

Trading Away Health and the Environment: The Toxic Business of Waste Imports into Thailand

Co-Authors: Tanya Lee Roberts-Davis & Penchom Saetang

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Supporting data: Darwan Chantarahesdee, Autthaporn Ritthichat, Tawatpong Arj-eam, Akarapon Teebthaisong

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Ecological Alert and Recovery - Thailand (EARTH)

211/2 Ngamwongwan Rd., Soi 31-12,

Bangken, Muang, Nonthaburi 11000

Thailand

Tel: +66 2 952 5061; Fax: +66 2 952 5062

Email: earth@earththailand.org

Website: <http://www.earththailand.org>

Thai-language Facebook: <https://www.facebook.com/EarthEcoAlert>

English-language Facebook: <https://www.facebook.com/EarthEcoAlertEn>

Arnika - Toxics and Waste Programme

Delnicka 13, 170 00 Prague 7, Czech Republic

Tel: +420774406825

Email: toxic@arnika.org

Website: <http://english.arnika.org>

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Contents

I. Executive Summary	7
II. Overview: The Devastating Consequences of the Waste Import Business in Thailand	13
III. Profile: Plastic and E-Waste Waste Exports into Thailand	16
IV. Global Environmental Agreement on Transboundary Waste Trade: Loopholes, Corporate Lobbying and Civil Society Responses	29
V. Trade and Pro-Business Policies that Facilitate Waste Flows into Thailand	33
- Open for Business: Plastics and E-Waste Processing along the EEC	37
- Implications of the WTO and Free Trade Agreements	40
VI. Voices of Concerned Communities: Sidelined But Not Silenced	42
VII. Snapshots of Communities Responding to Toxic Plastics and E-Waste Trade	44
- Tha Than, Chacheongsao	44
- Khao Yoi, Petchaburi	47
- Nam Pu, Ratchaburi	50
VIII. Looking Ahead: Recommendations	54
IX. Sources Cited	56



June 1, 2018
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I. Executive Summary

Trading Away Health and the Environment provides an overview of the devastating impacts on the health and well-being of communities in Thailand where industrial waste processing facilities are being developed as part of an ongoing expansion of the transnational business of plastic and used electronics waste and scraps.

Among key findings of this report are the following:

- After 2017, when China proceeded with phasing in a ban on a wide range of plastics, metal, and paper-based scrap products and waste from docking at the country's ports, the import of these types of used materials into Thailand rose exponentially. The majority of countries complicit in the trade are located within the region (in particular, Japan, Hong Kong, Australia, New Zealand, Singapore and China), but also include non-regional OECD countries, notably including the USA, UK and Canada. In effect, Chinese investors and companies involved in this sector

appear to have managed to continue business as usual by establishing their own or joint ventures with Thai business partners for scrap recycling, especially in provinces with direct access to seaports, not far from the central urban district of Bangkok. The industrial parks in Thailand's Eastern Economic Corridor may provide a new focal area for companies seeking to establish waste processing facilities, corresponding investment privileges to accelerate land use approval, provide tax and import exemptions, and permit amendments of applicable environmental, health and safety and labour standards to ensure the greatest degree of efficiency.¹

- Although the primary countries exporting hazardous plastics and e-waste into Thailand have committed to uphold the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*², by re-categorizing waste as used goods this toxic trade continues unabated.

- The Basel Convention Secretariat and Parties to the Convention have taken note of the major risks posed to health and the environment by e-waste and plastics. As a result, as of May 2019, an additional restriction on the transboundary trade in hazardous and non-recyclable plastics will be implemented as an amendment to the agreement. Parties also came closer to agreeing upon voluntary guidelines related to minimizing the trade in e-waste. Nevertheless, given the leverage of the chemical lobby within the Convention's subsidiary working groups, opportunities for corporate capture and subsequent weakening of outcomes in practice remain of concern among civil society groups.

- Thailand is a signatory to the *Basel Convention*, but due to a patchwork of applicable environmental, land acquisition and social protection standards, in practice, the channels for the development of businesses importing and processing hazardous plastics

1 See for example, Thailand SME Centre, "Eastern Economic Corridor Development"(2019): <www.thailandsmcdevelopment.com/17044948/eec>; Thailand Board of Investment, "Eastern Special Development Zone Act B.E. 2561 (2018)" (May 2018): <[www.eeco.or.th/sites/default/files/EEC_Act_English_Ver\(unofficial\).pdf](http://www.eeco.or.th/sites/default/files/EEC_Act_English_Ver(unofficial).pdf)>.

2 Although the USA remains yet to ratify the convention, as a signatory, it is still obligated to refrain in good faith from acts that would defeat the object and purpose of the convention. (See, for ex: UN, "Towards Universal Participation and Implementation," *Understanding International Law: Fact Sheet 1*, 2011: <https://treaties.un.org/doc/source/events/2011/Press_kit/fact_sheet_1_english.pdf>.)

and used electronics scraps remain open. Following public pressure from civil society, the government has-in principle-committed to ban imports of hundreds of hazardous substances present in plastics and electronic waste, though timelines for implementation phase-in and final chemical specifications remain undisclosed.

- Although high profile one-time spot-checks of industrial sites by Thai authorities where e-waste and plastics from abroad were being illegally handled for domestic processing received headline media attention in 2018, no information about follow-up procedures to ensure legal compliance has ever been disclosed. Systematic efforts to undertake such investigations of facilities remain to be established.

- Under the current lack of legal framework available to be leveraged in the public's interest, communities' access to information and opportunities to seek justice for harm wrought by toxic effluent or emissions where industrial sites are located remains minimal.

- In each of the three profiled communities that are affected by plastics and/or e-waste processing facilities, it is notable that investigations by authorities were sparked by repeated reports by residents to respective local, district and provincial authorities. On no occasion were investigations reported as a result of proactive state strategies to systematically ensure compliance with applicable regulations. Nevertheless, all three situations also illustrate a pattern of authorities concluding facilities are in violation of the law and/or respective operating permits. Although authorities have ordered operations to be temporarily suspended until corrective changes are implemented, companies regularly flout such orders. Instead, communities commonly testify to repeatedly recalling authorities for follow-up investigations, submitting petition letters to line ministries, and calling for companies to be held accountable for damages wrought. Significantly, all continue to mobilize respectively to achieve justice with outcomes still to be determined.



June 1, 2018

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The report urges:

- Thai authorities to revise the Factory Act based on input from public consultations so that, at a minimum:
 - permitting of new facilities is subject to public hearings and input;
 - licensing procedures are based on commitments to sound environmental management guarantees;
 - compliance with environmental, health and safety regulations is guaranteed through strict, systematic enforcement mechanisms; and
 - emission inventory and chemical pollutant release data is recorded and accessible to the public;
- Thailand to sign and ratify the *Basel Ban Amendment* as well as to ensure future bilateral and multilateral free trade agreements are negotiated in full compliance with the *Basel Convention* and the provisions of the human rights conventions to which it is signatory.
- ASEAN to adopt a resolution affirming a unified policy position in support of the *Basel Ban Amendment* and establish a partnership to put an end to transboundary trade in hazardous electronic and plastic wastes without exception; and
- Internationally, the Basel Convention Secretariat to explicitly consider alternatives to current e-waste frameworks under discussion, facilitating promotion of the “Responsible Guideline on Transboundary Movements of Used Electrical and Electronic Waste to Promote an Ethical Circular Economy under the Basel Convention” as advanced by civil society networks (May 2019).



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II. Overview: The Devastating Consequences of the Waste Import Business in Thailand



From 2014 to 2019, the amount of discarded electronics as well as plastic scraps and wastes shipped to Thailand for disassembly, crushing and final disposal via a transnational business network increased to levels never before recorded. However, with the corporate industrial profits generated by the trade in waste comes the inevitable devastating toll wrought on the health and well-being of people and the environment. Despite the fact that processing electronic and plastic waste scraps results in the release of hazardous chemicals and by-products, including cadmium, arsenic, mercury, dioxins and furans, for which transboundary shipments should be minimized whenever possible, the economic price tag attached fails to account for the social and environmental harm imposed once it lands in Thailand's ports.

Although many of the major waste exporting countries, including Japan, promote the notions of green growth and the 'circular economy' within their own borders, they continue to follow a model of business-as-usual that fails to challenge norms of pro-growth consumer capitalism. As a result, waste is seen as a subject for sustained management with least cost options for disposal pursued. The disassembly

and disposal of discarded goods, particularly plastics and electronic wastes, which pose long-term threats to the environment as well as public health, can therefore be more profitable if sent offshore, into transnational spaces of the public commons, facilitated by bi/multilateral free trade agreements.

Residents of communities in the areas proposed by investors as sites for establishing waste processing facilities typically find themselves relegated to the sidelines; under pressure to accept the loss of land once relied upon for sustenance to make way for these industries. At times, they also are subjected to verbal or physical threats from vested interests if they raise questions or voice opposition about the establishment and operations of these industries. The reality is that areas targeted by the waste trading business for processing and disposal sites are typically in provinces within a short distance from seaports, where land is rapidly being re-categorized from non-industrial zones used by communities for cultivating food, grazing of livestock and other subsistence or recreational activities, to industrial development zones without the knowledge-let alone prior consent-of the people who live there.

In response, people affected by these toxic industries are increasingly becoming organized in order to collectively raise critical concerns about the imposition of accepting imported wastes. Together with legal advocates, academics and allied community-based organizations, residents are aiming to leverage direct pressure on responsible district, provincial and national authorities.

However, in calling for an end to the flow of plastic and electronic waste into their communities from abroad, they are coming up against local authorities who themselves have an interest in ensuring 'business as usual' for Thai and international corporate ventures. As a result, the possibilities to hold culpable businesses accountable for environmental contamination and emissions during their operation and after closure remain minimal at best.

In this process, people across rural and urban divides are drawing attention to the realities of Thailand's weak applicable regulatory framework and lax enforcement of existing laws. In particular, they are faced with an absence of binding environmental, industrial and health regulations that firmly uphold the **precautionary principle**, establish mechanisms for **public information disclosure**, offer opportunities for **grievances to be effectively addressed**, or provide channels for **accessing justice** in response to environmental and health harms inflicted.

The following report is a collaborative effort of staff researchers and writers based at **Ecological Alert and Recovery-Thailand (EARTH)**, an independent non-governmental organization that works with communities affected by hazardous waste contamination to mobilize for social and environmental justice and monitors policies as well as practices related to industrial pollution. Unless otherwise noted, data about volumes and values of specific electronic and plastic waste exported to Thailand is based on information compiled and analyzed by researchers at EARTH of primary statistics and sourced from the limited statistics released publicly by the Thai Customs Department. The remaining sections of the briefing rely on desk-based research, testimonies provided by members of communities where waste facilities are sited, and observations of waste stockpiles brought to the attention of EARTH by concerned communities. The following sections will:

- Outline basic information about the state of discarded plastics and electronics imports into Thailand between 2014–2018 (accessible data as of May 2019);
- Identify key institutional and policy-related causes for the ongoing flow of plastics and e-wastes from abroad to recycling and processing facilities in Thailand;
- Profile the concerns and responses of some of the many communities affected by the siting of plastics and e-waste facilities expanding to meet the demands of increased waste shipments into Thai ports, particularly in provinces with direct access to the South China Sea via the Gulf of Thailand; and
- Provide an initial set of recommendations to Thai, ASEAN-level and international policy makers – who have the responsibility to take their positions of authority on these matters seriously, in recognition of the severe implications of their decisions on the well-being of the diverse peoples and environment of both Thailand and the entire region.

III. Profile: Plastic and E-Waste Waste Exports into Thailand

From 1992 up until the end of 2016, China was the largest global importer of plastic scraps, cumulatively accepting 45% of the world's waste-shipped from over 40 countries, including the UK, USA, much of Europe, Australia and Japan.³ Similar trends have been recorded for the trade in electronic scraps. Significantly, when combined with imports into Hong Kong, which at the time was primarily used as a transit hub for re-exporting to China, a total of 72% of the world's plastic waste ended up here.⁴ However, in 2017, China introduced the "*National Sword Policy*," banning the import of twenty-four types of plastics waste effective as of January 2018.⁵ A further 32 types of solid waste were subsequently added to the ban in 2018, of which 16 were phased in as of January 2019, and the final 16 types added effective as of January 2020. As a result, a global shift in the waste trade has gotten underway, with Southeast Asia-including Thailand, Malaysia, Indonesia and Vietnam-providing the nearest dumping ground for many of the shipments which had previously docked at China's ports.⁶

According to data analysis undertaken by the *Financial Times*, directly following China's announcement of the *National Sword Policy*, imports of plastic scraps for reprocessing have most significantly risen in Thailand-by 1370%.⁷ For instance, Japan had been sending over 70% of its waste to China, but by making use of a bilateral trade agreement with

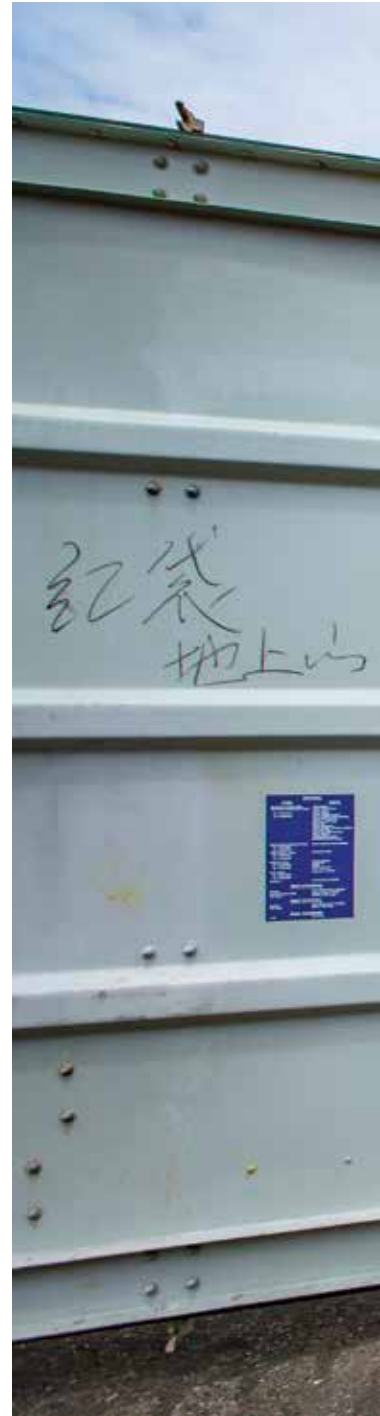
3 Brooks, A, S. Wang and J. Jambeck, "The Chinese import ban and its impact on global plastic waste trade," *Science Advances* 4.6, 20 June 2018 <<https://advances.sciencemag.org/content/4/6/eaat0131>>.

4 Ibid.

5 Foulsham, A. and J. Whitney, "How has China's waste import ban changed the recycling scene in Asia?" 20 June 2018 <csr-asia.com/newsletter-how-has-china-s-waste-import-ban-changed-the-recycling-scene-in-asia#1> .

6 Hook, L. and J. Reed, "Why the world's recycling system stopped working," *Financial Times*, 25 Oct. 2018 <on.ft.com/2zC4hSU>.

7 Ibid.





June 1, 2018
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Thailand, shifted its export patterns unimpeded by any regulatory restrictions⁸. Similarly, it appears that the USA and Australia took advantage of the weaker regulatory framework in Thailand and economic partnerships to seal respective agreements.

Chinese investors involved in the lucrative waste trade managed to continue business as usual by establishing their own or joint ventures with Thai business partners for scrap recycling, with new opportunities for setting up businesses close to the seaports in provinces surrounding the national capital region. In response to rising public awareness and concern, the Thai Government

⁸ Ibid.



June 1, 2018
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announced intentions to ban plastic and e-waste waste scrap imports. A series of high profile police raids on waste processing sites reported to be stockpiling and engaging in the trade of hazardous waste that failed to comply with applicable legal restrictions. However, given the conflicts of interest of government departments,⁹ it remains to be seen if there will be any systematic follow up with necessary scaling-up and coordination of inspections by all responsible line ministries.

⁹ Department of Industrial Works (DIW) personnel are simultaneously tasked with the promotion of industrial development and ensuring businesses' compliance with applicable laws, thus responsible for optimizing the investment environment, while also protecting the interests of the public.

Plastics and E-Waste Imports into Thailand On the Rise (2014-18)

According to import statistics provided by Thailand's Ministry of Commerce Trading Report System¹⁰ for the years 2014-18, the top exporters of plastic scrap and waste to Thailand (under the *Harmonized System code 3915*) include Japan, the USA, Hong Kong, Australia, China, New Zealand, Malaysia and Mexico. All the above countries have increased the amount of waste shipped to Thailand over this period of time, as demonstrated in the rise recorded in volume and worth. Notably, the monetary value of these imports bears no correlation to the actual social and environmental harm it carries into the country, both for the current population and generations to come. In addition, these figures reflect officially accounted for materials, with unrecorded flows uncalculated, and as such data is likely to be underestimated.

For example, in 2014, Japan exported a recorded volume of 5.103 million kg of plastic waste valued at approximately 1.42 million USD (46.06 million THB), but by 2018, was shipping nearly 118.24 million kg valued at 29.45 million USD (947.36 million THB) to Thailand. Nevertheless, Japan has officially taken note that while the growth of industrial zones in

¹⁰ Government data accessible online records both Thai and USD value of commodities, with volumes quantified in most cases by kilograms: <<http://tradereport.moc.go.th>>.





June 1, 2018
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the country has led to “severe pollution problems,” the Thai government has “limited capacity to understand the amount of chemical release and transfer in Thailand, and is thus unable to implement measures against chemical substances in accordance with the relevant environmental standards in a consistent manner.”¹¹ As a result, one of Japan’s key priorities for the provision of official development aid flows to Thailand is to work with local authorities to address challenges arising from industrial pollution, waste management and climate change.¹² It therefore would seem to be contradictory for Japan to continue to send its toxic plastic and electronic scraps to Thailand for processing and disposal.

Exports to Thailand of plastic waste from the USA have also increased in recent years, from a volume of 11.94 million kg worth 3 million USD (96.05 million THB) to 99.9 million kg valued at 10.78 million USD (347.66 million THB). Meanwhile Australia was recorded as exporting a volume of 14.65 million kg of plastic waste to Thailand worth 5.5 million USD (178.09 million THB) in 2014 and 23.4 million kg worth 4.04 million USD (129.74 million THB) by 2018.¹³

China’s share as a major exporter of plastic scraps to Thailand also increased over that time period, rising from 11.6 million kg in 2014, worth 2.4 million USD (76.72 million THB) to 19.84 million kg in 2018, worth 4.4 million USD (142.75 million THB).

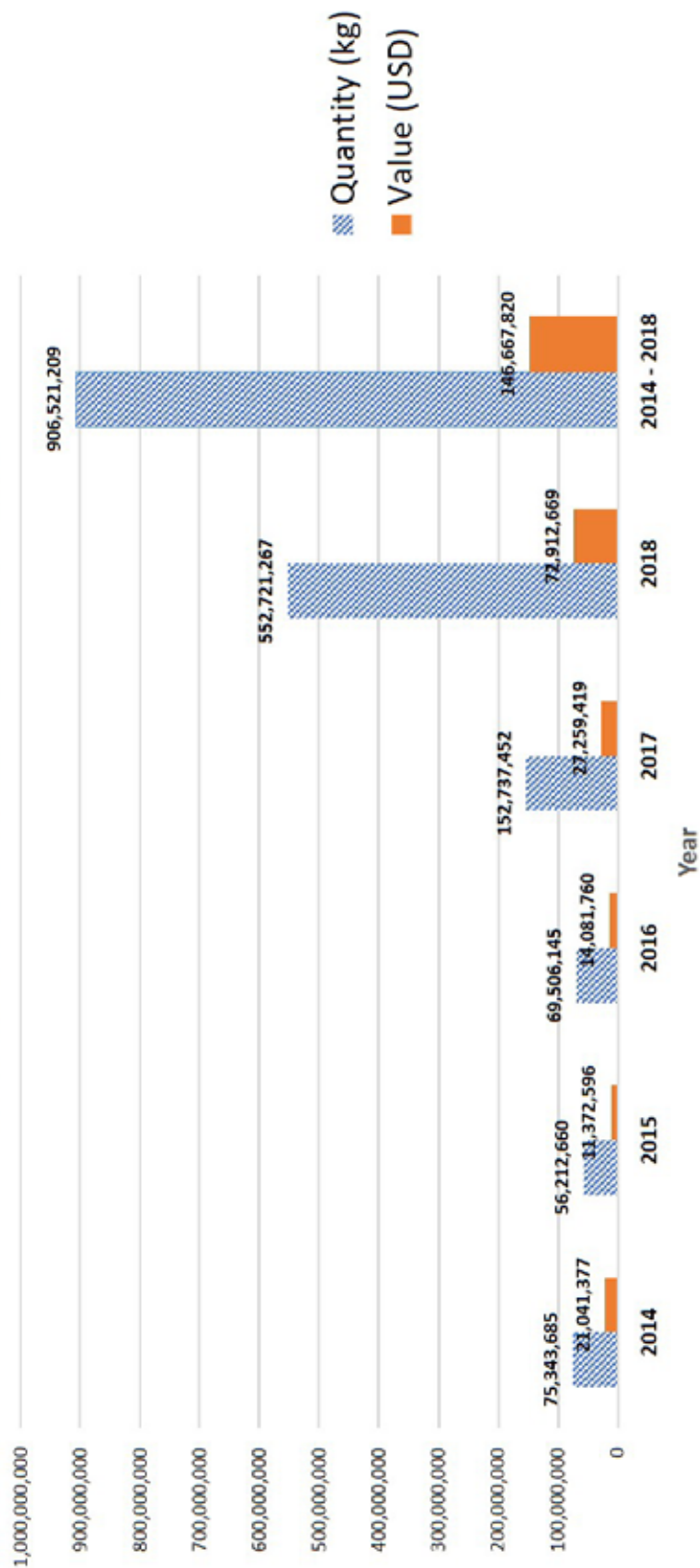
Similar trends are illustrated by statistics recorded in the Thai Ministry of Commerce database for electrical and electronics waste items such as used batteries, scraps of electrical machinery, used computers and data processing machines, old circuit boards, as well as used electronic circuits. For instance, used batteries and scraps of electrical machinery are exported to Thailand in bulk volumes (recorded under the *Harmonized System code 8548.9090*) from several countries, including the USA, China and Japan. In this case, in 2014, the USA shipped over 25,560 kg worth 330,000 USD (10.3 million THB), increasing to nearly 11.8 million kg, worth 3.1 million USD (101.4 million THB) to Thailand, with Japan sending 41,380 kg worth 16.4 million USD (533.17 million THB) in 2014, increasing to over 1.64 million kg in 2018 valued at 11.6 million USD (377.8 million THB). Meanwhile, China sent nearly 1.4 million kg in 2014 valued at 24.49 million USD (796 million THB) to Thailand, increasing to 1.84 million kg in 2018, worth 14.93 million USD (484.3 million THB).

11 JICA, “Activities in Thailand: Outline of the Project” [Site update: 18 Feb 2016] <www.jica.go.jp/project/english/thailand/013/outline/index.html>

12 JICA, “Activities in Thailand: Basic Policy of Assistance/Partnership & Priority Area of Sustainable development of the economy and providing a response towards a maturing society,” 8 April 2019 <www.jica.go.jp/thailand/english/activities/activity01.html>.

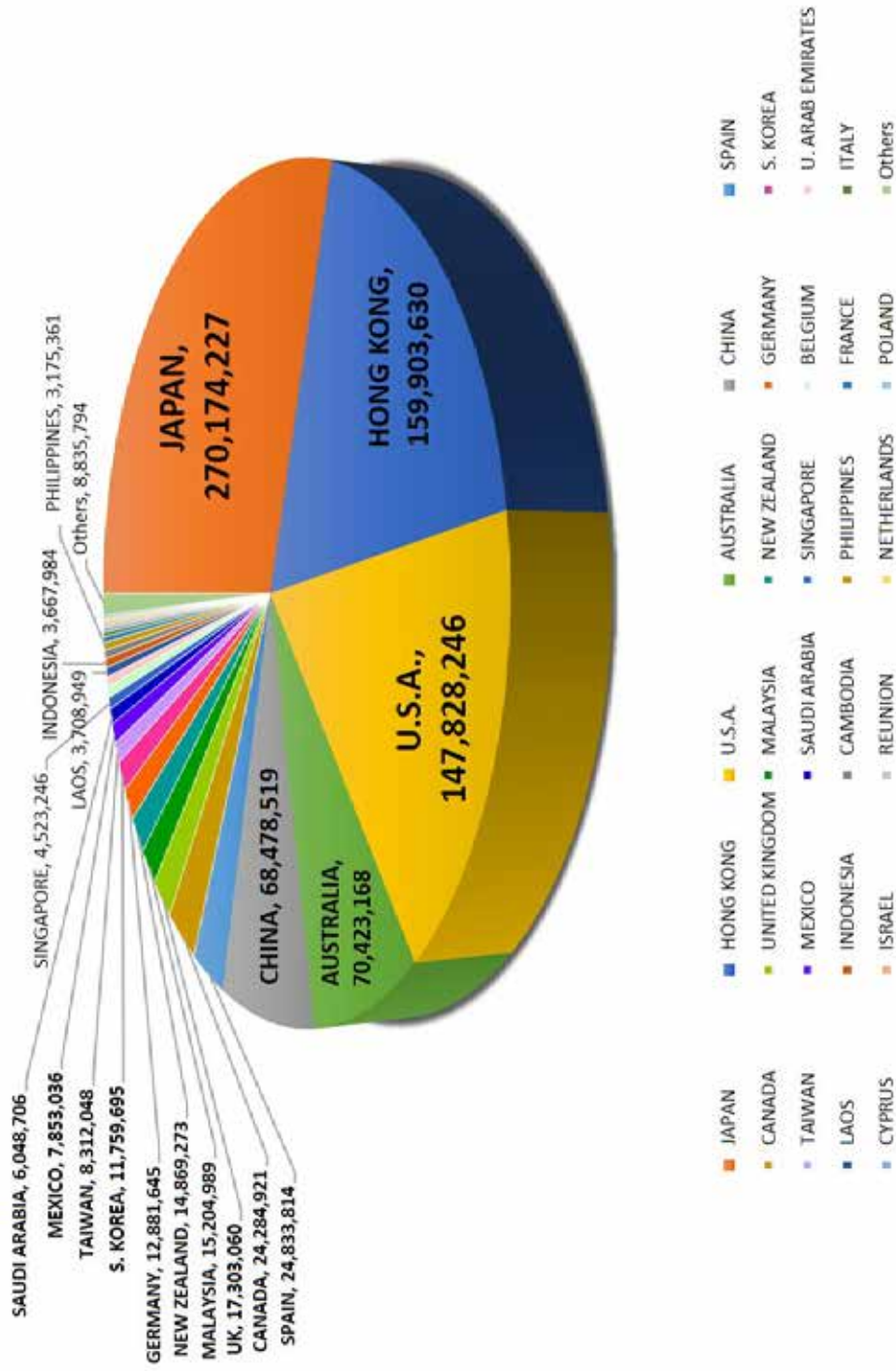
13 In this case, the volume of imports increased substantially between 2014 and 2018 but was valued at a lower rate.

**Import of Thailand (HS code 3915)
Waste, parings and scrap, of plastics
Between 2014 - 2018 | Total: 906,521,209 kilograms**



SOURCE : INFORMATION AND COMMUNICATION TECHNOLOGY CENTER WITH COOPERATION OF THE CUSTOMS DEPARTMENT

Top 29 Exporting Countries to Thailand (HS code 3915) Waste, parings and scrap, of plastics Between 2014 - 2018 | Total: 906,521,209 kilograms



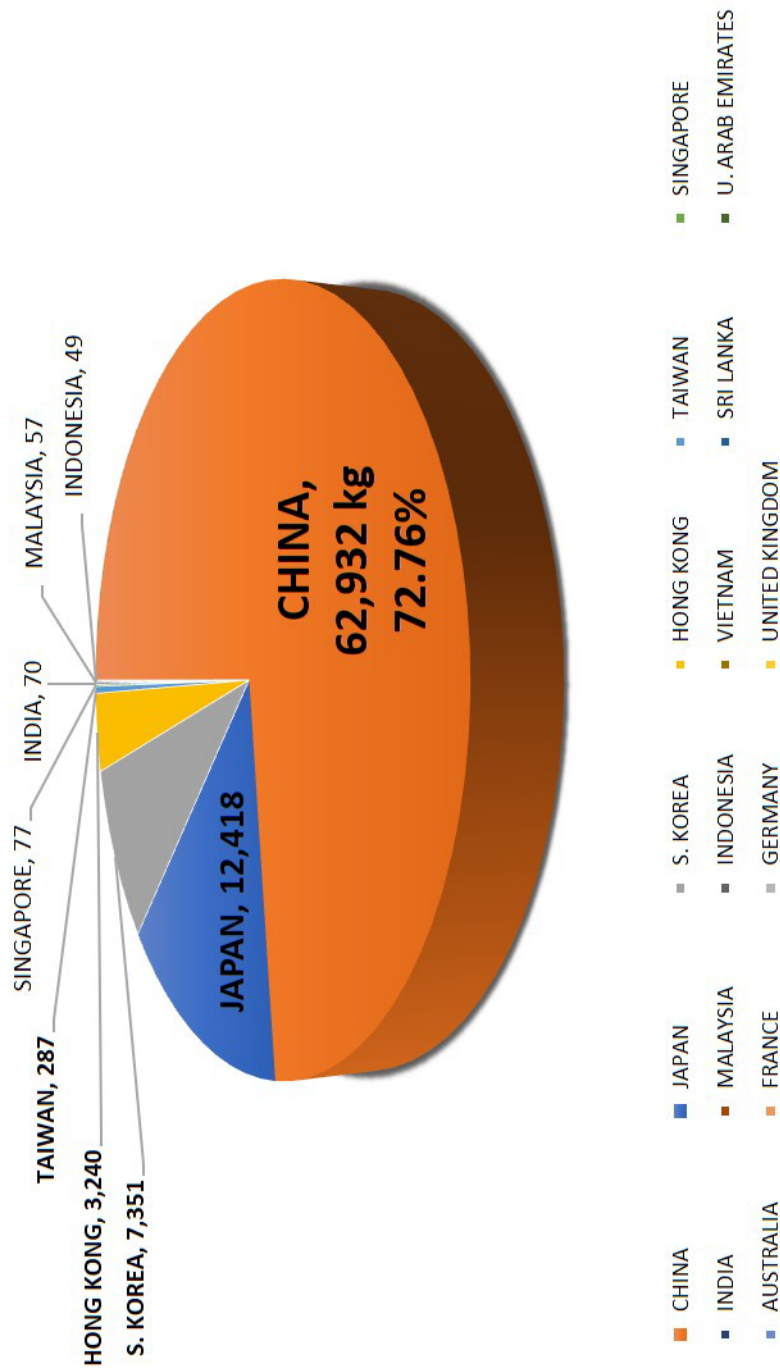
SOURCE: INFORMATION AND COMMUNICATION TECHNOLOGY CENTER WITH COOPERATION OF THE CUSTOMS DEPARTMENT. <http://tradereport.moc.go.th/TradeEng.aspx>

During the time period since 2014, China has remained the top exporter to Thailand of used printed circuit boards (*Harmonized System code 8534*), sending over 62,900kg worth 2.55 million USD (83.18 million THB) for re-processing and disposal in 2014, and over 63,750kg in 2018, but valued at the lower rate of approximately 104,650 USD (3.43 million THB). For used electronic integrated circuits (*Harmonized System code 8542*), among top countries exporting to Thailand from 2014 to 2018 were Hong Kong as well as China, and from 2015 onwards, Canada.

Thai government records for used data processing machines and magnetic/optical readers (*Harmonized System code 8471*), estimate that in 2014, Singapore exported a volume valued at approximately 2.11 million USD (68.86 million THB) for re-processing and disposal to Thailand in 2014, and by 2018, was sending shipments worth about 3.47 million USD (114.11 million THB). Similarly, China sent 1.38 million USD (44.9 million THB) worth of used data processing units in 2014 to Thailand, increasing shipments to reach a worth of approximately 4.96 million USD (163 million THB) by 2018, while the USA's exports increased from a quantity valued at 1.3 million USD (43.49 million THB) to an amount worth more than 2.9 million USD (96.79 million THB) over the same time period.

16 Exporting Countries to Thailand (HS code 8534 Stat 800; 899) Used Printed Circuit Boards | Total: 86,491 kilograms

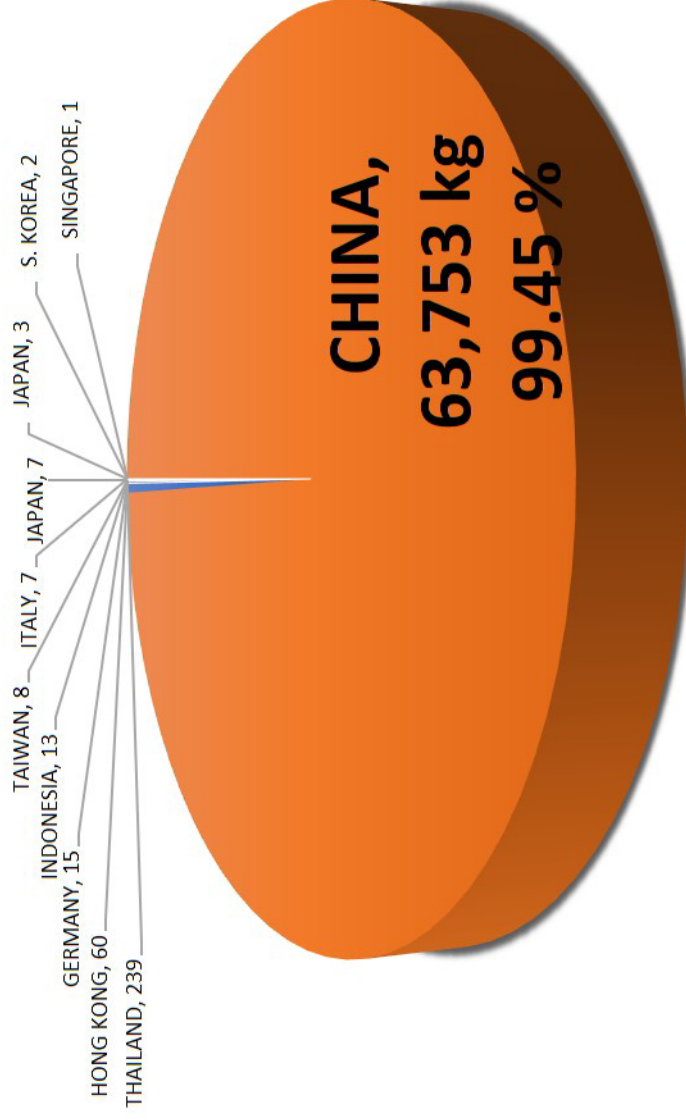
In 2014



SOURCE: INFORMATION AND COMMUNICATION TECHNOLOGY CENTER WITH COOPERATION OF THE CUSTOMS DEPARTMENT

11 Exporting Countries to Thailand (HS code 8534 Stat 800; 899) Used Printed Circuit Boards | Total: 64,108 kilograms

In 2018



■ CHINA ■ THAILAND ■ HONG KONG ■ GERMANY ■ INDONESIA ■ TAIWAN ■ JAPAN ■ ITALY ■ S. KOREA ■ SINGAPORE

SOURCE: INFORMATION AND COMMUNICATION TECHNOLOGY CENTER WITH COOPERATION OF THE CUSTOMS DEPARTMENT



June 1, 2018

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IV. Global Environmental Agreement on Transboundary Waste Trade: Loopholes, Corporate Lobbying and Civil Society Responses

Notably, all of the major waste exporting countries above have agreed in principle¹⁴ to follow the procedures of the 1989 *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*. Furthermore, with the exception of Mexico, all are members of the OECD, with respective duties under international law to follow – in good faith and in practice – the Convention’s provisions. Relevant in this context are the procedures under the *Ban Amendment* requiring transboundary shipments of hazardous waste intended for final disposal (as well as for reuse, recycling or recovery operations) from OECD to non-OECD countries to be avoided, with environmentally sound management of chemicals to be carried out within national borders, wherever possible.¹⁵ Although the Amendment is not yet in force, there is considerable momentum amongst Parties and the Basel Secretariat to hasten its entry into force via country level initiatives. To date, however, Thailand has not ratified it, nor have many of its major trading partners, including Japan and Australia, leaving a significant loophole in compliance yet to be resolved.

One of the unique provisions of this multilateral environmental agreement is the obligation on signatories to regulate transboundary movement of hazardous waste transport based on the principle of prior informed consent (i.e. before export takes place, the authorities of the state of export must notify states of import and transit with detailed information and can only proceed once all states concerned provide written consent). Under the convention, if provisions are contravened, and transboundary movements of hazardous waste proceed in non-compliance, the act shall be considered as “illegal” traffic in wastes.

14 Although the USA signed but is yet to ratify the Basel Convention, it is still obligated to refrain in good faith from acts that would defeat the object and purpose of the convention. Notably, government and corporate lobby groups from the US engage in Conferences of the Parties to the Convention.

15 See: UNEP, “The Basel Convention Ban Amendment,” *Basel Convention* (Website), October 2011: <www.basel.int/Implementation/LegalMatters/BanAmendment/Overview/tabid/1484/Default.aspx>.

Steps towards Halting the Toxic Trade in Plastic and Electronics Trade

Both plastic waste and e-waste shipments under the *Basel Convention* have been subject to specific scrutiny, given the toxic components and volumes of these materials, respectively, that continue to be shipped across borders.

For instance, in 2002, the *Technical Guidelines for the Identification and Environmentally Sound Management (ESM) of Plastic Wastes and for their Disposal*¹⁶ were integrated into the Convention. Additional regulatory guidelines for preventing and minimizing the generation of hazardous plastics have been adopted in subsequent Conferences of the Parties to the Convention.

Most recently, in May 2019, parties to the Convention agreed to adopt amendments to include the most contaminated, mixed and unrecyclable plastic waste under the Convention, requiring that countries exporting plastics obtain the prior consent of receiving countries, environmentally sound management processes are undertaken for their disposal, and where facilities exist, for such wastes to be dealt with at the source to avoid transboundary movement. With the 187 Parties in agreement, the amendment is to come into force in one year, with implementation to be facilitated through the development of a new tripartite “Partnership on Plastic Waste”.¹⁷ However, given the pressures from corporate lobby groups involved in the plastics trade, civil society groups will need to continue to monitor and pressure Parties as well as complicit private sector interests to demand compliance.

In relation to e-waste, in 2015, the *Technical Guidelines on Transboundary Movements of Electrical and Electronic Waste and Used Electrical and Electronic Equipment*¹⁸ were adopted as an interim measure. However, the guidelines have remained incomplete and in draft format as there has been no agreement among Parties on regulating transboundary movement of used electronics destined for repair, refurbishment and/or recycling. Revised guidelines were proposed

16 UNEP, “Plastic Wastes: Technical Guidelines,” Basel Convention (Website), May 2017:

<www.basel.int/Implementation/Plasticwastes/Technicalguidelines/tabid/7992/Default.aspx>.

17 UNEP, “Press Release: Governments agree landmark decisions to protect people and planet from hazardous chemicals and waste, including plastic waste,” 12 May 2019:

<www.unenvironment.org/news-and-stories/press-release/governments-agree-landmark-decisions-protect-people-and-planet>.

18 UNEP, “E-Waste: Development of Technical Guidelines on E-waste,” Basel Convention (Website, January 2018): <www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx>.

in May 2019, but similarly not agreed upon. In the interim between 2015 and 2019, loopholes were written into the revisions that would allow for export of electronics containing obsolete components not easily disposed of in an environmentally sound manner, such as asbestos, mercury and PCBs, by designating such items as repairable or recyclable rather than as hazardous.¹⁹ Furthermore, the proposed guidelines lack an overarching transparent procedure for transboundary movement as well as compliance with the environmentally sound management principles for hazardous components. Explicit provisions for exceptions to allow free movement of electronics are provided if importing and exporting countries already have specific agreements for trade in such goods, even if in full contravention of the convention.

In contrast to this flexible ‘business as usual’ guidance, civil society networks put forward a set of guidelines with more stringent provisions for transboundary movement of electronics, intended to comprehensively protect the health and environment of people in countries of import.²⁰ Accordingly, this alternative framework explicitly aims to stop the all-too frequent practice of categorizing non-functional / non-repairable used electronics as reusable or recyclable in order to export them to countries in Asia and Africa, instead considering such goods as hazardous, non-functional waste. Greater transparency is proposed by ensuring pre-approved and publicly listed exporters and recycling facilities that are classified and monitored for compliance with standards of ensuring environmentally safe management and no damage to the health of workers or communities where wastes are handled, recycled or disposed. Whether the Parties to the Basel Convention will have the political will to endorse similarly strong wording in relation to the transboundary movement of used electrical and electronics materials (categorized as either destined for disposal or for reuse/refurbishment), in compliance with the *Ban Amendment* and the principles of the Convention itself, remains to be seen.

19 See: Basel Action Network, “Why an Alternative E-Waste Guideline is Necessary” (May 2019): <http://wiki.ban.org/images/a/ac/Why_an_Alternative_is_Necessary.pdf>.

20 See: Basel Action Network, “Endorse The Responsible E-Waste Guideline: The Responsible Guideline on Transboundary Movements of Used Electrical and Electronic Waste to Promote an Ethical Circular Economy under the Basel Convention” (May 2019): <www.ban.org/the-responsible-guideline>.



June 1, 2018

Photo by Karnt Thassanaphak



V. Trade and Pro-Business Policies that Facilitate Waste Flows into Thailand

Thailand ratified the *Basel Convention* in 1998, designating the Pollution Control Department (PCD) of the Ministry of Natural Resources and the Environment as the *Focal Point* tasked with compiling and providing information about transboundary movement of hazardous wastes including instances of accidents and illegal traffic to the Basel Secretariat, as well as raising awareness publicly about related risks to health and the environment. The Department of Industrial Works (DIW) within the federal Ministry of Industry is designated as the *Competent Authority* for domestic matters related to the Basel Convention, with duties to: allocate factory permits for facilities handling hazardous waste, issue permits for imports and exports of waste, resolve reports of illegal traffic in hazardous waste, draft, amend and enforce domestic legislation to manage hazardous waste and ensure compliance with the Basel Convention procedures.

Although Thailand has not signed onto the *Ban Amendment*, civil society has sought to urge the government to take a position firmly endorsing it, particularly in light of the pattern of increasing volumes of toxic e-waste and plastics being shipped here. To date, this remains a contentious question of political will with implications for Thailand's diplomacy in relation to its trading partners in the OECD. As outlined below, trade in hazardous waste is normalized under some of the economic partnership agreements to which the country is signatory. However, by signing the *Ban Amendment*, the Thai government could take a step towards closing existing loopholes that remain inherent in attempts to enforce this multilateral environmental agreement.





June 1, 2018

Photo by Karnt Thassanaphak



Top: Police inspection of containers of illegally imported plastic in Lat Krabang (June 1, 2018).

Bottom: Police inspection at Klongdaan, Samut Prakarn of containers of illegally imported e-waste (June 1, 2018).

This lax regulatory environment is now being further exacerbated by recent amendments to the national *Factory Act*, signed into law in April 2019.²⁶ Under the revisions, several types of factories will be exempted from meeting the standards, in effect meaning over 40% of facilities previously defined as factories required to duly follow the Act's provisions now no longer have to comply with its stipulations.²⁷ In addition, factory licenses will no longer have to undergo a renewal process, instead allowing for extensions of company operations not subject to any verification previously required. Inspections of facilities, previously under the responsibility of the Department of Industrial Works, will be outsourced to accredited inspectors from private firms. Without public oversight or recourse through state authorities, this measure could act as a further barrier for communities submitting requests for facility inspections to be undertaken based on concerns, observations and grievances, especially in relation to environmental and health issues, as well as to access information about factory inspections undertaken. Taken together, these measures can be expected to limit possibilities for participation, discussion, and transparency on critical matters of public concern related to the environmental, health and broader social implications of expanding industries such as those in the business of plastics and electronics waste processing and disposal.

Open for Business: Plastics and E-Waste Processing along the EEC

The industrial hub of investment being established in Chonburi, Chachoengsao and Rayong, targeted for expansion by the Thai government, also known as the Eastern Economic Corridor (EEC), includes the development of industrial estates in which companies are provided with significant economic incentives to establish facilities.²⁸ Under special legislative regulations, adopted in 2018 (the EEC Act), if “any law, rule, regulation, by-law, notification or order causes inconvenience or delay, is redundant or creates an undue and excess burden, or in case of any other problems or obstacles” [...consideration can be made for] “the amendment of such law, rule, regulation, by-law, notification or order, or for the enactment of a new law to ensure that the development of the Eastern Special Development Zone be carried out efficiently, conveniently, and promptly”. In practice, these legal frameworks could have wide-ranging implications, effectively subjecting provisions for labour, health and safety and environmental matters to potential abrogation.

26 JETRO, *Regulations Issued under the Factory Act / Related Manual and Guideline*, April 2019: <www.jetro.go.jp/thailand/e_survey/factoryact.html>.

27 Rujivanarom, P., “Activists up in arms over new factory law”, *The Nation* (Thailand), 20 Feb 2019: <www.nationmultimedia.com/detail/national/30364470>.

28 See for example: EEC Office, “Investment Benefits on EEC,” 2018 <<https://www.eeco.or.th/en/investment/investment-privileges/investment-benefits-on-eeec>>.

Priority industries promoted under the EEC include chemicals, plastics and paper processing, as well as digital industries, electrical equipment and electronics, and as a result, the opportunities for companies establishing plants to process recycled goods within these categories are also facilitated²⁹. Already, for example, in Chonburi, a joint venture between Dow Chemical, AMATA and Siam Cement Group announced a manufacturing facility to produce pavement from recycled plastics, proposed to help advance road development in the area.³⁰ Despite media coverage of the investment,³¹ the range of ecological ramifications for a factory to re-process plastics into a substance suitable for roadways, and for paving over porous soil with such materials (presumably requiring heated to extreme levels for the desired consistency), appear to have received scant public attention to date.

Implications of the WTO and Free Trade Agreements

Under the Basel Convention, exceptions can be made for trade in hazardous waste (by-passing the usual prior and informed consent procedures between state parties otherwise required) if other bilateral agreements exist between the countries involved and environmentally sound management (ESM) procedures are followed. However, if the parties fail to identify the waste as hazardous and enter into bilateral trade agreements, these provisions for ESM may end up being altogether sidestepped. As a result, for example, under the *Japan-Thailand Economic Partnership Agreement* (Article 28):

*scrap and waste derived from manufacturing or processing operations or from consumption[...] and fit only for disposal or for the recovery of raw materials, [and] parts or raw materials recovered [...] from articles which can no longer perform their original purpose nor are capable of being restored or repaired*³²

29 Thailand Board of Investment, "BOI Announcement No 6.2561: Investment Promotion Measures in Eastern Economic Corridor (EEC)" 2018 [2561]: <www.boi.go.th/upload/content/No6_2561_EN_5c493a440a885.pdf> ; US Embassy in Thailand "Thailand will tackle hi-tech waste," March 2019: <thaiembdc.org/2019/03/04/thailand-will-tackle-hi-tech-waste/>.

30 Apisitniran, L. "Amata Eager for Smart City," Bangkok Post, 5 Oct. 2018: <www.bangkokpost.com/business/news/1552274/amata-eager-for-smart-city>.

31 Ibid.

32 Ministry of Foreign Affairs of Japan, "Agreement Between Japan and the Kingdom of Thailand for an Economic

are categorized as 'goods' originating in one of the two countries which are to be given 'preferential treatment'. Accordingly, customs duties are to be substantially reduced or eliminated altogether, and entrance into ports facilitated. Given Japan's role as a major exporter of plastics and electronics waste and scraps to Thailand, the use of this loophole by categorizing waste and scrap as 'goods', directly side-steps commitments under the *Basel Convention* to dispose of waste wherever possible within national borders.

This practice of undermining the standards enshrined in the Convention is however not isolated to the bilateral relations between Thailand and Japan. At the time of writing, Thailand has a total of 54 international investment agreements in place, including with Australia, New Zealand, China, Korea, ASEAN (regional), and members of the EU (some of which have similar provisions). In addition, the government is actively pursuing regional economic partnership agreements (Comprehensive and Progressive Agreement for Trans-Pacific Partnership and the Regional Comprehensive Economic Partnership).³³

Earlier this year, the Thai Customs Department announced it would be working to speed up clearance of goods and cargo in order to further ensure swift passage of imports and investment into the country, especially from other countries in the ASEAN region.³⁴ Thailand's Trade Negotiations Department within the Ministry of Commerce has also announced its intention to negotiate and settle further economic partnership agreements, facilitating 'trade flows', with special attention on industries involved in the EEC and China's One Belt One Road.³⁵ These measures can be expected to exacerbate the amount of toxic waste shipments entering Thai ports unchecked, with corresponding environmental health risks borne by communities.

Partnership," April 2007: <<https://www.mofa.go.jp/region/asia-paci/thailand/epa0704/agreement.pdf>>.

33 Olivet, C., K. Moore, S. Cossar-Gilbert and N. Cingott, *The Hidden Costs of RCEP and Corporate Trade Deals in Asia*, Friends of the Earth International, Transnational Institute, Indonesia for Global Justice, Focus on the Global South, and Paung Ku, Dec 2016: <www.tni.org/files/publication-downloads/rcep-booklet.pdf>.

34 *The Nation* (Thailand), "Customs: clearance times speeding up," 11 April 2019: <www.nationmultimedia.com/detail/Economy/30367555>.

35 Arunmas, P., "FTA talks being accelerated," Bangkok Post, 16 Oct. 2018: <https://www.bangkokpost.com/business/news/1558750/fta-talks-being-accelerated>; --, "Moving forward in global trade," Bangkok Post, 26 Feb 2018: <www.bangkokpost.com/news/special-reports/1413050/moving-forward-in-global-trade>.





Photo by Karnt Thassanaphak

Through the trade agreements Thailand has signed and is in the process of negotiating, the possibilities for investor state disputes to be launched against the country are increasing, posing further risks to the well-being of communities. These cases involve binding arbitration outside of regular judicial procedures, launched on behalf of companies incorporated in a country that has signed an investment treaty with Thailand. Through this closed-door process, companies can seek damages if the government imposes laws or regulations that could negatively affect its expected profits or investment potential, including those advanced in the interest of protecting public health. A reverse suit against a company by the government is not possible, leaving the state without any option but to pay damages-or at the least, for the legal costs. For example, at the time of writing, the Australian gold mining company, Kingsgate, is seeking 55 million USD in arbitration awards from the Thai Government due to an order to close the mine.³⁶ Although no such case has been launched by an international investor in the waste recycling sector, it remains a possibility, especially in light of the Thai government's promotion of industrial investment along the EEC where e-waste and plastic waste recycling facilities seem to be expanding.

³⁶ Bangkok Post, "Kingsgate prepares for legal challenge to mine closure," 30 March 2019: <www.bangkokpost.com/business/news/1653764/kingsgate-pushes-ahead-with-legal-challenge-to-mine-closure>.

VI. Voices of Concerned Communities: Sidelined But Not Silenced

According to the first global report published on the *Environmental Rule of Law* (2019) by UNEP, Thailand is categorized as achieving limited environmental democracy, with for example, limited access to information about industrial contamination unless one has a specific contact point person within the state apparatus, and a policy for coordination between environmental enforcement agencies that fails to have legal or practical effect on the ground.³⁷ As noted in a recent publication of the international *Access Initiative*, “weak implementation and limited investments in information disclosure systems” are leading to the effective undermining of ‘right to know’ legislation that would in theory allow people in Thailand to access information about health and environmental matters related to industrial development.³⁸

Upon request, the Thai government does grant public disclosure of information related to industries’ license permit documents, but this is not necessarily provided in a timely or prompt manner. There is no legally specified time requirement for acknowledgement of information requests and release and no officials with the designated duty to respond to requests for information about industrial facilities.³⁹ In some cases, community members submitting such requests may only receive information after several follow up phone calls, may be asked to come to government offices to receive information or may get responses from authorities months after the request for information is submitted.⁴⁰ This situation reflects a continued failure to develop a legal framework requiring – at a minimum – the industrial sector to release transparent, trackable data publicly about emission and effluent pollutants discharged, or to advance internationally accepted standards as outlined in the *UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters*.

37 UNEP, *Environmental Rule of Law: First Global Report*, 2019 (pp 56, 96, 98): <wedocs.unep.org/bitstream/handle/20.500.11822/27279/Environmental_rule_of_law.pdf>.

38 Excelle, C., “In Thailand, Unmet Transparency Laws Impede Poor Communities’ Struggle for Environmental Justice,” 5 Sept 2017: <accessinitiative.org/blog/thailand-unmet-transparency-laws-impede-poor-communities%E2%80%99-struggle-environmental-justice>.

39 Ibid.

40 Ibid.

Significantly, it is notable that inspections of the operations of industrial facilities, such as those processing plastics and electronics waste and scraps, carried out by both the DIW and PCD are effectively reliant on communities themselves reporting concerns related to environmental or health and safety compliance to authorities.⁴¹ However, although PCD has the authority to assess compliance of facilities with effluent and emission standards, as environmental line ministry personnel, they cannot bring the law to bear in instances of non-compliance. Instead, enforcement is delegated to DIW, and requires them to also investigate the facility sites. Despite this delineation of responsibilities, the two departments do not necessarily carry out joint inspections, or systematically corroborate findings.

With personnel from both agencies lacking expertise and testing devices to carry out thorough evaluations for compliance on environmental and health concerns on site as well as delimited authority and conflict of interest in the case of DIW, follow-through of effective corrective action remains rare. As a result, communities end up repeatedly reporting concerns of environmental and health impacts to authorities, hoping that eventually the suspension orders and penalties imposed on non-compliant facilities will have an effect on the company's operations.

To date, there remains a lack of frameworks available to launch citizen suits that could directly hold businesses criminally responsible for poisoning the water, air and land on which the lives of local residents rely. Nevertheless, despite the barriers to accessing appropriate and affordable legal counsel and to launch legal cases against companies, legal strategies are increasingly being pursued by community members when they have collectively come to the conclusion that all other options for recourse have been exhausted.

Across the country, awareness and opposition to waste processing facilities continue to grow. In the following section, three of the many communities where people are raising their concern and firm opposition to becoming the dumping ground for scrap plastics and e-waste, are profiled. Significantly, at all three sites, repeated investigations by authorities demonstrate the implicated facilities' systematic non-compliance with existing laws and the lack of attention paid to corrective orders imposed, such that residents in the surrounding areas are forced into a position to continuously take action to bring attention to the toll on their well-being and that of the community at large.

⁴¹ Asian Environmental Compliance and Enforcement Network and USAID, *Environmental Compliance and Enforcement in Thailand: Rapid Assessment*, Oct. 2004: <www.aecen.org/sites/default/files/TH_Assessmentmt.pdf>.

VII. Snapshots of Communities Responding to Toxic Plastics and E-Waste Trade

Tha Than, Chachoengsao

In late 2017, community members recall that representatives from the Chinese company, “*Hejia Enterprises Co. Ltd*” approached them with a Thai interpreter explaining that they were moving into the building of a recently closed aluminum processing facility to open a business for stripping plastic from old electrical wires. At the time, *Hejia* personnel provided assurances to the local people that no hazardous materials would be handled or present.

Even though the company had yet to acquire an operating license, over the next 6 months community members observed that in the early pre-dawn hours of the morning, trucks would enter the factory premises regularly with loads of electronics scraps, which were then burnt to extract copper and other metals, spewing noxious fumes that left local people feeling faint and ill. In early 2018, *Hejia* was granted permission to recycle domestically sourced electric and electronic waste, without ever initiating a community consultation or formal information meeting about their intention to operate there. Though over 15 different requests have been filed by the community for access to information about the process undertaken by the company to acquire its license permits and the limitations of its permitted operations, little documentation has been publicly disclosed to date.

Local residents are, however, aware that on the 23rd May 2018, when a factory inspection was undertaken (based on reports that they submitted to authorities), *Hejia* was found to be in violation of its permits, operating substantially more machinery with more workers than allowed under their license. The company was also found to be holding stockpiles of waste from abroad (despite not ever submitting the required documents to request permission to process imported waste), and to be in possession of electronic and electrical waste stored unsafely in an open area outside the facility. Despite being ordered to suspend operations until corrective actions were undertaken, *Hejia* instead advanced with expanding its facilities and workforce. After the community submitted a letter of protest, raising collective concerns with district level authorities, another inspection was done, and authorities requested *Hejia* to securely shut down its operations.



Above: Hejia Enterprises' electronic waste processing facility in Tha Than, Chachoengsao Province. Waste has been repeatedly stockpiled in open areas, leaving hazardous chemicals to leach into the surrounding soil and groundwater reserves.

Credit: Akarapon Teebthaisong.

Below: To highlight the urgency of their concerns, residents of Tha Than have collectively come together to organize protest actions in front of government administrative offices (December 2018). Credit: Tha Than community member.



Nevertheless, within weeks, community members reported that cement trucks were still transporting materials onto the site for building expanded sections of the facility, while other trucks were observed bringing additional waste and scrap products for processing.

After contacting authorities again to look into the situation and requesting for water testing to be undertaken, community members observed authorities conducting investigations at the site, but have not yet been able to access accurate information about any findings in relation to water contamination in the area.

According to news reports filed in June 2018, waste delivered to the factory was sourced from *O.G.I. Co.*,⁴² an importer of scrap electronics that sent the waste in turn to a network of factories, despite not having a permit to do so. By late June 2018, though authorities suspended *OGI's* operating license,⁴³ there remains a lack of clarity about whether it continues to operate under a revised name or management structure.

Although community members continued to file petitions and complaints at all levels of government in late 2018, up until the time of writing, the company continues to operate in flagrant violation of the work suspension orders imposed by authorities. More recently, as of May 2019, authorities issued another order on *Hejia* to suspend its operations. Machinery that had already been ordered confiscated during previous investigations was found to be in use, being operated by a labour force of migrant workers suspected to not have the required permit documents. As repeated violations continue to be noted by authorities at *Hejia's* facilities, but no decisive action has been taken to penalize the company's management, community members are aiming to leverage more pressure by raising the profile of the situation, not only nationally, but also to people in countries outside of Thailand, whose garbage is at the source of the industry's expansion and the toxic contamination of the air, soil, and water here.

42 PPTV Online, "Recycling plant has electronic-waste from companies that have licenses to import" [tr. from Thai language], 6 June 2018: <www.pptvhd36.com/news/ประเด็นร้อน/82715>.

43 Ngamkham, W. and A. Sattaburuth, "Five importers of e-waste lose licences," *Bangkok Post*, 20 June 2018: <www.bangkokpost.com/news/environment/1488570/five-importers-of-e-waste-lose-licences>.

Pu Wai, Khao Yoi

In Pu Wai, Nong Chumphon Neua, Khao Yoi District of Petchaburi, residents are collectively organizing to raise concerns about a Chinese-Thai joint venture, *CMP Green Technology Ltd.*, established in late 2017 with an initial stated purpose to process “waste and scrap and materials for recycling”⁴⁴. The facility’s owners did not initially engage in any consultative process or inform local people about management and mitigation of hazardous chemicals being emitted into the air, water or soil. Instead, the company proceeded to establish its business beside the local drinking water reserve from which groundwater wells and pumps are fed. The risk to peoples’ health and well-being this poses is severe given that *CMP* was eventually granted a license that from the outset, has allowed for 20–30,000 tonnes/yr of waste discharge emitted untreated through open piping.

Even before the recycling business became functional, people alerted authorities that the company was stockpiling waste that reportedly emitted a sickening odour. Authorities did find plastic scrap and used electrical cords as well as wiring stored inside factory when they subsequently investigated the site. However, they concluded that as operations of the factory had not yet gotten underway (despite waste being stockpiled), no impacts on the environment were of note. The owner of *CMP* claimed that waste materials being prepared on site prior to operation were non-hazardous. No further verification was undertaken by authorities at the time. Nevertheless, the storage of mounds of waste in open areas around the facility on higher ground than the surrounding residential area has continued. With no access to information about what is contained in these garbage stockpiles, people have noted the intense stench and question whether chemicals will leach into the soil and water sources, especially during the months of heavy seasonal rains.

In response to the development of *CMP*’s waste processing business, a cross-generational group of local women formed an *ad hoc* committee with the purpose to raise the awareness of families living in the area about the health and environmental risks and assert a collective stance in opposition to the facility. They estimate that three-quarters of the community members are similarly opposed to the project, with the remainder of the population being in some way connected to the company’s management or official personnel.

44 Matchlink Asia, *CMP Green Technology Company*, 2019. Accessed online: <www.matchlink.asia/BusinessPage/Petchaburi/42990-cmp-green-technology-company-limited.html>.



Photo by Karnt Thassanaphak



Photo by Karnt Thassanaphak

Top and bottom: Site of the Chinese-Thai joint venture, CMP Green Technology Ltd., established in Pu Wai, Nong Chumphon Neua, Khao Yoi District of Petchaburi in late 2017 to process “waste and scrap and materials for recycling”.



Photo by Karnt Thassanaphak

In June 2018, members of the Pu Wai community delivered a petition to the national complaints bureau at the Office of the Prime Minister in Bangkok, raising their concerns about the establishment of CMP Green Technology's waste processing operations

By early 2018, CMP publicly announced an intention to expand into a facility for disassembly, crushing and melting of electronic and electrical waste, beyond its initial permit to handle only plastics and paper-based scraps. However, due to vocal opposition by the community, this proposal was withdrawn, resubmitted in early 2019, and brought forward to the community during a consultation in May. With only three days of advance notice prior to the consultation, local community members who attended the meeting report being outnumbered by company and business personnel.

Over the course of 2018, community members filed several petitions to authorities and organized public protest actions in order to bring attention to the situation, as the facility's operations continued. The company proceeded to build a high fence around its property, circumventing the local people's attempts to observe and monitor its operations. Nevertheless, people were able to take note of incidents when e-waste was transported into the area of the factory by trucks driving to the site, and accordingly reported this to authorities. At the time of writing, the last inspection of the facility happened in late December 2018, when electronic waste and scrap disposal onsite

was reported by authorities, in contravention of the company's operating permits. Notably, although migrant labourers reportedly continue to work there, evidently authorities have not hired an interpreter to look into their conditions or verify compliance with health and safety regulations.

As of May 2019, residents continue to note that in the evenings when they are tending to their livestock, the foul stench routinely emitted from the facility makes them feel ill. They suspect that some operations may be continuing well into the evening, beyond permitted hours of operation. Now, in light of the recent company attempt to expand its license to handle additional categories and substantially higher quantities of waste, local people are pulling together a counter proposal to recommend that Petchaburi develop the capacity to minimize and manage its own waste in an environmentally safe way, ensuring the well-being of current and future generations. This proposal is also being advanced as a conscious alternative to the current status quo, in which it has become clear to the population that when local officials are closely aligned with the company or related investments, there is an absolute lack of assurances of compliance with legal regulations. Otherwise, the mandatory closure of the operations like those of *CMP*, that systematically undercut regulations and pose a clear threat to peoples' health and well-being, would be imminent.

Nam Pu, Ratchaburi

Ever since 2001, when *Wax Garbage Recycling* was established as an industrial waste treatment facility upstream of the Nam Pu Creek and residential area, local people witnessed the community water source becoming so contaminated it emitted a chemical stench, too toxic for agricultural purposes, let alone household consumption. The facility has expanded over the years to handle plastics, oil based substances, paint wastes, detergents, gasoline and other hazardous chemicals. At least five fires have ravaged parts of the area, directly caused by chemical combustion at the *Wax Garbage* site. As the contamination has become worse, seeping into the groundwater table, local people have repeatedly brought the situation to the attention of the Pollution Control Department (PCD) and Department of Industrial Works (DIW).

Chemical sampling was undertaken by government personnel along the watershed and on groundwater samples, providing clear evidence that the water was laced with heavy metals exceeding maximum allowable levels, including lead, nickel and barium, as well as a

range of organic compounds, such as toluene, xylene, ethylbenzene, benzene, trichloromethane and dichloroethylene⁴⁵. The state authorities at PCD accordingly deduced that *Wax Garbage*'s operations were the source of the problems, but the company denied causing the pollution, and demanded more evidence, including baseline data (which was never recorded prior to 2001). Nevertheless, with the tenacity of local people who have continued to demand *Wax Garbage* close its operations and rehabilitate the area, government institutions have continued to write letters to the company calling on it to improve and clean up its operations, and have issued several work suspension orders. However, with the conflict of interest inherent in the DIW carrying out inspections but also seeking to promote industry, the facility continued to operate, profiting from the expanding trade in waste and scraps despite the deadly consequences borne by the community.

Seventeen years after *Wax Garbage* set up its toxic business, in March 2018, a civil lawsuit initiated by a group of 20 local community members proceeding against the company, resulted in a court injunction being imposed on *Wax Garbage*, finally forcing the company's management to suspend operations until further notification from authorities⁴⁶. As part of their testimony, villagers showed documented footage of employees dumping chemical waste in the area as recently as February 2018. Following the presentation of this evidence, the court moved forward with issuing a decision that unless firm action was taken in the form of an injunction, further damages impossible to rectify would be likely. The aim of the community members in this case is to seek compensation for the range of damages done over the years, and for the company to rehabilitate the environment both on site and the surrounding area to return it to a habitable state, comparable to before the facility's operations began.

Simultaneously, three villagers took a stand as leading plaintiffs representing over 100 households of affected families in the first environmental class action filed in Thailand to ever proceed, officially being granted hearing in February 2018.⁴⁷ However, with the two court cases ongoing at the time of writing, it appears that the ownership of *Wax Garbage* may be in the

45 TDRI, "Tainted water saga has roots in poor policy," 8 February 2017. Accessed online: <tdri.or.th/en/2017/02/tainted-water-saga-has-roots-in-poor-policy/>.

46 "Toxic dump sees court close Waxga's doors," *Bangkok Post*, 9 March 2018. Accessed online: <www.bangkokpost.com/news/general/1424774/toxic-dump-sees-court-close-waxgas-doors>.

47 Le Marquer, A., "Thailand Certifies First Class Action," *Tilleke & Gibbons*, 27 Feb. 2018: <www.tilleke.com/resources/thailand-certifies-first-class-action>.



Above: The Wax Garbage Recycling facility in Nam Pu, Ratchaburi Province is sited alongside a local creek in the midst of agricultural lands. Credit: Chamnan Sirirak

Below: Open storage of waste containers inside the Wax Garbage site has led to the leaching of hazardous chemicals into the soil and surrounding watershed. Credit: Darwan Chantarahesdee



process of moving the remaining wastes at the property to an undisclosed location and exploring the potential for filing for bankruptcy. As of June 2019, community members are monitoring the situation at the *Wax Garbage* site to the greatest extent possible, including observing areas in the municipality where the company has dumped waste in the past (and from which foul smelling odours are still being emitted). They continue to prepare evidence and statements for upcoming court proceedings.

VIII. Looking Ahead: Recommendations for Change

Based on the above research and in acknowledgement of the urgency of the prevailing situation facing communities where plastics and e-waste recycling facilities are being established, the following recommendations have been formulated, addressed to Thai authorities, ASEAN leaders present during the June 2019 Summit in Bangkok, and the Basel Convention Secretariat, housed under the United Nations Environmental Programme (UNEP), respectively. In the coming months, EARTH will be seeking to proactively follow up on the concerns outlined below, particularly in the case of the responsible personnel of Thai Government line ministries.

We urge the Thai Government to:

- Open the Factory Act for overhaul based on public input gathered through country-wide consultations;
- Consider revisions of the *Factory Act* so that:
 - permitting of new facilities is subject to public hearings and input;
 - licensing procedures are based on commitments to sound environmental management guarantees, including limiting and progressively reducing emissions (as opposed to allowable machine capacity or committed investment levels);
 - compliance with environmental, health and safety regulations is guaranteed through strict, systematic enforcement mechanisms;
 - emission inventory and chemical pollutant release data is recorded and accessible to the public (through a *Pollutant Release and Transfer Register*, for instance), and
 - No exemptions should be provided for establishments in special economic zones.
- Ensure that future trade agreements negotiated do not include investor state dispute mechanisms and ensure full compliance with the Basel Convention as well as the human rights conventions to which Thailand is signatory; and
- Sign and ratify the *Ban Amendment*.

ASEAN leaders are called upon to:

- Adopt the *Basel Ban Amendment*;
- Establish a regional partnership banning transboundary flows of plastic waste and e-waste with no exception for any other goods categorized as fit only for disposal or the recovery of parts or raw materials, and
- Develop national-level access to information standards unified under a regional agreement in line with the internationally accepted principles of the *UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention)*;

Basel Convention Secretariat/UNEP should:

- Re-consider current frameworks being developed on e-waste trade to reflect the more stringent “Responsible Guideline on Transboundary Movements of Used Electrical and Electronic Waste to Promote an Ethical Circular Economy under the Basel Convention” as advanced by civil society networks at the 14th Basel Convention Conference of Parties (May 2019); and
- Pro-actively support Parties’ full adherence to the implementation of the May 2019 amendment to the list of chemicals considered hazardous waste, identifying hazardous and non-recyclable plastics as subject to the provisions of the Convention.

IX. Sources Cited

Aksorndej, K. and P. Rujivanarom, "Smuggling of hazardous waste comes to light", *The Nation* (Thailand), 25 May 2018. Accessed online: <www.nationmultimedia.com/detail/national/30346214>.

Arunmas, P., "FTA talks being accelerated," *Bangkok Post*, 16 Oct. 2018. Accessed online: <https://www.bangkokpost.com/business/news/1558750/fta-talks-being-accelerated>>

--, "Moving forward in global trade," *Bangkok Post*, 26 Feb 2018. Accessed online: <www.bangkokpost.com/news/special-reports/1413050/moving-forward-in-global-trade>.

Asian Environmental Compliance and Enforcement Network and USAID, *Environmental Compliance and Enforcement in Thailand: Rapid Assessment, Oct. 2004*. Accessed online: <https://www.aecen.org/sites/default/files/TH_Assessmemt.pdf>.

Apisitniran, L., "Amata Eager for Smart City," *Bangkok Post*, 5 Oct. 2018. Accessed online: <www.bangkokpost.com/business/news/1552274/amata-eager-for-smart-city>.

Bangkok Post, "Kingsgate prepares for legal challenge to mine closure," 30 March 2019. Accessed online: <www.bangkokpost.com/business/news/1653764/kingsgate-pushes-ahead-with-legal-challenge-to-mine-closure>.

Basel Action Network, "Endorse The Responsible E-Waste Guideline: The Responsible Guideline on Transboundary Movements of Used Electrical and Electronic Waste to Promote an Ethical Circular Economy under the Basel Convention," May 2019. Accessed online: <www.ban.org/the-responsible-guideline>.

Brooks, A, S. Wang and J. Jambeck, "The Chinese import ban and its impact on global plastic waste trade," *Science Advances* 4.6, 20 June 2018. Accessed online: <advances.sciencemag.org/content/4/6/eaat0131>.

Chantanusornsiri, W., "E-waste shunned by China piles up in Thailand," *Bangkok Post*, 13 June 2018. Accessed online: <www.bangkokpost.com/news/general/1484385/e-waste-shunned-by-china-piles-up-in-thailand>.

Excell, C., "In Thailand, Unmet Transparency Laws Impede Poor Communities' Struggle for Environmental Justice", *Access Initiative*, 5 Sept 2017. Accessed online: <accessinitiative.org/blog/thailand-unmet-transparency-laws-impede-poor-communities%E2%80%99-struggle-environmental-justice>.

Foulsham, A. and J. Whitney, "How has China's waste import ban changed the recycling scene in Asia?," CSR Asia, 20 June 2018. Accessed online: <csr-asia.com/newsletter-how-has-china-s-waste-import-ban-changed-the-recycling-scene-in-asia#1> .

Honda, S., D. S. Khatriwal and R. Kuehr, *Regional E-waste Monitor 2016 East and Southeast Asia*, United Nations University: 2016. Accessed online: <collections.unu.edu/eserv/UNU:6348/Regional_E-waste_Monitor_East_Southeast_Asia_low.pdf>.

Hook, L. and J. Reed, "Why the world's recycling system stopped working," *Financial Times*, 25 Oct. 2018. Accessed online: <on.ft.com/2zC4hSU>.

JETRO, *Hazardous Substances Act and Regulations Issued under the Hazardous Substances Act*, Feb 2019. Accessed online: <www.jetro.go.jp/thailand/e_survey/hazardousact.html>.

-- *Regulations Issued under the Factory Act / Related Manual and Guideline*, April 2019: <www.jetro.go.jp/thailand/e_survey/factoryact.html>.

JICA, "Activities in Thailand: Basic Policy of Assistance/Partnership & Priority Area of Sustainable development of the economy and providing a response towards a maturing society" (Website). Last update: 8 April 2019. Accessed online: <www.jica.go.jp/thailand/english/activities/activity01.html>.

JICA, "Activities in Thailand: Outline of the Project," (Website). Last update: 18 Feb 2016. Accessed online: <www.jica.go.jp/project/english/thailand/013/outline/index.html>.

Lee, S., "Revision to Thailand's Hazardous Substance Act expected in 2019: Rules for international supply-chain shipments will be eased," *ChemicalWatch News*, 21 Nov. 2018. Accessed online: <chemicalwatch.com/72213/revision-to-thailands-hazardous-substance-act-expected-in-2019>.

Le Marquer, A., "Thailand Certifies First Class Action," *Tilleke & Gibbons*, 27 Feb. 2018. Accessed online: <www.tilleke.com/resources/thailand-certifies-first-class-action>.

Matchlink Asia, *CMP Green Technology Company*, 2019. Accessed online: <www.matchlink.asia/BusinessPage/Phetchaburi/42990-cmp-green-technology-company-limited.html>.

Ministry of Foreign Affairs of Japan, "Agreement Between Japan and the Kingdom of Thailand for an Economic Partnership," April 2007. Accessed online: <<https://www.mofa.go.jp/region/asia-paci/thailand/epa0704/agreement.pdf>>.

Moore, D., "Thailand Set To Ban Plastic Waste Imports By 2021," *Chartered Institution of Waste Management*, 19 Oct 2018. Accessed online: <ciwm-journal.co.uk/thailand-set-to-ban-plastic-waste-imports-by-2021/>.

The Nation (Thailand), "Customs: clearance times speeding up," 11 April 2019: <<http://www.nationmultimedia.com/detail/Economy/30367555>>.

Ngamkham, W. and A. Sattaburuth, "Five importers of e-waste lose licences," *Bangkok Post*, 20 June 2018. Accessed online: <www.bangkokpost.com/news/environment/1488570/five-importers-of-e-waste-lose-licences>.

Olivet, C., K. Moore, S. Cossar-Gilbert and N. Cingott, *The Hidden Costs of RCEP and Corporate Trade Deals in Asia*, Friends of the Earth International, Transnational Institute, Indonesia for Global Justice, Focus on the Global South, and Paung Ku: Dec 2016. Accessed online: <www.tni.org/files/publication-downloads/rcep-booklet.pdf>.

PPTV Online, "Recycling plant has electronic-waste from companies that have licenses to import" [tr. from Thai language], 6 June 2018: <www.pptvhd36.com/news/ประเด็นร้อน/82715>.

Rayanakorn, K., "Is it time to reform toxic industrial waste management law?," *Prachatai*, 28 June 2018. Accessed online: <prachatai.com/english/node/7776>.

Rujivanarom, P., "Activists up in arms over new factory law", *The Nation* (Thailand), 20 Feb 2019. Accessed online: <www.nationmultimedia.com/detail/national/30364470>.

-- "Govt to ban import of electronic, plastic wastes," *The Nation* (Thailand), 16 August 2018. Accessed online: <www.nationmultimedia.com/detail/national/30352239>.

Srinualchan, S., "Toxic dump sees court close Waxga's doors," *Bangkok Post*, 9 March 2018. Accessed online: <www.bangkokpost.com/news/general/1424774/toxic-dump-sees-court-close-waxgas-doors>.

Styllis, G. "Thailand falling behind in global battle with plastic waste," *Nikkei Asian Review*, 5 June 2018. Accessed online: <asia.nikkei.com/Economy/Thailand-falling-behind-in-global-battle-with-plastic-waste>.

TDRI, "Tainted water saga has roots in poor policy," 8 February 2017. Accessed online: <tdri.or.th/en/2017/02/tainted-water-saga-has-roots-in-poor-policy/>.

Thai Board of Investment, "BOI Announcement 6.2561: Investment Promotion Measures in Eastern Economic Corridor (EEC)," June 2018. Accessed online: <www.boi.go.th/upload/content/No6_2561_EN_5c493a440a885.pdf>.

-- "Eastern Special Development Zone Act B.E. 2561 (2018)," May 2018. Accessed online: <[www.eeco.or.th/sites/default/files/EEC Act English Ver\(unofficial\).pdf](http://www.eeco.or.th/sites/default/files/EEC Act English Ver(unofficial).pdf)>.

Thai EEC Office, "Investment Benefits on EEC," 2018. Accessed online: <www.eeco.or.th/en/investment/investment-privileges/investment-benefits-on-eeec>.

Thai SME Centre, "Eastern Economic Corridor Development," 2019. Accessed online: <www.thailandsmdevelopment.com/17044948/eeec>.

UNEP, "The Basel Convention: Overview," *Basel Convention* (Website), 2011. Accessed online: <www.basel.int/TheConvention/Overview/tabid/1271/Default.aspx>.

-- "The Basel Convention Ban Amendment," *Basel Convention* (Website), October 2011. Accessed online: <www.basel.int/Implementation/LegalMatters/BanAmendment/Overview/tabid/1484/Default.aspx>.

-- *Environmental Rule of Law: First Global Report*, 2019. Accessed online: <wedocs.unep.org/bitstream/handle/20.500.11822/27279/Environmental_rule_of_law.pdf>.

-- "E-Waste: Development of Technical Guidelines on e-waste," *Basel Convention* (Website), January 2018. Accessed online: <www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx>.

-- "Plastic Wastes: Technical Guidelines," *Basel Convention* (Website), May 2017. Accessed online: <www.basel.int/Implementation/Plasticwastes/Technicalguidelines/tabid/7992/Default.aspx>.

-- "Press Release: Governments agree landmark decisions to protect people and planet from hazardous chemicals and waste, including plastic waste," 12 May 2019. Accessed online:

<www.unenvironment.org/news-and-stories/press-release/governments-agree-landmark-decisions-protect-people-and-planet>.

UN, "Towards Universal Participation and Implementation," *Understanding International Law: Fact Sheet 1*, 2011. Accessed online: <https://treaties.un.org/doc/source/events/2011/Press_kit/fact_sheet_1_english.pdf>.

US Embassy in Thailand, "Thailand will tackle hi-tech waste," March 2019. Accessed online: <thaiembdc.org/2019/03/04/thailand-will-tackle-hi-tech-waste/>.