

# Bilateral Cooperation between the Philippines and Japan on Sustainable E-waste Management and Recycling

January 15<sup>th</sup>, 2025

Ko MATSUURA Ministry of the Environment, Japan











# **1. E-waste outlook**

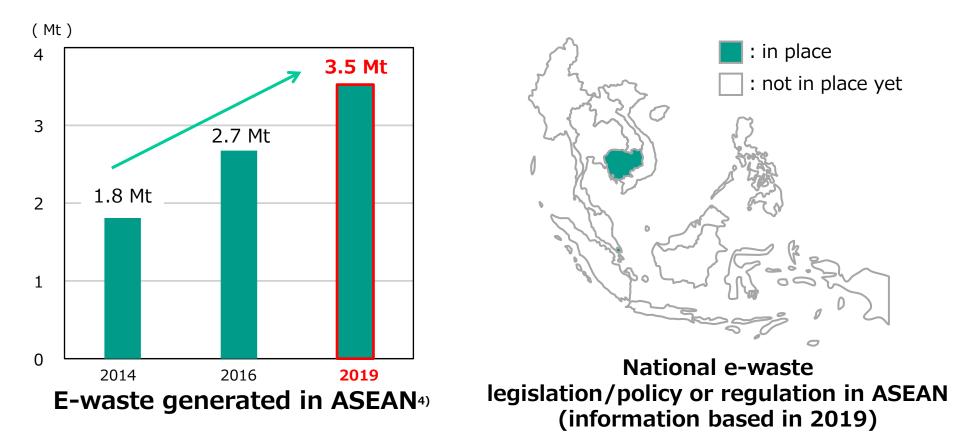
**2. ARCPEC** 

**3. Bilateral Cooperation on Sustainable E-waste** 

**Management and Recycling** 

# **E-waste generation and legislation in ASEAN**

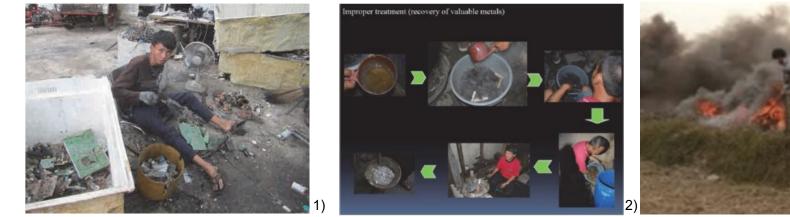
- Rapid economic growth increases the volume of e-waste in ASEAN countries, which amounted to 3.5 Mt in 2019 and continues to increase 4).
- In many countries, <u>national e-waste legislation/policy or regulation is not in place</u> <u>yet</u>, while some countries have established legislation or are in the process.



# Negative impacts of e-waste on environment and health

When **<u>e-waste</u>** (electric and electronic waste) is disposed of in landfills or improperly treated, it causes **<u>negative</u>** impacts on the environment and health.

- ✓ Soil and water pollution caused by leaks of heavy metals
- ✓ Ecosystem distraction caused by river runoff of waste acid
- ✓ Health damage by open burning and inhalation of organic gas



Hand dismantling of e-waste (no pollution control)

Improper recovery of precious metals (acid fractionation)

Cable burning in the open

3)

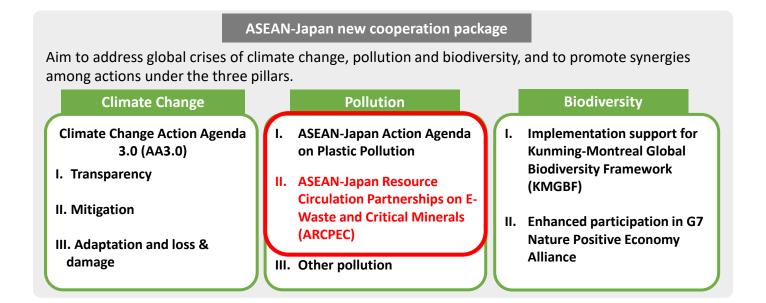
1) JICA: Information collection and confirmation survey on E-waste management in Malaysia and neighboring countries (2014)

2) Sukandar: E-waste disposal & health safety in 3R of e-waste (2009)

3) NIES: International resource circularity of E-waste, Nies Research Booklet, No.57 (2015)



- For the 50<sup>th</sup> Year of ASEAN-Japan Friendship and Cooperation, a new initiative, "Strategic Program for ASEAN Climate and Environment (SPACE) ", addressing the global crises; climate change, pollution and biodiversity loss, was launched by the Ministers in August 2023, and welcomed its endorsement by the Leaders in September 2023.
- ASEAN and Japan will enhance cooperation under the Strategic Program for ASEAN Climate and Environment (SPACE), as is also stated at the Implementation plan adopted by the Leaders.



## ASEAN-Japan Resource Circulation Partnerships on E-Waste and Critical Minerals (ARCPEC)

## Outline

- ARCPEC was launched at the 50th anniversary of ASEAN-Japan Ministerial Dialogue on Environment and Climate Change (AJMDEC) held in Vientiane, Lao PDR on 24 August 2023.
- ASEAN-Japan partnership will increase the circularity of electronics and other relevant supply chains in ASEAN countries to strengthen the supply of critical minerals and raw materials for the transition to a net-zero economy, improving human health, and promote environmentally sound recycling of e-waste and recovery of critical minerals and raw materials.

#### **Expected cooperation**

#### Promotion of an enabling environment

Support ASEAN countries to develop necessary laws and regulations including standards and guidelines for collection, dismantling and disposal. It also includes registration and permission system of recycling business, reduction of environmental contamination and improvement of human health.

## Capacity building

3

Promote capacity enhancement of governments and businesses. For governments: enforcement of laws and regulations and monitoring of the entire operation from collection and recycling to final disposal. For businesses: improvement of technical and operational capacities of recycling operators.

### Promotion of private partnerships

Foster collaboration between local companies and Japanese ones e.g. Technical cooperation, Joint ventures, Investments in local facilities

### Promotion of the uptake of recycled material

Promote the uptake of recycled critical minerals and raw materials in key supply chains.



Hand dismantling of e-waste

Open burning of cables

## Advanced technologies



Many other nonferrous metals and chemicals are produced.

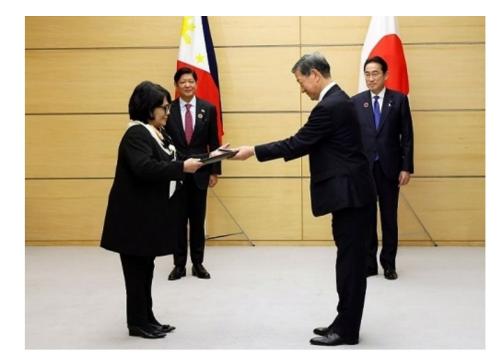
MOC between DENR and MOEJ (December 2023)

### MEMORANDUM OF COOPERATION BETWEEN THE MINISTRY OF THE ENVIRONMENT OF JAPAN AND THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES OF THE REPUBLIC OF THE PHILIPPINES IN THE FIELD OF ENVIRONMENTAL PROTECTION

#### Paragraph 2 Areas of Cooperation

The cooperation under this MOC will include the following areas:

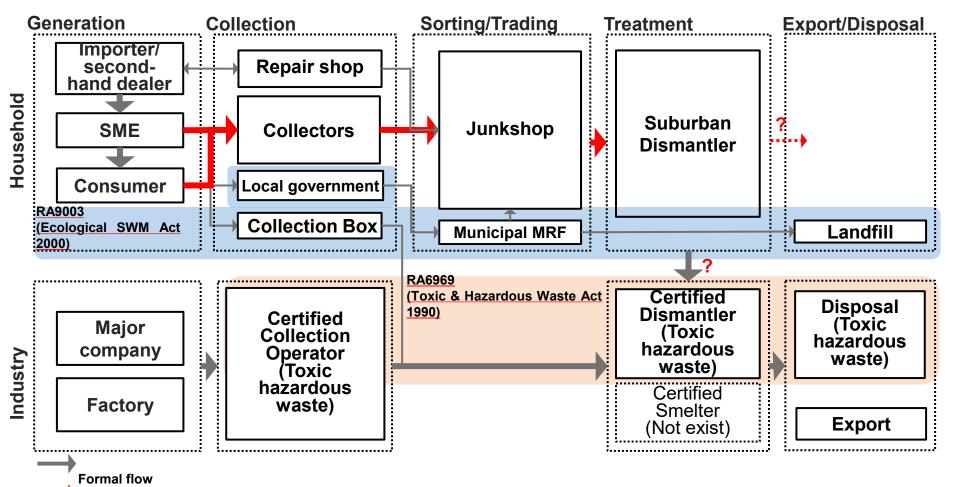
- Climate change mitigation and adaptation
- Air quality management
- Water quality management
- Chemical management
- Waste management including plastic and e-waste
- Biodiversity conservation





Informal flow

- While E-waste originating from the industrial sector is mostly treated through formal procedure, the household waste is more likely collected by Junkshops, which is beyond the existing law.
- Therefore, collection from household can be enhanced to recycle better.
- Detailed capture of the whole material flow remains challenging.



澴境省

# **Future material flow**

- Governments will have necessary <u>regulations, standards, monitoring and enforcement</u> <u>mechanism</u> in place along the whole operation from collection to final treatment through proper recycling and recovery, reducing associated environmental footprints and improving human health.
- Businesses will increase in technical and operational capacities of recycling activities through technical cooperation, joint ventures and investments in facilities.

