

# Chapter 6

## Policy Recommendations

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# Chapter 6

## Policy Recommendations

### 1. Introduction

Gaps between Association of Southeast Asian Nations (ASEAN) Member States (AMS) and Japan, as well as challenges contributing to each gap, are described in Chapter 1. This chapter contains policy recommendations under exchanging experiences about legal systems, promoting business collaboration amongst AMS and Japan, and harmonising standards to promote reuse and remanufacturing amongst AMS and Japan. In addition, the progress of legal systems (Chapter 3) and different situations of the electrical and electronic equipment (EEE) value chains (Chapter 1) in AMS should be considered. Promoting appropriate cooperation should thus be conducted.

### 2. Exchanging Specific Experiences and Capacity Building on Legal Systems

A lack of waste collection systems, high costs associated with environmentally sound collection and treatment, lack of product design for remanufacturing, and poor awareness are challenges encountered in most AMS. Establishment of appropriate waste-related legal systems would help solve these challenges. Some waste-related legal systems in AMS are sufficient; for example, some contain extended producer responsibility (EPR), which could substitute for the common lack of collection systems. Recycling fee systems require consumers or producers to pay for collection and recycling of e-waste, and these work for solving high costs associated with environmentally sound collection and treatment.

Japan has established laws regarding used EEE, including EPR and recycling fee systems. The Home Appliance Recycling Law, which was enacted in 2001, requires retailers to take back e-waste from consumers and producers. The law also requires consumers to pay a fee for collection and recycling of e-waste when consumers deliver it to retailers, manufacturers, or municipalities. Finally, recycling fees are incurred on manufacturers to recycle e-waste. The Ministry of Economy, Trade and Industry (METI) (2022) reported that the collection rate of televisions, refrigerators, washing machines/dryers, and air conditioners in 2019 was 64.1%, which increased by about 15.0% compared with 2012. It also reported that illegal dumping of those four home appliances in 2019 decreased by about 70,400 units compared with 2000.

Exchanging the experiences of establishment and enforcement of the Home Appliance Law in Japan with AMS would be invaluable. Japan and AMS could hold workshops; the countries have, in the past, had various cooperation exchanges related to the establishment of EEE circular value chains of EEE. Most were just exchanges of general information, although specific cooperation has started with Malaysia and Thailand.<sup>28</sup> Such specific cooperation is needed in other AMS, because it is important to exchange the experiences depending on the progress of legal systems and different situations of EEE

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<sup>28</sup> Government of Malaysia, Department of Environment Water, E-Waste Management in Malaysia, <https://ewaste.doe.gov.my/>; and NEDO, E-Waste Recycling System in Thailand [in Japanese], [https://www.nedo.go.jp/news/press/AA5\\_101433.html](https://www.nedo.go.jp/news/press/AA5_101433.html)

value chains.

Additionally, it is helpful to promote capacity building amongst AMS regulators, policymakers, and relevant entities in the e-waste management sector. AMS governments struggle to regulate unlicensed collectors and recyclers; thus, the enforcement of regulations is challenging. Viet Nam and Singapore have enacted laws for e-waste management, which include EPR principles and recycling fee systems, but enforcement is insufficient. Capacity building for entities in charge of the enforcement of the regulations are necessary and should:

- (i) seek to increase AMS and stakeholder knowledge on how an e-waste circular economy is managed, and explore effective approaches to responsibly recover, repair, and trade e-waste and used EEE;
- (ii) facilitate AMS ability to strengthen recyclable materials management, such as the efficient and traceable movement of known recoverable materials to pre-approved recovery facilities, which supports a sustainable circular economy approach to the recovery of e-waste and used EEE;
- (iii) provide an opportunity to learn about the economic benefits afforded by an e-waste circular economy mechanism and to identify solutions that modernise regulatory processes to manage the recovery of e-waste and used EEE responsibly;
- (iv) share best practices of using regulatory frameworks to manage e-waste to reduce adverse environmental, climate, and health impacts, while facilitating cross-border movement of used EEE and recoverable e-waste to re-enter the manufacturing process;
- (v) share best practices of the implementation of other alternative measures (e.g. allowing the importation of remanufactured goods) besides trade facilitation matters in second-hand goods;
- (vi) share best practices in the cooperation between customs administrations with other bodies (e.g. environmental agencies) in controlling the importation of second-hand EEE, recoverable e-waste, and remanufactured goods; and
- (vii) update relevant development in Basel Convention implementation as well as international negotiations of relevant legal instruments related to the control of e-waste.

### **3. Fostering ASEAN–Japan Business Collaboration**

Business collaboration amongst AMS and Japan could help alleviate some challenges, such as a lack of technologies and equipment for e-waste processing. Business collaborations are classified into technical cooperation; establishment of joint ventures; and international resource circulation like international trade of used EEE, reused goods, remanufactured goods, and scraps.

To create opportunities for business matching amongst AMS and Japan, joint ventures in ASEAN could promote business collaborations. In addition, international resources circulation could create circumstances in which private sectors can participate in the global trade of used EEE, reused goods, remanufactured goods, and scraps smoothly. Business collaboration would contribute to the establishment of circular value chains of more valuable but less harmful used EEE, because such used

EEE could be positively processed by the private sector without regulation.

These business cases in Chapter 4 could contribute to business collaboration:

- (i) **Reuse Mobile Japan.** Reuse Mobile Japan established guidelines to evaluate reusable mobile phones and to authenticate businesses and stores involved with these phones in accordance with these guidelines. Collaboration with this company could contribute to solving a lack of systems to distinguish used EEE for reuse and e-waste and a lack of quality assurance standards for reused goods.
- (ii) **Dowa Holdings.** Dowa Holdings recovers metals by smelting residue and recycled materials (i.e. smartphones and waste electronic substrates) generated in the market. It collects metals from a wide variety of scraps, such as incineration residues from a waste incineration plant and waste substrates from home appliance recycling plants. This company could help compensate for the poor capacity of recycling in most AMS. Collaboration with such a company could contribute to ensuring e-waste recycling capacity, solving a lack of technologies and equipment for e-waste processing.
- (iii) **JX Metals.** JX Metals processes copper ore and recycled raw materials to refine copper, precious metals, and rare metals. The company collects metal scraps for recycling and has set up a collection base in Taiwan. Such a company could help compensate for the poor capacity of recycling in AMS. Collaboration could help contribute to ensuring e-waste recycling capacity, solving a lack of technologies and equipment for e-waste processing.
- (iv) **Mitsubishi Materials.** Mitsubishi Materials makes full use of its copper smelting facilities by undertaking recycling activities that process scrap as secondary materials containing copper and precious metals. It is operating an integrated system, spanning the assessment, collection, and processing of recycled materials. Such a company could help compensate for the poor capacity of recycling in AMS. Collaboration could contribute to ensuring e-waste recycling capacity, helping address a lack of technologies and equipment for e-waste processing.
- (v) **Jaring Metal.** Jaring Metal is a licensed company for treating e-waste and the recycling of unfinished EEE through hydrometallurgical methods. It recycles e-waste through cutting, crushing, milling, separating, smelting, and refining, and recycled materials are exported. Collaboration with this company could help contribute to ensuring e-waste recycling capacity, solving a lack of technologies and equipment for e-waste processing.
- (vi) **FUJIFILM Business Innovation.** FUJIFILM Business Innovation produces and sells remanufactured multifunction peripherals. It has its own take-back system, unique technology for remanufacturing, standards for distinguishing parts that can be used for remanufacturing, and quality and safety assurance standards. Collaboration could help contribute to solving the challenges for promoting remanufacturing.
- (vii) **Wongpanit and EcoBatt-Energy Cambodia.** Wongpanit has formalised collection systems with informal waste collectors in Thailand. Likewise, EcoBatt-Energy Cambodia has constructed a collection network with various actors in Cambodia. Both companies have the know-how of collaboration with various actors involved in waste collection. Formalising informal collectors is one of the common and critical issues in AMS, and these companies could help.

#### **4. Aligning with International Rules and Standards, and Advancing Trade Openness between ASEAN and Japan**

Some used EEE is imported into AMS as reused goods, but it turns out to be e-waste and is then recycled improperly (Kojima, 2014). One cause is the inconsistent judgement of administrative agencies in import and export countries. In fact, sometimes used EEE has been shipped back, due to the differences in the judgement of exporters and that of importers.<sup>29</sup> To ensure the enforcement of e-waste trade regulations and smooth trade of used EEE, the introduction of standards to distinguish between used EEE and e-waste is important. Draft technical guidelines on transboundary movements of e-waste and used EEE, under the Basel Convention, includes criteria to distinguish between them. AMS and Japan can introduce these guidelines in closer alignment with international rules and standards, and it is necessary for importers, exporters, and customs to utilise them appropriately.

To promote remanufacturing, standardisation of the definition of remanufactured EEE and origin of remanufactured goods amongst AMS and Japan is needed. The United States has harmonised the definitions of remanufactured goods and origin of remanufactured goods with other countries, making it possible to trade remanufactured goods smoothly. They can avoid cases where the importation of EEE identified as a remanufactured good in one country is refused in another country because the EEE is instead regarded as a reused good. This circumstance is motivating the private sector to trade remanufactured goods, and the remanufacturing of EEE is thus promoted. Closer alignment with international rules and standards for quality and safety assurance for remanufactured goods are important as well. Those description can be added to international agreements in ASEAN such as the ASEAN Trade in Goods Agreement (ATIGA).

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<sup>29</sup> Government of Japan, Ministry of Environment, 'Background of Developing the Standard to Distinguish Reusable UEEE' [in Japanese], [https://www.env.go.jp/recycle/yugai/conf/conf25-01/H260318\\_03.pdf](https://www.env.go.jp/recycle/yugai/conf/conf25-01/H260318_03.pdf)

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