 2017.¹⁸

Lastly, the 3rd Working Group on Development and Utilisation of Plastic Wastes is tasked with duties to (i) develop a model for plastic waste reuse and recycle in accordance with the concept of a circular economy; (ii) suggest and prepare Thailand Plastic Material Flow Database and; (iii) support factories in enhancing their effectiveness in reducing plastic wastes in their production and support domestic recycling industry to improve their production standard.¹⁹ The working group has completed the 2017 material flow analysis for plastic wastes and continues to monitor it annually.²⁰ In addition, two pilot areas have been developed to be a model for plastic waste management and to create a circular economy. These include Klongtoey district in Bangkok, where the working group and local administration pilot several programmes in enhancing good practices on plastic waste management, and Rayong province, where a memorandum of understanding was signed by the provincial authorities, local administration, and private sector to create a public-private partnership for plastic waste management.²¹ The working group has a progress meeting every two months to track the progress of the development under this MOU and provide knowledge to local administration to enhance the effectiveness of plastic waste segregation.²²

While there have been positive and meaningful developments under the Sub-Committee on Plastic Wastes Management and its working groups, there is also a weakness inherent in this arrangement, which is that the composition of the Sub-Committee and its working groups mainly concentrates on representatives of the government departments and private sector, while members of academia, non-government organisations, or the wider public are missing. In addition, it has been reported that, at the end of 2019, the Sub-Committee on Plastic Wastes Management has been merged with the Sub-Committee on Electronic Wastes and formed the new body entitled 'Sub-Committee on Plastic and Electronic Wastes Management'.²³ However, the official documents including reports on works of this body have not been made publicly available. This merger can be deemed problematic as the two types of wastes are different in nature and managing them under a single body may slow down the work on plastic waste management.

_

¹⁵ Ibid, รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 1/2561 (26 กรกฎาคม พ.ศ. 2561).

 $^{^{16}}$ รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 3/2561 (26 ธันวาคม พ.ศ. 2561), at p. 10.

¹⁷ รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 2/2562 (21 มิถุนายน พ.ศ. 2562), at p. 7.

¹⁸ Ihid

¹⁹ Ibid, รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 1/2561 (26 กรกฎาคม พ.ศ. 2561)

²⁰ รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 2/2562 (21 มิถุนายน พ.ศ. 2562), at p. 12.

²¹ รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 1/2562 (7 กุมภาพันธุ์ พ.ศ. 2562), at p. 8.

²² รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 2/2562 (21 มิถุนายน พ.ศ. 2562), at p. 11.

²³ Bangkok Post (10 January 2020), *'New Panel set up to tackle waste disposal'* available at: https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal <a href="https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal <a href="https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal <a href="https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal <a href="https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal <a href="https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-disposal <a href="https://www.bangkokpost.com/thailand/general/1832154/new-panel-set-up-to-tackle-waste-up-to-tackle-waste-up-to-tackle-waste-up-to-tackle-waste-up-to-tackle-waste-up-to-tackle-w

Another government institution established by this Act is the Pollution Control Commission (PCC) having the Pollution Control Department (PCD) as its secretariat. The PCC's functions are mostly advisory. The functions include proposing and recommending an action plan for prevention and rectification of any harm caused by the diffusion of a pollutant or pollution; providing advice on revision and improvement of any legislation relating to the control, prevention, reduction, and abatement of pollution prior to the NEB; and recommending tax and investment promotion measures relating to pollution control and the enhancement and maintenance of the environment quality prior to the NEB.²⁴

In terms of pollution management, the National Environmental Quality Act divides pollution into three categories, that is, (i) air and noise pollution; (ii) water pollution; and (iii) other pollution and hazardous waste. ²⁵ It is within the power of the PCC and with the approval of the NEB to advise the Natural Resources and Environment Minister to establish the above-mentioned pollution control standards. ²⁶

For the regulation of pollution within Thai waters both in the aquatic and marine environment, the Navigation in the Thai Waters Act empowers the Marine Department (MD), within the Ministry of Transport, to regulate the navigational use of the waters.²⁷ It encourages the MD to regulate plastic pollution in the form of a prohibition of pouring, dumping, or acting in whatsoever way that causes a spill of any oil, chemical substances, or any other substance into any river, canal, marsh, reservoir, or lake being used as a public navigational route or for communal use, or into any sea of the Thai waters, likely to be harmful to the environment or harmful to the navigation.²⁸

In addition, the marine and coastal environments are also under the responsibility of the Department of Marine and Coastal Resources (DMCR), within the Ministry of Natural Resources and Environment, which is the competent authority under the Promotion of Marine and Coastal Resources Management Act.²⁹ This Act authorises the DMCR director general or authorised officers to order a stoppage of any action or activity causing damage to the marine environment.³⁰ In such a case, if the DMCR sees that marine plastic pollution causes or is likely to cause significant harm to the marine and coastal environment, it may take preventive actions.³¹ To date, DMCR has taken legally-binding preventive actions for the protection of coastal areas and beaches in specific areas. An example can be drawn from DMCR order No. 755/2561 (2018) setting out measures for protecting coastal areas and marine resources in Koh Tao, Koh Pa-Ngan and Koh Samui, Surat Thani.³² This order was adopted to deal with the management of marine litters including plastic debris in the areas of those three islands.³³

Another situation where the DMCR may take protective measures relating to marine plastic pollution is when it designates the so-called 'protected mangrove area' or 'marine and coastal

²⁴ *Ibid*. พระราชบัญญัติส่งเสริมและรักษาคุณภาพสิ่งแวดล้อมแห่งชาติ (B.E. 2535, 1992). Section 53.

²⁵ Ibid, Sections 55-56.

²⁶ Ibid.

²⁷ พระราชบัญญัติการเดินเรือในนานน้ำไทย (B.E. 2456, 1913). Section 119 bis.

²⁸ *Ibid.* Section 119 bis.

²⁹ พระราชบัญญัติส่งเสริมการบริหารจัดการทรัพยากรทางทะเลและชายฝั่ง (B.E. 2558, 2015).

³⁰ Ibid. Section 17.

³¹ Ibid.

³² คำสั่งกรมทรัพยากรทางทะเลและชายผั่ง ที่ 755/2561 คุ้มครองทรัพยากรทางทะเลและชายผั่ง บริเวณพื้นที่เกาะเต่า เกาะพะงัน และเกาะ สมุย จังหวัดสุราษฎร์ธานี (2018).

³³ The same kind of measures were also adopted in the Eastern coast of Thailand – Koh Sichang, Chonburi. See, คำสั่งกรมทรัพยากรทางทะเลและชายฝั่ง ที่ 518/2562 เรื่องมาตรการคุ้มครองทรัพยากรทางทะเลและชายฝั่ง บริเวณพื้นที่เกาะสีซัง อำเภอเกาะสีซังและอำเภอศรีราชา จังหวัดชลบุรี (2019); See also, คำสั่งกรมทรัพยากรทางทะเลและชายฝั่ง ที่ 1064/2560 (2017).

protected area'.³⁴ Upon the designation of such protected areas, the Promotion of Marine and Coastal Resources Management Act enables the DMCR to adopt protective measures applicable to such areas and such measures can be those relating to prevent, reduce, and control marine plastic pollution provided that the measures adopted contribute to the protection of mangrove, marine and coastal areas.³⁵ To date, DMCR has not taken any protective measure with regards to plastic pollution in those areas. Other measures taken by DMCR include beach clean-up activities in line with the method and procedure of International Coastal Clean-up (ICC), litter and cigarette butt-free beach – informing the public through SMS of the general prohibition on discarding litters and cigarette butts on the beach.³⁶ DMCR actions also include the installation of litter booms on several river mouths along the Gulf of Thailand and Andaman coastlines in order to monitor land-based litters and prepare a database of marine debris for the Sub-Committee on Plastic Waste Management.³⁷

Waste management and disposal is under the responsibilities of the Department of Health (DOH), Ministry of Public Health – the centralised government department. The DOH is the responsible government department under the Public Health Act.³⁸ Plastic pollution is also part of the term "waste" under this Act, which includes "paper waste, cloth remnant, merchandise waste, material waste, plastic bag, food container, ash, animal manure, or any other matter swept away from roads, marketplaces, animal farms or other places including infectious waste, toxic or hazardous waste from the community."³⁹ This Act assigns the power to collect, transport, and dispose of waste or litter to DOH and local administrations. In practice, the DOH delegates this power to the local administration to take care of wastes within their administering areas.⁴⁰

The situation of local administrations is particular as their powers are territorially limited to their administering areas. In addition, there is a *de facto* hierarchical relationship between the centralised and the local administrations. The local administrations need to follow and implement laws and policies adopted by the central government. Local Administrations include sub-district administrative organisations, provincial administrative organisations, and municipalities under the supervision of the Ministry of Interior. Under the Public Health Act, a local administration has the power to collect, transport, or dispose of waste and litter within its administering area. In addition, these local administrations have the general power to protect and preserve natural resources and the environment from plastic pollution in accordance with the Sub-District Council and Sub-District Administrative Organisation Act, the Provincial Administrative Organisation Act, and the Municipality Act respectively. Furthermore, local administrations are designated to perform waste management and abatement tasks by the Maintenance of the Cleanliness and Orderliness of the Country Act. The Act designates the power to collect, transport, and dispose of waste and litter including plastics to local

³⁴ พระราชบัญญัติล่งเสริมการบริหารจัดการทรัพยากรทางทะเลและชายฝั่ง (B.E. 2558, 2015). Sections 18 and 20.

³⁵ Ibid. Section 23.

³⁶ รายงานการประชมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 1/2562 (7 กุมภาพันธุ์ พ.ศ. 2562), at p. 11.

³⁷ Ibid, p. 12

³⁸ พระราชบัญญัติการสาธารณสุข (B.E. 2535, 1992).

³⁹ Ibid. Section 4.

⁴⁰ Ibid. Sections 6 - 7.

⁴¹ *Ibid.* Section 18.

⁴² พระราชบัญญัติสภาตำบลและองค์การบริหารส่วนตำบล (B.E. 2537, 1994).

Sections 67 and 90; พระราชบัญญัติองค์การบริหารส่วนจังหวัด (B.E. 2540, 1997). Sections 45 and 77; พระราชบัญญัติเทศบาล (B.E. 2496, 1953). Section 50.

⁴³ พระราชบัญญัติการสาธารณสุข (B.E. 2535, 1992).

Section 18; พระราชบัญญัติรักษาความสะอาดและความเป็นระเบียบเรียบร้อยของบ้านเมือง (B.E. 2535, 1992). Sections 34/1 and 43.

administration and a fee shall be charged by the local administration for providing such service. Also, the local administration may assign other government departments, agencies, or private operators to perform such tasks.⁴⁴

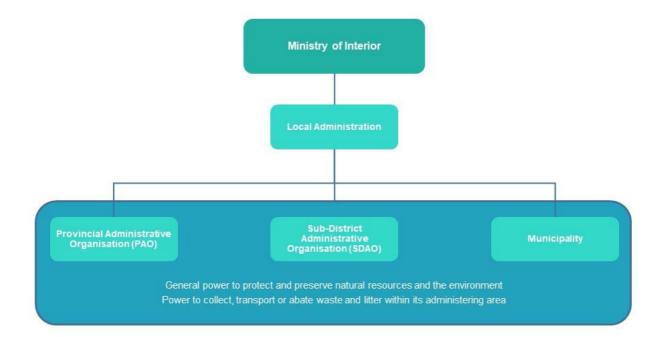


Figure 2: Function of local administrations in dealing with plastic pollution under their administering areas

4 Legal and policy frameworks

4.1 Overarching law or strategy

It should be noted that the environmental legal system does not give any special status for plastic pollution. It focuses on plastics only when they become waste or litter and it is treated as part of general waste and litter. As such, the Thai environmental law does not fully address the entire lifecycle of plastics but gives priority to waste management and disposal. What complicates the handling of marine plastic pollution is the fact that there is no single piece of legislation designed to deal with plastics. Instead, Thai waste management law is fragmented, involving several pieces of legislation and government departments and agencies. In terms of policy framework, Thai policies relating to marine plastic pollution can be addressed from both environmental and energy perspectives.

The National Environmental Quality Management Plan identifies marine litter together with coastal erosion as the main threats to the marine environment in the country. ⁴⁵ Between 2009 and 2013, the record showed that the accumulated marine litter gathered was 300,000 pieces

⁴⁴ พระราชบัญญัติการสาธารณสุข (B.E. 2535, 1992).

Section 18; พระราชบัญญัติรักษาความสะอาดและความเป็นระเบียบเรียบร้อยของบ้านเมือง (B.E. 2535, 1992). Section 34(1).

⁴⁵ Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment. แผนพัฒนาคุณภาพสิ่งแวดล้อม พ.ศ. 2560 - 2564.

or the equivalent of 50,000 kilograms.⁴⁶ It is important to highlight that the majority of these litters were plastic from land- and vessel-based sources.⁴⁷ Municipal solid wastes increased to 26.85 million tonnes in 2015, and a large portion was plastics.⁴⁸ Out of this amount, only 8.34 million tonnes were properly disposed (31 per cent) and merely 4.74 million tonnes were recycled, converted into energy and used for other purposes, especially those from organic waste.⁴⁹ The Prime Minister declared municipal solid wastes (including plastics) as a priority in the national agenda and ordered (i) priority actions to be taken in 6 provinces where municipal solid wastes are heavily accumulated;⁵⁰ (ii) integrated municipal solid wastes management among related ministries; and (iii) an establishment of rules and regulations for municipal solid wastes, and hazardous waste management.⁵¹ One of the strategies is to ensure sound management of the protected and restored environment by improving air and water quality, and increasing green space.⁵² However, there is no clear policy, target, nor measures set to deal with both marine plastic pollution and plastic pollution in general.

With regards to energy, the Alternative Energy Development Plan aims to increase energy produced from communal waste and litter from 65.72 megawatts (MW) in 2014 to 500 MW in 2036. Examples include an Energy and Organic Fertiliser Plant of Rayong Municipal in Rayong project where Anaerobic Digestion (AD) technology was deployed to create biogasower generation.⁵³ In addition, an Incineration Power Plant was constructed using municipal waste in Phuket city to produce electricity processing 250 tonnes/day of municipal solid waste. ⁵⁴ However, the lack of proper waste, garbage, and litter separation and reception and treatment facilities continue to pose problems for the production of energy from municipal solid wastes. ⁵⁵

4.2 Production

It should be noted that, in Thailand, there is no ban on production of plastic items. However, there are industrial product standards applicable to certain plastic products in accordance with the Industrial Product Standards Act.⁵⁶ This Act provides both compulsory and voluntary industrial product standards to ensure trust and quality of products sold to the public.⁵⁷ There is only one compulsory industrial standard relating to plastic products, the industrial product standard concerning plastics containers for sterile pharmaceutical products.⁵⁸ However, there are various voluntary industrial standards for plastic products that are not legally binding, but with which producers may comply in order to enhance public trust over their plastic products.

⁴⁶ *Ibid.* p.9.

⁴⁷ Ibid.

⁴⁸ *Ibid.* pp.9, 14.

¹⁹ Ibid.

⁵⁰ *Ibid*. Ayutthaya, Nakorn Pathom, Saraburi, Lopburi, Samukprakarn, and Pathumthani provinces; *See also* พลเอก ประยุทธ์ จันทร์โอชา นายกรัฐมนตรี กล่าวในรายการ "คืนความสุขให้คนในชาติ" ออกอากาศทางโทรทัศน์รวมการเฉพาะกิจแห่งประเทศไทย วันศุกร์ที่ 5 มิถุนายน 2558 เวลา 17.00 น.

⁵¹ *Ibid*. p.15.

⁵² *Ibid.* p.85.

⁵³ Department of Alternative Energy Development and Efficiency. *Energy from Municipal Waste*. Available at http://weben.dede.go.th/webmax/content/energy-municipal-solid-waste-msw (accessed 15 April 2020). ⁵⁴ *Ibid*.

⁵⁵ Energy Policy and Planning Office, Ministry of Energy. แผนพัฒนาพลังงานทดแทนและพลังงานทางเลือก พ.ศ. 2558 – 2579. pp.8-

⁵⁶ พระราชบัญญัติมาตรฐานผลิตภัณฑ์อุตสาหกรรม (B.E. 2511, 1968).

⁵⁷ *Ibid.* Sections 8, 15, 17.

⁵⁸ ประกาศกระทรวงอุตสาหกรรมฉบับที่ 4677

การยกเลิกและทำหนดมาตรฐานผลิตภัณฑ์อุตสาหกรรมที่เกี่ยวข้องกับบรรจุภัณฑ์พลาสติกสำหรับผลิตภัณฑ์ยาปลอดเชื้อ (B.E. 2558, 2015).

This includes, *inter alia*, industrial standards concerning plastic baby feeding bottles, plastic bags for food and U-shaped plastic shopping bags.⁵⁹ In addition, the Food and Drug Administration (FDA) has issued questionnaires asking for public opinion in revising the Ministry of Public Health Notification under the Food Act on determining the quality or standard of plastic containers in order to allow for the use of PET and HDPE recycled plastic pellets in the production of plastic containers.⁶⁰ The period for receiving opinions ended on 10 April 2020. It remains to be seen how the FDA further revises its regulation.

4.3 Trade and transport

In terms of importation and exportation of plastics, the Ministry of Commerce regulates imports and exports of used or unused plastic scraps. This is in accordance with the Ministry of Commerce Notification on an Import of Goods issued under the Export and Import of Goods Act. The notification determines that the importing of used or unused plastic scraps shall be subject to an import authorisation by the Ministry of Industry. The authorisation procedure is in accordance with the notification of the Ministry of Industry. However, there are no regulations on the export of plastics.

It should be, nonetheless, noted that initial substances intended for plastic production such as ethylene or propylene are classified as hazardous substances.⁶⁴ This is under the application of the Hazardous Substances Act.⁶⁵ Production, import, transit, export and possession of these substances are subject to authorisation by the competent authority (Department of Industrial Works, Ministry of Industry). For the domestic transport of plastic products and waste, there is no special legislation. The general law concerning carriage of goods under the Thai Civil and Commercial Code applies in this instance.

4.4 Retail and consumer use

In Thailand, there is no law on the sale or distribution of plastic products. In addition, no ban on the sale or use of plastic items has been issued so far. Reducing the use of plastic items is voluntary and can be a private institution initiative. ⁶⁶ In addition, there are no taxes nor fiscal incentives to reduce the use of plastic items.

63 ประกาศกรมโรงงานอุตลาหกรรม เรื่อง หลักเกณฑวิธีการเกี่ยวกับการอนุญาตให้นำเศษ เศษตัด และของที่ใช้ไม่ได้ซึ่งเป็นพลาสติกไม่ว่าใช้แล้วหรือไม่ก็ตามเข้ามาในราชอาณาจักร (B.E. 2551, 2008).

⁵⁹ ประกาศกระทรวงอุตสาหกรรม ฉบับที่ 1922 (พ.ศ. 2536, 1993) เรื่อง กำหนดมาตรฐานผลิตภัณฑ์อุตสาหกรรมขวดนมพลาสติก (TIS 1181 – 2536);
ประกาศกระทรวงอุตสาหกรรม ฉบับที่ 4228 (TIS 2553, 2010) เรื่อง ยกเลิกและกำหนดมาตรฐานผลิตภัณฑ์อุตสาหกรรม ถุงพลาสติกสำหรับบรรจุอาหาร (TIS 1027 – 2553); ประกาศกระทรวงอุตสาหกรรม ฉบับที่ 1835 (พ.ศ. 2535, 1992) เรื่อง กำหนดมาตรฐานผลิตภัณฑ์อุตสาหกรรมถุงพลาสติกหิ้วรูปตัวยู

⁽TIS 1116 – 2535); (For more information, see Thai Industrial Standards Institute website. Available at https://www.tisi.go.th/home/en (accessed 13 December 2019).

⁶⁰ ประชาสัมพันธ์ แบบสอบถามข้อมูลเพื่อนำมาปรับปรุงประกาศกระทรวงสาธารณสุข (ฉบับที่ 295) พ.ศ. 2548 เรื่อง กำหนดคุณภาพหรือมาตรฐานของภาชนะบรรจุที่ทำจากพลาสติก (2020); See also, Food Packaging Forum. Thailand considers use of recycled plastic FCMs. Available at https://www.foodpackagingforum.org/news/thailand-considers-use-of-recycled-plastic-fcms (accessed 15 April 2020).

⁶¹ ประกาศกระทรวงพาณิชย์ว่าด้วยการนำสินค้าเข้ามาในราชอาณาจักร (ฉบับที่ 112) (B.E. 2539, 1996); Export and Import of Goods Act (B.E. 2522, 1979).

⁶² Ibid.

⁶⁴ ประกาศกระทรวงอุตสาหกรรม เรื่อง บัญชีรายชื่อวัตถุอันตราย (ฉบับที่ 2) (B.E. 2556, 2013). List No. 5.

⁶⁵ พระราชบัญญัติวัตถุอันตราย (B.E. 2535, 1992).

⁶⁶ For example, 'Everyday say no to plastic bags' campaign initiated by the Ministry of Natural Resources and the Environment. Available at: https://www.thaigov.go.th/news/contents/details/25552 (accessed 7 February 2020); Several department stores and retailers stop providing plastic bags. Available at: https://www.bbc.com/thai/thailand-50963578 (accessed 7 February 2020).

4.5 End of life (including recycling, waste management and clean-up)

Under the National Master Plan on Waste Management, plastics are treated as part of the municipal solid wastes.⁶⁷ It was recorded in this Plan that in 2015 there were 30.49 million tons of accumulated solid waste that was left untreated in Thailand. However, Thailand's waste treatment facilities are insufficient in relation to this amount of waste. Currently, there are 2,450 treatment facilities, and most of them are landfill systems. Only 7.88 million tonnes are correctly treated.⁶⁸ The causes of this are manifold. This includes, *inter alia*, improper treatment of waste in the community, insufficient waste reception and treatment facilities, public protests for the construction of waste management facilities in specific neighbourhoods, and financial difficulties and limitations of the local administration responsible for municipal solid wastes management.⁶⁹ Together with the lack of knowledge and understanding of local people concerning waste management and the operation of waste treatment facilities to be built in their areas, this leads to tensions and protests by the public.

In addition, the National Master Plan on Waste Management sets out an ambitious target to achieve a sound and proper treatment for at least 75 percent of the municipal solid wastes produced by 2021.⁷⁰ Several measures are spelt out to deal with plastics. These include measures supportive of garbage separation, reduction or ban of single-use plastic bags and containers in governmental departments, educational institutions, tourist attractions, and the deposit system for plastic bottles and containers.⁷¹ Local administration shall assess and develop its waste management capacity as well as invest in waste reception, collection and treatment facilities and develop a system for waste separation at origin. Recycling of plastic waste and its conversion into alternative energy should be supported and encouraged.⁷² Other measures shall also be encouraged, including studies and research on the life cycle of products especially plastics.⁷³ It remains to be seen whether the Thai government will be able to meet its waste management targets and especially those concerning marine plastic pollution and plastic pollution in general.

Furthermore, the Ministry of Natural Resources and the Environment, together with other relevant government departments, has drawn up the 'Roadmap for Plastic Wastes Management B.E. 2661 – 2573 (2018 - 2030)' which is pending approval by the cabinet. The Roadmap lays down two important goals for this issue, that is (i) reducing and phasing out the use of targeted plastic products and replacing them with other environmentally friendly products; and (ii) to achieve 100 per cent rate of recycling plastic within the year 2027. The cabinet has acknowledged these goals with targets and has set them as part of the national agenda which will be implemented nationwide to tackle plastic pollution.⁷⁴

Under Thailand's environmental legislation on plastics pollution, there is no obligation to recycle plastic, no deposit scheme for plastic products, and no use of a recycling incentive/tax in plastic waste management. In relation to the fishery industry, there are no recycling

⁶⁷ Pollution Control Department, Ministry of Natural Resources and Environment. แผนแม่บทการบริหารจัดการขยะมูลฝอยของประเทศ พ.ศ. 2559 – 2564. p.7.

⁶⁸ *Ibid*. p.10.

⁶⁹ *Ibid.* pp.12-13.

⁷⁰ *Ibid*. p.21.

⁷¹ *Ibid.* p.28.

⁷² *Ibid*.p.30.

⁷³ *Ibid*.p.37.

⁷⁴ Pollution Control Department (7 October 2020), A letter re comments on IUCN's report on the legal and institutional framework governing marine plastics in Thailand', para 2.

regulations regarding fishing gear. In addition, there are no measures regarding port reception facilities for marine plastic pollution. The applicable law is the Marine Transport Department Regulation on Requirements and Procedures for Certifying the Service Provider for Vesselsource Waste and Garbage Management and Other Matters, B.E. 2560 (2017)⁷⁵ and the general prohibition to discard all kinds of wastes into the Thai waters under Navigation in the Thai Waters Act.⁷⁶

Furthermore, plastic is treated as other pollution and hazardous waste under the National Environmental Quality Act. The National Environmental Quality Act refers to other specific legislation for the collection, transport, and management for treatment and disposal of litters and other wastes in solid form as well as dumping of waste and other matters, including plastics from seagoing ships, oil tankers, and other vessels. By such reference, this brings in the Navigation in the Thai Waters Act, where the plastic pollution originating from a vessel shall be governed by such legislation. It is important to note that marine plastic pollution originates mainly from land-based sources and activities. The legislation relating to litter and waste management is also applicable to the management of marine plastic pollution. This includes the Public Health Act, the Maintenance of the Cleanliness and Orderliness of the Country Act and local administration laws.

It is worth noting that the Draft Plan on Integrated Plastic Waste Management was prepared by the Pollution Control Department within the Ministry of Natural Resources and the Environment, and has already been subject to a public hearing. The draft plan was sent to the Sub-Committee on Plastic Waste Management for reviews and comments. Under this draft Plan, three targets are set out: (i) reducing plastic waste; (ii) increasing the design and production of more environmentally friendly plastic products; and (iii) recycling 60 percent of plastic waste by 2021. Several interesting measures are set to be used in order to achieve such targets including an environmental management tax on plastic producers, the development of legislation on the management of waste and litter including plastics, and studies on alternatives to plastics. In addition, the PCD has adopted the Roadmap on Plastic Waste Management (2018-2030), which sets two targets in tackling plastic pollution: (i) to reduce and voluntarily phase out the use of targeted plastic products and increase the use of alternative products to plastics; and (ii) to achieve 100 per cent reuse and recycle of plastic wastes. It remains to be seen how this draft roadmap is endorsed and implemented in practice by the relevant government departments and agencies.

⁷⁵ระเบียบกรมเจ้าท่า ว่าด้วยหลักเกณฑ์และวิธีการรับรองผู้ให้บริการจัดเก็บและบำบัดของเสียจากเรือประเภทขยะและกากของเสียต่าง ๆ (B.E. 2560, 2017).

⁷⁶ *Ibid.*; พระราชบัญญัติการเดินเรือในนานน้ำไทย (B.E. 2456, 1913).

⁷⁷ พระราชบัญญัติส่งเสริมและรักษาคุณภาพสิ่งแวดล้อมแห่งชาติ (B.E. 2535, 1992). Sections 78-79.

⁷⁸ Ibid. Section 78.

⁷⁹ UN General Assembly. *Oceans and the law of the sea - Report of the Secretary-General*. A/59/62/Add.1 (18 August 2004). Para. 97.

⁸⁰ พระราชบัญญัติรักษาความสะอาดและความเป็นระเบียบเรียบร้อยของบ้านเมือง (B.E. 2535, 1992). Sections 34/1 and 43.

⁸¹ Pollution Control Department, Ministry of Natural Resources and Environment.

⁽ร่าง) แผนจัดการขยะพลาสติกอย่างบูรณาการ พ.ศ. 2560 - 2564. p.1.

⁸² Ibid.

⁸³ Ibid. pp.12-13.

⁸⁴ Pollution Control Department, Ministry of Natural Resources and Environment. (ร่าง) Roadmap การจัดการขยะพลาสติก พ.ศ. 2561 – 2573.

5 Gaps and challenges

5.1 A needed reinforcement of the leadership for integrated and concerted implementation and enforcement of relevant laws and necessary measures

Recent scientific research has attracted considerable attention from the Thai government and press to the problem of plastic waste in the ocean.85 This has ignited government political will and actions in dealing with plastic pollution in Thailand. This was evident through its commitment shown in the Bangkok Declaration on Combating Marine Debris adopted at the 34th ASEAN Summit in early 2019. At the summit, Thailand and other ASEAN member States pledged and reaffirmed their commitment "to take concrete actions in combating marine plastic debris" and "to strengthen regional and international cooperation by exploring the possible development of an EAS regional plan of action and guidelines, and promoting efforts to support the development of a national action plan to prevent, reduce and manage marine plastic debris".86 In addition, political will is also shown through the establishment of the Sub-Committee on Plastic Waste Management, bringing all stakeholders on board and working together in combating plastic pollution, including those from academia and non-governmental organisations.87 However, it has been years since Thailand was identified as one of the world's leading producers of marine plastic litter and the author is of the opinion that integrated and concerted implementation and enforcement of relevant laws and necessary measures by the government are still lacking. 88 These include measures that could induce changes in consumption patterns, such as taxes on single-use plastic bags. Therefore, the author is of the view that in light of the growing and promising political will to combat plastic pollution, Thailand needs a stronger leadership, hopefully from the leader of the government and relevant political parties to command, support, and consistently monitor the implementation and enforcement of relevant laws and necessary measures by the competent authorities. This will certainly ensure that the objectives set in the roadmap and action plan by the government itself are achieved.

5.2 A lack of innovative measures dealing with plastic pollution

Economic instruments and measures such as environmental taxes and incentives as well as charges for those who litter plastics can be introduced to boost the effectiveness of the regulatory regime. It should be noted that, as mentioned above, the NEB and PCC have powers to recommend tax measures and incentives. ⁸⁹ However, so far, these measures have not been sufficiently implemented by the government. This was discussed in the meeting of the Sub-Committee on Plastic Waste Management and the reasons for this are twofold. Firstly, the relevant existing environmental legislations – the National Environmental Quality Act and the Maintenance of the Cleanliness and Orderliness of the Country Act - do not allow for charging environmental taxes or fees. Amendments to these legislations are needed to empower the government for environmental tax and fee collection, including those to be

⁸⁵ Jambeck, J.R. et al. (2015). Plastic waste inputs from land into the ocean. Science 347 (6233):768-771.

⁸⁶ For more information, see ASEAN (2019). Bangkok Declaration on Combating Marine Debris in ASEAN Region. ⁸⁷ See section 3.

⁸⁸ Styllis, G. (5 June 2018). *Thailand Falling Behind in Global Battle with Plastic Waste*. Available at https://asia.nikkei.com/Economy/Thailand-falling-behind-in-global-battle-with-plastic-waste (accessed 30 January 2019)

⁸⁹ พระราชบัญญัติส่งเสริมและรักษาคุณภาพสิ่งแวดล้อมแห่งชาติ (B.E. 2535, 1992). Sections 13 and 53.

charged on consumers of plastic products. 90 Secondly, the existing tax law allows for limited regulation of plastics based on excise tax.91 Excise tax and tariffs may be charged upon producers and/or importers of plastics and plastic-related products. 92 However, this is unlikely to influence changes of societal behaviour as such tax and tariffs are not directly placed upon the consumer, which will fundamentally affect consumer patterns. 93 Amid this inadequacy, there are some positive developments which should be further encouraged. The Royal Ordinance under the Revenue Code (No. 702) on Tax Exemption B.E. 2563 (2020) has recently been adopted in June 2020 by the Revenue Department. This allows a company or juristic partnership to deduct 25 per cent of its expense on bio-degradable plastic goods specified by the Director General of the Revenue Department and approved by the Office of Industrial Economics for the period of 1 January 2019 – 31 December 2021.94 The Royal Ordinance is designed specifically to support entrepreneurs using environmentally friendly and bio-degradable plastic products, as they support the government attempt to reduce plastics.95 This kind of measures should be further adopted and tailored to use within the wider society in order to enhance incentives and induce behavioural changes towards a growing recycling practice.

The Bill on National Waste Management is currently being prepared by the Ministry of Natural Resources and the Environment.⁹⁶ It may be of use to include the power to impose environmental measures including taxation, incentives, and other economic and fiscal measures in the Bill so that, once it is enacted, the competent authorities can be equipped with more options to manage plastic wastes and ultimately protect the environment. Options for introducing Extended Producer Responsibility as well as a Deposit/Return System for certain plastic products should be included as well.

In addition, innovative measures such as environmental taxation or incentives cannot be introduced by the local administration as they have limited power under their constitutive legislation. Although a municipality, sub-district administrative organisation, or provincial administrative organisation has powers over the protection of the environment, these powers do not extend to the introduction of a tax or fiscal measures on plastic pollution. The local administration therefore has no chance to generate income to be used for environmental protection purposes. Coupled with the limited financial resources to develop waste management facilities and environmentally sound technologies (including waste-to-energy), the inability to impose an environmental taxation or to provide tax incentives reduces the effectiveness in managing waste, litter, and plastics pollution in respective administrative areas.

-

⁹⁰ รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 1/2562 (7 กุมภาพันธุ์ พ.ศ. 2562), at p. 16.

⁹¹ พระราชบัญญัติภาษีสรรพลามิต พ.ศ. 2560; พระราชบัญญัติพิกัดอัตราภาษีสรรพลามิต พ.ศ. 2527

⁹² รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 1/2562 (7 กุมภาพันธุ์ พ.ศ. 2562), at p. 16.

⁹³ รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 1/2562 (7 กุมภาพันธุ์ พ.ศ. 2562), at p. 16; See also, ONEP, รายงานบทสรุปสำหรับผู้บริหาร จัดทำโดย มูลนิธิสถาบันวิจัยนโยบายเศรษฐกิจการคลัง โครงการศึกษาและพัฒนาแหล่งรายได้จากการ จัดเก็บภาษีสิ่งแวดล้อม ค่าธรรมเนียม และมาตรการทางการเงิน.

⁹⁴ Royal Ordinance under the Revenue Code (No. 702) on Tax Exemption B.E. 2563 (2020), Royal Gazette Vol 137/ Chapter 45 Kor/ Page 36 (22 June 2020), section 3.

⁹⁶ *Ibid*, รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 1/2562 (7 กุมภาพันธุ์ พ.ศ. 2562), p. 16.

⁹⁷ พระราชบัญญัติเทศบาล (B.E. 2496, 1953). Section 60; พระราชบัญญัติสภาตำบลและองค์การบริหารสวนตำบล (B.E. 2537, 1994). Section 67; พระราชบัญญัติองค์การบริหารสวนจังหวัด (B.E. 2540, 1997). Section 45.

5.3 Implementation challenges

There are also implementation challenges as to marine plastic pollution. The first one concerns institutional fragmentation and the lack of inter-departmental cooperation. As mentioned above, there are many government departments - centralised and decentralised - having a role to play in handling marine plastic pollution. The problem arises from the fact that all the relevant departments work strictly within their mandate and are limited to their areas of administration. Integrative action and cooperation must be encouraged as marine plastic pollution management requires inter-governmental cooperation. For instance, in the Municipality of Saensuk, the municipality officer is not entitled to get into the coastal waters that constitute the administration area of the MD in order to eliminate marine litter and plastics, due to the fact that the municipality's administration area is confined to land. The author is of the opinion that the situation is aggravated by the fact that the MD itself does not have the capacity to deal with marine litter and plastic pollution. In addition, it is very difficult to clean up marine plastic pollution in the areas of Bangsaen beach, because Saensuk Municipality officers have to wait until those plastics get stranded on the beach before they can be removed.98 Therefore, it would be more effective to encourage an even closer interdepartmental cooperation.

Insufficiently coordinated actions between relevant government departments, agencies and local administration is also a very urgent problem concerning the prevention, reduction, and control of marine plastic pollution in Thailand. A ban on single-use plastics introduced by merely a single municipality will never become effective if the neighbouring municipalities do not adopt concerted actions. This is the case of the Saensuk Municipality where the municipal law introduced a ban on foam/plastic containers. ⁹⁹ Despite this ban, foam/plastic containers can still be found in the coastal areas and waters as other neighbouring localities did not adopt the same measure towards plastic containers. Therefore, foam/plastic containers continue to be marketed, used, and ultimately brought into the Saensuk Municipality. It must be noted that Saensuk is relatively unique as they have the authority to raise their own revenue and taxes from tourism to pay the high costs of removing debris from the beach - not all municipalities have this relative autonomy and opportunity for investment decisions - and rely on the central government finances. This situation draws on the issue that the main responsibility for waste management lies at the municipal level and not at the central level, despite the disparities in municipal governments' capacities and knowledge.

5.4 Perception of plastics as pollution in Thailand

Another gap in the legislation is the fact that Thai legislation and the relevant authorities have never considered plastics – especially those single-use plastics – as a threat or pollution before. As such, there has never been any environmental standard concerning plastic pollution. Considering the nature and magnitude of the problem of plastics pollution, it is arguably an appropriate time for both the NEB and PCC to consider environmental standards for plastics. This is not only a question of considering plastics as waste or litter but of regulating the entire life cycle of plastics. In addition, as the Sub-Committee on Plastic Waste Management has recently been established under the NEB, public education and awareness-raising activities have been conducted to advocate a good understanding and knowledge of

⁹⁸ Interview with Narongchai Kunplome, the Major of Saensuk Municipality, Chonburi Province, 23 August 2018.

⁹⁹ Saensuk Municipality. คู่มือสำหรับผู้ประกอบการค้าชายหาดบางแสน เทศบาลเมืองแสนสุข. p.5.

plastic wastes i.e. its effects on the environment, plastic waste management and separation. Hopefully, this will change the general perception of the Thai society from seeing plastic products as part of their everyday convenience to a more cautious and considerate approach to the use of plastics. 101

¹⁰⁰ รายงานการประชุมคณะอนุกรรมการบริหารจัดการขยะพลาสติก ครั้งที่ 2/2562 (21 มิถุนายน พ.ศ. 2562), at p.8.

¹⁰¹ Green News Agency (5 October 2017). ขยะ' ภาระโคร. Available at https://greennews.agency/?p=15430 (accessed 26 February 2019).



IUCN Environmental Law Programme Environmental Law Centre

Godesberger Allee 108-112 53175 Bonn, Germany

Tel +49 228 2692 231 Fax +49 228 2692 246 elcsecretariat@iucn.org www.iucn.org/law