Public Sector Consultation on Defining the Indonesian Extended Producer Responsibility System for Electronics

November 19 & 20, 2024

The Westin Jakarta, Jakarta, Indonesia

Co-organized by:
Ministry of Communication and Digital Affairs of Indonesia
&
International Telecommunication Union

WORKSHOP SUMMARY REPORT

1. Background

ITU is collaborating with the United Kingdom Foreign, Commonwealth & Development Office (FCDO) Digital Access Programme (DAP) to promote effective regulation, greater investment, and innovative modes for connectivity in underserved communities and for broader digital inclusion in five DAP countries (Brazil, Indonesia, Kenya, Nigeria and South Africa). The range of activities allows ITU to work with new partners and implement innovative connectivity and capacity development projects. Indonesia is the largest e-waste generator in Southeast Asia, ranking as the fourth largest generator in Asia, trailing only China, India and Japan. With the assistance from ITU, the Government of Indonesia is currently exploring opportunities to regulate the country's electrical and electronic equipment (EEE) sector through the environmental policy principle of extended producer responsibility (EPR). The objective of the technical assistance to prepare an initial, high-level, roadmap for a possible EPR regulatory framework for the EEE sector in Indonesia, taking into consideration the local context, stakeholder inputs and global best practices. The target audience of the technical assistance is composed of local and national government entities and associated public sector entities.

A public sector consultation took place on Tuesday 19th and Wednesday 20th November 2024 at the Westin Jakarta. The consultation took place in the form of a workshop, with the aim to gather inputs from public sector stakeholders to define a potential framework for regulating EPR for Indonesia's electronics sector. The definition of the EPR system formed a core part of the workshop since it will itself define how a national regulation on this issue will be framed. The public sector consultation workshop marked a first step in Indonesia's journey towards the establishment of an EPR system in the country.

The consultation workshop gathered a core group of relevant national and local stakeholders from the public sector. It provided space for discussion and alignment on the government's unified vision for the development of a system of EPR and its regulation, for the electronics sector. Stakeholders were consulted to define a coherent roadmap for a regulatory framework and system definition for EPR.

1.1 Workshop Objectives

- Introduce participants to the key definitions, terms and principles of e-waste management under the environmental policy principle of EPR and apply these to the context of Indonesia.
- Gather relevant inputs from government stakeholders to inform the development of an EPR regulation and system definition through the preparation of a high-level roadmap.
- Share knowledge and build capacity among government stakeholders concerning the EPR policy principle and test their preparedness for engaging the private sector on the topic of EPR.
- Identify the building blocks for the construction of an EPR system considering the legal, financial and administrative components of the system comprising both public and private sector stakeholders.
- Identify all relevant stakeholders for establishing an economically viable EPR system for the EEE sector that is efficient and simple to enforce for government entities.
- Receive feedback from participants on specific proposals for the various flows and stocks of the EPR system, including on the possible flows of materials, money and information.

1.2 Workshop Outputs and Outcomes

This workshop summary report serves as an immediate output, providing a detailed summary of presentations and breakout groups findings of the workshop. It details a set of concrete findings and regulatory gaps around the potential legal, administrative and financial arrangements of the EPR system.

At the outcome level, substantial government stakeholder input provided during the public sector consultation workshop will feed into the formulation of a clear and unified vision of the government's approach to introducing EPR in the electronics sector to improve e-waste management.

This unified version will be translated into a high-level roadmap that will define the Indonesian EPR system and regulation for the electronics sector, as a proposal for further development.

1.3 Participants

Over 60 participants from the following departments attended Day 1 & Day 2 of the workshop.

- Ministry of Communications and Informatics
  - Directorate General of Resources and Postal and Informatics Devices
  - Center for International Institutions
- Ministry of Environment
  - Directorate of Waste Management
  - Directorate of Hazardous and Non-Hazardous Waste Management
- United Kingdom, Foreign, Commonwealth & Development Office (FCDO)
- United Nations Resident Coordinator
- Ministry of National Development Planning
  - Directorate of Electricity, Telecommunications, and Informatics
  - Directorate of Environmental Affairs
  - Directorate of Industry, Tourism, and Creative Economy
- Ministry of Industry
  - Center for Green Industry
  - Directorate of Electronics and Telematics Industry
- Ministry of Finance
  - Center for Climate Change Financing and Multilateral Policy, Fiscal Policy Agency
  - Directorate of the Environmental Fund Management Agency (BPDLH)
  - Directorate of Customs Technical Affairs, Directorate General of Customs and Excise
  - Directorate of Business Process Efficiency, National Single Window Institution
- Ministry of Investment (BKPM)
  - Directorate of Business Licensing Services for the Industrial Sector
  - Directorate of Business Licensing Systems

3. Workshop Programme

The workshop proceeded according to the below programme.

Public Sector Consultation on Defining the Indonesian EPR System Electronics		
Day One – Tuesday 19th November 2024 (Master of Ceremonies: Komdigi)		
TIME	**ACTIVITY**	**PRESENTER**
08:30 – 09:00	Registration of Participants	All Participants
09:00	MC Opening and Indonesian National Anthem	All Participants
09:05 – 09:30	Welcome Remarks	Ministry of Communications and Digital
	Opening Remarks	UK Foreign, Commonwealth and Development Office
	Opening Remarks	Ministry of Environment
	Opening Remarks	UNRC
	Opening Remarks	ITU
09:30 – 09:40	**Presentation**: High-level Roadmap Defining the Indonesian EPR System and Regulation for the Electronics Sector.	Garam Bel, Circular Economy Coordinator, ITU and Samantha O'Riordan, Senior Project Manager, ITU
09:40 – 10:30	**Presentation and Discussion**: Extended Producer Responsibility for Electrical and Electronic Equipment	James Mulolo, Circular Economy Lead in Africa, ITU
Group photo and Tea/Coffee Break		
11:00 – 11:30	**Presentation**: Indonesian E-waste Management System and Existing Regulatory Framework	Ministry of Environment
11:30 – 12:30	**Breakout Groups**: Group One- Analysis of Public and Private Sector Stakeholders. Group Two- Scoping of EEE to be included in the EPR System. Group Three- Identification of Viable EPR Financing Modality.	All Participants
Lunch		
14:00 – 15:00	**Plenary Session**: Group One, Group Two and Group Three	All Participants
15:00 – 16:30 (Tea/Coffee)	**Presentation and Discussion**: EPR System Definition on Roles and Responsibilities and the Flow of Money, Materials and Information	Garam Bel, Circular Economy Coordinator, ITU and James Mulolo, Circular Economy Lead in Africa, ITU
16:30 – 16:45	Closing Remarks	ITU
Day Two – Wednesday 20th November 2024 (Master of Ceremonies: Komdigi)		
08:30 – 09:00	Registration of Participants	All Participants
09:00 – 09:05	MC Opening	MC
09:05 – 09:45	**Presentation**: Circular Economy Roadmap and Action Plan – Electronics Sector EPR Objectives	Ministry of National Development Planning
09:45 – 10:00	**Refresher**: EPR System Definition on Roles and Responsibilities and the Flow of Money, Materials and Information	Garam Bel, Circular Economy Coordinator, ITU
Tea/Coffee Break		
10:15 – 11:30	**Breakout Groups**: EPR System Definition Critique and Feedback	All Participants
11:30 – 12:30	**Plenary Session**: Group One, Group Two and Group Three	All Participants
Lunch		

14:00 – 15:00	**Presentation and Discussion**: Responsibilities in the ICT/Telecommunications Sector	Ministry of Communications and Digital
Tea/Coffee Break		
15:15 – 16:00	**Presentation and Discussion**: The Current Laws that Cover E-waste Management in Indonesia and Potential EPR Benefits.	Ministry of Environment
16:00 – 16:30	**Presentation**: High-level Roadmap Defining the Indonesian EPR System and Regulation for the Electronics Sector	Garam Bel, Circular Economy Coordinator, ITU
16:30 – 16:45	Closing Remarks	Ministry of Communications and Digital

3.1 Presentations

19 November 2024, 09:30 – 09:40
High-Level Roadmap Defining the Indonesian EPR System and Regulation for the Electronics Sector
Presenter ● Garam Bel, Circular Economy Coordinator, International Telecommunication Union

In his presentation, Garam Bel introduced the International Telecommunication Union (ITU) as the United Nations specialized agency for information and communication technologies (ICTs), explained the context in which ITU is working with FCDO and highlighted global achievements towards broader digital inclusion. He then provided an overview of key focus areas for Indonesia before concluding on the scope and objective of the high-level roadmap, as well as the initial outputs and outcome of ITU's technical assistance to the Government of Indonesia.

19 November 2024, 09:40 – 10:30
Extended Producer Responsibility for Electrical and Electronic Equipment
Presenter ● James Mulolo, Circular Economy Lead in Africa, International Telecommunication Union

James Mulolo's presentation focused on providing a thorough overview of the extended producer responsibility policy principle serving as the foundation for e-waste systems globally and crucial for advancing the transition to a circular economy for electronics. ITU's Circular Economy Lead for Africa detailed the different types of EPR policy instruments (product take-back, regulation and performance standards, economic and market-based instruments and information-based instruments). He then introduced the functioning of EPR systems, before detailing the different approaches to EPR implementation (individual producer responsibility vs. collective producer responsibility). Challenges in EPR implementation were reviewed, as well as benefits of EPR for e-waste management.

19 November 2024, 11:00 – 11:30
Indonesian E-waste Management System and Existing Regulatory Framework
Presenter ● Mahanani Kristininghsih, Head of the Specific Waste Sub-Directorate of the Directorate General of Management, Ministry of Environment

The presentation provided a comprehensive framework for the regulation and management of electronic waste (e-waste) in Indonesia. It outlined the legal foundations governing e-waste management, including laws and regulations aimed at reducing and handling e-waste. The presentation showed e-waste types and sources, detailing the processes for waste separation, collection, transportation, processing, and recycling. It emphasized the importance of environmental protection and the responsibilities of individuals and organizations in managing hazardous waste. The framework aims to enhance the efficiency of e-waste management while promoting sustainability and compliance with environmental standards.

19 November 2024, 15:00 – 16:30
EPR System Definition on Roles and Responsibilities and the Flow of Money, Materials and Information
Presenters ● Garam Bel, Circular Economy Coordinator, International Telecommunication Union ● James Mulolo, Circular Economy Lead in Africa, International Telecommunication Union

The presentation provided an overview of flows of materials, money and information within an EPR system. In three case studies, Garam Bel and James Mulolo detailed how roles and responsibilities, as well as flows of materials, money and information would vary based on the modalities of the EPR system. The first system presented was government-led. The second system focused on an industry-led scheme, whilst the third system was hybrid.

20 November 2024, 09:05 – 09:45
Circular Economy Roadmap and Action Plan – Electronics Sector EPR Objectives
Presenter ● Priyanto Rohmatullah, Director of Environment, Ministry of National Development Planning

The presentation discussed the National Circular Economy Roadmap and Action Plan as a foundational reference for Indonesia's National Long-Term Planning (2025–2045), outlining strategies to transition towards a circular economy. It emphasized sustainable practices to minimize waste, enhance resource efficiency, and support long-term economic and environmental objectives. A key focus was Extended Producer Responsibility (EPR) as a mechanism to drive this transition, particularly in the electronics sector, where only 5% of e-waste was recycled, and the rest was improperly managed. The circular economy model was presented as a solution to reduce resource consumption, extend product lifespans, and improve recycling efforts. Policy recommendations include integrating EPR regulations, promoting sustainable public procurement, and supporting circular businesses. The presentation also identified key challenges, such as financing gaps, governance issues, and insufficient infrastructure, alongside enabling conditions like incentives, supportive policies, and technology development.

20 November 2024, 14:00 – 15:00
Responsibilities in the ICT/Telecommunications Sector
Presenter ● Fajar Prasanti, Team Leader of Device Ecosystem, Ministry of Communications and Digital

The presentation discussed e-waste management in the telecommunication and digital sectors in Indonesia, emphasizing the importance of regulations, certification, and environmental responsibility. Fajar Prasanti highlighted legal frameworks such as UU 36/1999, PP 46/2021, and UU 6/2023, which govern telecommunications, frequency spectrum usage, and technical standards. The presentation outlined the necessity of certification to prevent radio interference, health

risks, safety hazards, and environmental damage. It also explored the potential of urban mining and the role of circular economy principles in managing e-waste.

20 November 2024, 15:15 – 16:00
The Current Laws that Cover E-waste Management in Indonesia and Potential EPR Benefits
Presenter ● Widayati, Functional Environmental Impact Controller, Directorate of Waste Management, Ministry of Environment

The presentation discussed e-waste management regulations in Indonesia and the potential for Extended Producer Responsibility (EPR) in the electronics sector. It covers key legal frameworks, including Government Regulation No. 27/2020 and Law No. 18/2008, outlining waste classification, handling, and disposal requirements. The presentation highlighted obligations for producers to implement take-back programs and sustainable waste management strategies. Additionally, it detailed electronic waste collection, transportation, and disposal procedures, emphasizing the importance of hazardous waste (B3) management.

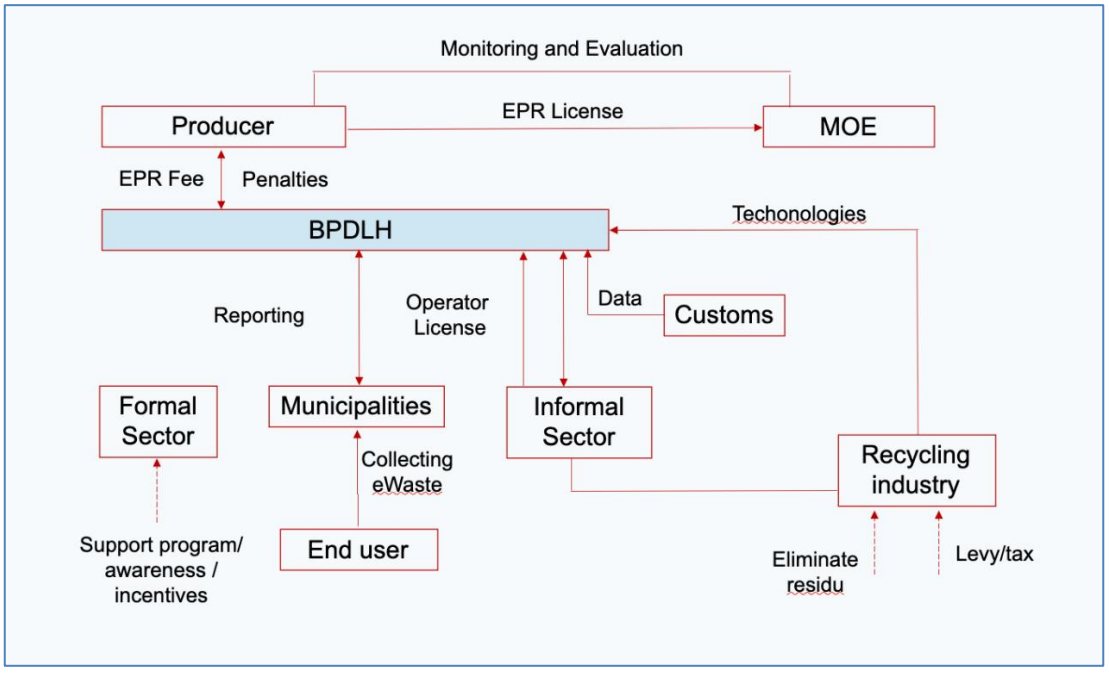
20 November 2024, 16:00 – 16:30
High-Level Roadmap Defining the Indonesian EPR System and Regulation for the Electronics Sector
Presenter ● Garam Bel, Circular Economy Coordinator, International Telecommunication Union

The concluding presentation of the workshop focused on the high-level roadmap defining the Indonesian EPR system and regulation for the electronics sector. Garam Bel explained that a draft roadmap would be shared with participating stakeholders (only comprising government institutions) to provide government stakeholders with the opportunity to review the core elements of the proposed EPR system for electronics and the elements to be included in a regulation governing this principle for the electronics sector.

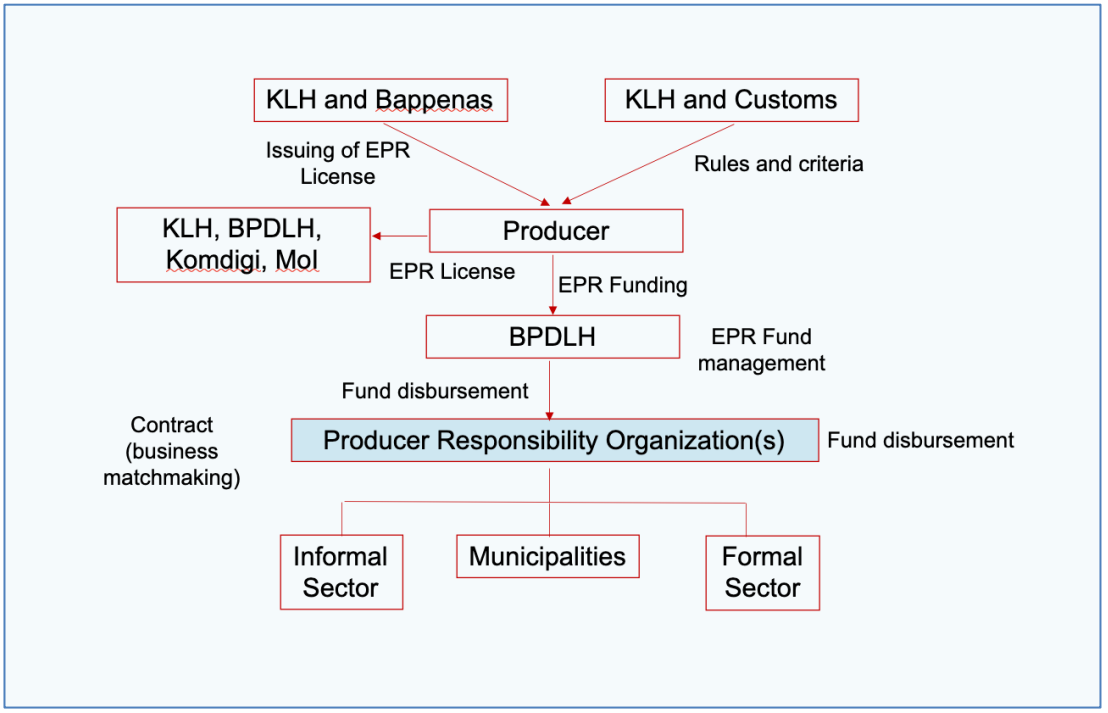
4. Breakout Groups

A summary of the key breakout group sessions – which culminated in the compilation of inputs from the discussions and the definition of a possible EPR system by each group – can be found below:

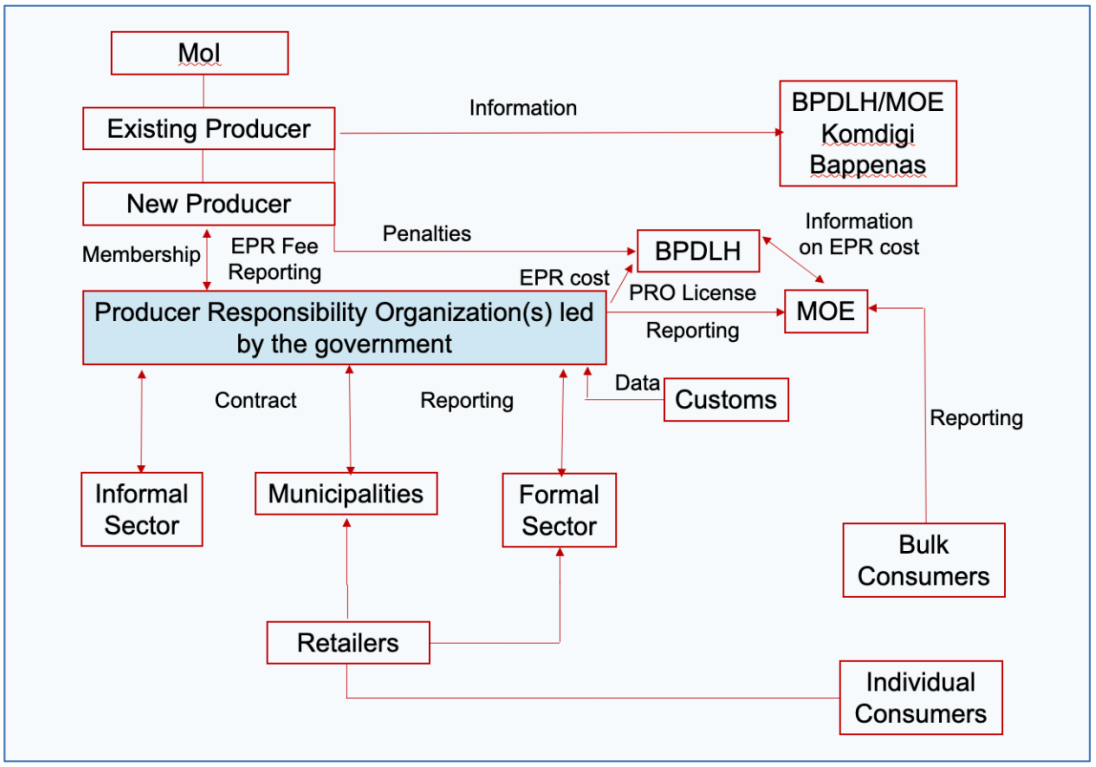
4.1. Day 2 – Group One– EPR System Definition Critique and Feedback



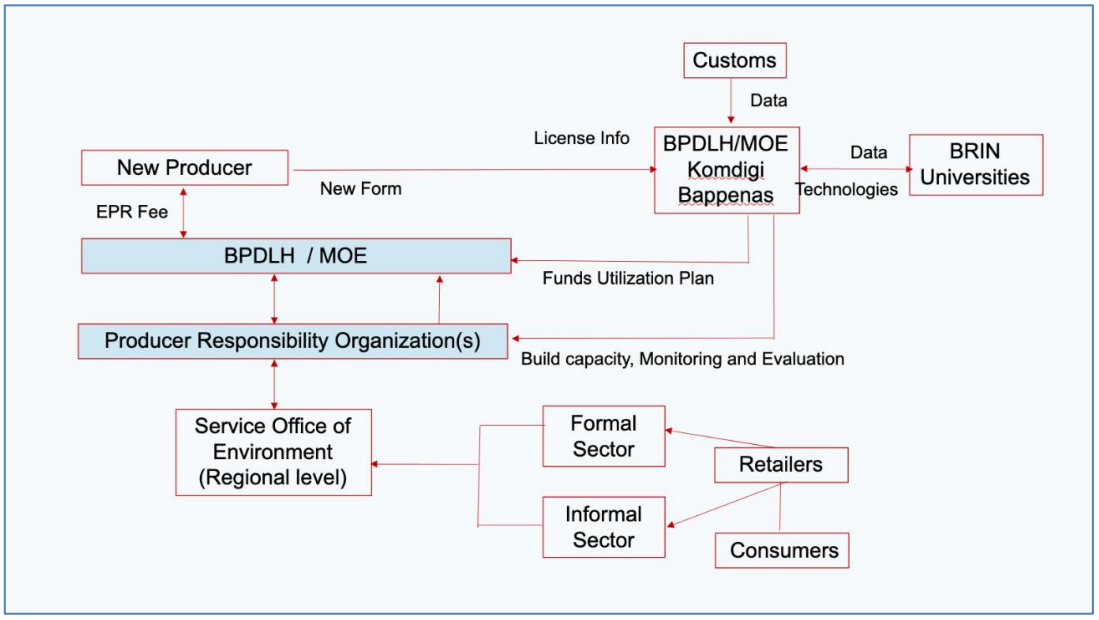
4.2. Day 2 – Group Two – EPR System Definition Critique and Feedback



Day 2 – Group Three – EPR System Definition Critique and Feedback



4.3. Day 2 – Group Four – EPR System Definition Critique and Feedback



5. Key Regulatory Framework Gaps

Some critical gaps were identified in the regulatory framework where it is advised these gaps are addressed in order to prepare for an effective and efficient system of EPR. The gaps are linked to the following aspects:

- Product scope- the scope of EEE and its e-waste are covered two parts of the regulatory framework where one part defines EEE in only a limited selection of products. There is no reference made to broader categories of equipment. E-waste is defined mostly as parts and components of products, whereas it is more effective to have the entire product as e-waste defined.

- Producer definition- there exists a definition of producer but it requires further enhancement since it does not fully capture the process of a legal or natural persons first putting EEE on the market. The link between the producer definition and the principle of EPR, in particular the organizational or financial responsibility of the producer, is not clearly defined.

- E-waste definition- the current definition of e-waste is confusing to the actors across the value chain of EEE and e-waste because it distinguishes between Sampah (trash waste) and Limbah B3 (hazardous waste). Since Sampah is not classed as hazardous, though it equally contains e-waste (i.e. the full EEE discarded by the owner without the intention to reuse it), there are limited rules governing this portion of the e-waste stream. Permits are not required for collection of e-waste from households (a process considered as dealing with Sampah) for example, only from industry (a process considered as dealing with Limbah).

- Producer registration- reference is made to producers as an entity defined to have a responsibility regarding the end-of-life phase of the EEE which they place on the market. However, it was highlighted that there has been a low level of onboarding of producers of EEE in Indonesia, especially given the vast number of active producers. The legal framework does not make clear provisions on the requirements related to EPR registration by producers.

- Roles and responsibilities- not all actors in the value chain are clearly defined and their roles and responsibilities spelled out. Clear requirements for the government, for producers, for retailers and for consumers large and small are missing in the existing regulatory framework.

- Financial mechanism- behind EPR is typically a financial mechanism and the critical components of such a mechanism are currently absent in the regulatory framework. Key questions like who covers the cost of e-waste management?, or who pays who for e-waste management?, are missing. Moreover the organizational / compliance framework to implement the financial mechanism is missing hence the requirements for producers in this regard remains unclear.

6. Conclusion

The consultations held in November 2024 were instrumental in starting to compile a roadmap for Indonesia's EPR system. Key components for consideration to be explored by the roadmap have been included in the workshop and all bilateral consultations with relevant public sector representatives. All feedback will be taken into consideration during the formulation of the roadmap based on feedback. While the feedback collected in November provides a solid foundation for a comprehensive roadmap for Indonesia, some thematic priorities and aspects remain unexplored since the topic is complex in nature. Therefore, a second round of consultations is scheduled for February 2025 to address the remaining regulatory gaps and further refine the roadmap. The first versions of the key components of the high-level roadmap will be presented to consulted stakeholders for their initial validation online and in-person throughout January and February 2025, before being submitted to the Government of Indonesia internally in March or April 2025.