

Battery Waste Management Rules, 2022



Date of Notification 22 August, 2022 **Nodal Agency** Ministry of Environment, Forest and Climate Change, Government of India

Download the **policy**

Key Objectives

- The Battery Waste Management Rules shall apply to producers, dealers, consumers, and entities involved in the collection, segregation, transportation, refurbishment and recycling of waste batteries regardless of chemistry, shape, volume, weight, material composition and use.
- Central Pollution Control Board (CPCB) shall establish an online system for the registration and filing of returns by producers, recyclers, and refurbishers of waste batteries within six months of the commencement of these rules.

www.shoonya.info / 1

- Extended Producer Responsibility (EPR) shall be mandated where the producers (including importers) are responsible for the collection and recycling/ refurbishment of waste batteries and the use of recovered materials from wastes into new batteries.
- A centralised online portal will be enabled for the exchange of EPR certificates between producers and recyclers/refurbishers to fulfil the obligations of producers.



1. Producer

Producer means an entity that engages in the manufacture and sale of battery including refurbished battery, including in equipment, under its own brand; sale of batteries including refurbished battery, including in equipment, under its own brand produced by other manufacturers or suppliers; or import of battery as well as equipment containing the battery.

Functions of a Producer

- 1. The producer is obligated to adhere to EPR stipulations concerning recycling or refurbishing for the battery it introduces in the market.
- 2. Waste battery collected by the producer shall be sent for recycling or refurbishing and shall not be sent for landfilling or incineration.



- 3. It shall be the responsibility of a producer to adhere to prohibitions and labelling requirements as prescribed in Schedule I of the Battery Waste Management Rules, 2022, and ensure safe handling of battery or waste battery to safeguard human health and the environment occurs.
- 4. In case of imported battery, the producer shall meet the minimum use obligation by ensuring such quantity of recycled material is utilised by other businesses or exported.

Target: Mandatory Waste Battery collection target and 100% of refurbishment or recycling of the collection target (based on weight)

Compliance Year	Type of EV Target: Minimum 70% of the battery quantity placed in the market in the year			
2024-2025	• For 3W, 2021–22			
2025-2026	• For 3W, 2022–23			
2026-2027	 For 2W, 2022–23 For 3W, 2023–24 			
2027–2028	 For 2W, 2023–24 For 3W, 2024–25 			
2028-2029	 For 2W, 2024–25 For 3W, 2025–26 			
2029-2030	 For 2W, 2025–26 For 3W, 2026–27 For 4W, 2021–22 			
2030-2031	 For 2W, 2026–27 For 3W, 2027–28 For 4W, 2022–23 			
2031–2032	 For 2W, 2027–28 For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2023–24 			



Compliance Year	Type of EV				
	Target: Minimum 70% of the battery quantity placed in the market in the year				
2032–2033	 For 2W, 2028–29 For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2024–25 				
2033-2034	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2025–26 				
2034–2035	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2026–27 				
2035–2036	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e. 2028–29) and onwards For 4W, 2027–28 				
2036–2037	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2028–29 				
2037–2038	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2029–30 				
2038-2039	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2030–31 				
2039-2040	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2031–32 				
2040-2041	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2032–33 				
2041–2042	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2033–34 				



Compliance Year	Type of EV			
	Target: Minimum 70% of the battery quantity placed in the market in the year			
2042-2043	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, 2034–35 			
2043–2044 and onwards	 For 2W, in the 4th preceding financial year (i.e., 2029–30) and onwards For 3W, in the 3rd preceding financial year (i.e., 2028–29) and onwards For 4W, in the 8th preceding financial year (i.e., 2035–36) and onwards 			



Target: Waste battery collection target, and 100% refurbishment and/or recycling target for every seven-year cycle (based on weight)

Compliance Cycle	Type of EV			
2024-2025 till 2025-2026	 For 3W, collection of 100% waste battery and of 100% of refurbishment or recycling shall be mandatory by end of seven-year compliance cycle (end of 7th year) against the battery placed in the market during seven-year compliance cycle. 			
	 However, there may be a carry forward of up to 60% of the average quantity of battery placed in the market per year during the seven-year cycle to the next compliance cycle. 			



Compliance Cycle Type of EV 2026-2027 till For 2W and 3W, collection of 100% waste battery and of 100% of refurbishment/recycling 2028-2029 shall be mandatory by end of seven-year compliance cycle (end of 7th year) against the battery placed in the market during seven-year compliance cycle. However, there may be a carry forward of up to 60% of the average quantity of battery placed in the market per year during the seven-year cycle to the next compliance cycle. For 2W and 3W, collection of 100% waste battery and of 100% of refurbishment/recycling 2029-2030 till 2030-2031 shall be mandatory by end of seven-year compliance cycle (end of 7th year) against the battery placed in the market during seven-year compliance cycle. For 4W, collection of 100% waste battery and of 100% of refurbishment or recycling shall be mandatory by end of fourteen-year compliance cycle (end of 14th year) against the battery placed in the market during fourteen-year compliance cycle. However, there may be a carry forward of up to 60% of the average quantity of battery placed in the market per year during the seven-year cycle to the next compliance cycle for 2W and 3W, and fourteen-year cycle to the next compliance cycle for 4W. 2031-2032 till For 2W and 3W, collection of 100% waste battery and of 100% of refurbishment/recycling 2032-2033 shall be mandatory by end of seven-year compliance cycle (end of 7th year) against the battery placed in the market during seven-year compliance cycle. For 4W, collection of 100% waste battery and of 100% of refurbishment or recycling shall be

- For 4W, collection of 100% waste battery and of 100% of refurbishment or recycling shall be mandatory by end of fourteen-year compliance cycle (end of 14th year) against the battery placed in the market during fourteen-year compliance cycle.
 - However, there may be a carry forward of up to 60% of the average quantity of battery placed in the market per year during the seven-year cycle to the next compliance cycle for 2W and 3W, and fourteen-year cycle to the next compliance cycle for 4W.

2033-2034 till 2042-2043

- For 2W and 3W, collection of 100% waste battery and of 100% of refurbishment/recycling shall be mandatory by end of seven-year compliance cycle (end of 7th year) against the battery placed in the market during seven-year compliance cycle.
- For 4W, collection of 100% waste battery and of 100% of refurbishment or recycling shall be mandatory by end of fourteen-year compliance cycle (end of 14th year) against the battery placed in the market during fourteen-year compliance cycle.
- However, there may be a carry forward of up to 60% of the average quantity of battery
 placed in the market per year during the seven-year cycle to the next compliance cycle for
 2W and 3W, and fourteen-year cycle to the next compliance cycle for 4W.



Compliance Cycle Type of EV

2043–2044 and onwards

- For 2W and 3W, collection of 100% waste battery and of 100% of refurbishment/recycling shall be mandatory by end of seven-year compliance cycle (end of 7th year) against the battery placed in the market during seven-year compliance cycle.
- For 4W, Collection of 100% waste battery and of 100% of refurbishment or recycling shall be mandatory by end of fourteen-year compliance cycle (end of 14th year) against the battery placed in the market during fourteen-year compliance cycle.
- However, there may be a carry forward of up to 60% of the average quantity of battery placed in the market per year during the seven-year cycle to the next compliance cycle for 2W and 3W, and fourteen-year cycle to the next compliance cycle for 4W.

Target: Minimum use of the recycled materials out of the total dry weight of a battery

Compliance Year	2027-28	2028-29	2029-30	2030–31 and onwards
Minimum percentage	5%	10%	15%	20%

2. Consumer

Consumer are defined as end user of battery.

Functions of a Consumer

- 1. Consumer shall discard waste battery separately from other waste streams, especially from mixed waste, and domestic waste streams.
- 2. Consumer shall ensure that waste battery is disposed off in an environment-friendly manner by giving them to an entity engaged in collection or refurbishment or recycling.



3. Public Waste Management Authorities

Public waste management authorities for these rules include village panchayats, municipal corporations, municipalities, and agencies engaged on their behalf.

Functions of Public Waste Management Authorities

1. The authorities will hand over collected waste battery to the producers or agencies acting on their behalf or the entity engaged in refurbishment or recycling with a view to refurbishment or recycling of the waste battery or ecycling or refurbishment themselves.

4. Entity Involved In Collection, Segregation and Treatment

Functions of Entities Involved in Collection, Segregation and Treatment

- 1. Hand over the waste battery to a registered refurbisher or recycler.
- 2. Ensure that a facility is in accordance with and carries out any activities in accordance with the standards or guidelines prescribed by the CPCB.

5. Refurbisher

Refurbisher refers to an entity engaged in refurbishment.

Functions of a Refurbisher

- 1. All refurbishers shall register with the State pollution Control Board (SPCB) on the centralised portal.
- 2. It shall be the responsibility of the refurbisher to:
 - Ensure that it carries out any activity in accordance with the guidelines prescribed by CPCB.
 - Ensure that hazardous waste generated from any activity of the entity is managed as per the provisions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.



- Ensure that other waste generated during handling and refurbishing activities be managed as per the extant regulations such as Solid Waste Management Rules, 2016 and Plastic Waste Management Rules, 2016.
- Ensure that refurbishment processes and facilities comply with the standards or guidelines prescribed by the CPCB.
- Ensure that the waste battery is removed from the collected appliance if the battery is incorporated in the equipment.
- 3. Refurbisher shall not deal with any other entity not having registration mandated under these rules.

6. Recycler

Recycler means an entity engaged in recycling waste battery.

Functions of Recycler

- 1. It shall be the responsibility of the recycler to:
 - Ensure that it carries out any activity in accordance with the guidelines prescribed by CPCB.
 - Ensure that hazardous waste generated from any activity of the entity is managed as per the provisions under Hazardous and Other Wastes (Management and Transboundary Movement).
 - Ensure that other waste generated during handling and recycling activities is managed as per the extant regulations such as Solid Waste Management Rules, 2016, Plastic Waste Management Rules, 2016 and E-waste (Management) Rules, 2016.
 - Ensure that the waste battery is removed from the collected appliance if the battery is incorporated into an equipment.
- 2. Recycler shall not deal with any other entity not having registration mandated under these rules.



- 3. Provision of certificate for waste battery:
 - Entities involved in refurbishment and/ or recycling of waste battery, registered under these rules shall provide certificate for waste battery processing.
 - In no case, the amount of waste battery recycled or refurbished by the entity shall be more than installed capacity of the entity.
 - The certificate for waste battery provided by registered entities shall be provided for the type and quantity of battery refurbished or recycled and can be transacted for meeting Recycler obligations. CPCB will provide for the issuance of such certificates on the online portal.
 - Recovery of minimum percentage is the percentage of total weight of all recovered materials out of dry weight of the battery and recyclers shall be mandated for minimum recovery of battery materials as mentioned below:

Type of Battery	٠	Recovery target for the year			
		2024-25	2025-26	2026–27 and Onwards	
Electric vehicle		70%	80%	90%	

4. EPR certificates will be generated by CPCB through the centralised online portal based on the recycled or refurbished quantities and assigned to recyclers or refurbishers. The recyclers or refurbishers can sell the assigned Extended Producer Responsibility certificates to Producer in exchange of waste battery.

7. Central Pollution Control Board

Functions of Central Pollution Control Board (CPCB)

1. CPCB shall share Extended Producer Responsibility plan of the producer and registration details of Producer with SPCB.



- 2. CPCB shall suspend and/or cancel the registration, and/or impose Environmental Compensation, in case of non-compliance of EPR obligations as per Schedule II after giving reasonable opportunity of being heard.
- 3. CPCB or through a designated agency shall verify compliance by producer through inspection and periodic audit.
- 4. CPCB shall issue guidelines for environmentally sound procedures of collection, storage, transportation, refurbishment, and recycling of waste battery.

8. State Pollution Control Board

Functions of State Pollution Control Board (SPCB)

- In case the information provided by the entity involved in refurbishment or recycling of Waste Battery is found to be false, the SPCB shall suspend and/ or cancel the registration up to a period of five years, after giving reasonable opportunity of being heard including actions under Rule 13.
- 2. SPCB will ensure a regular dialogue between relevant stakeholders involved in the fulfilment of obligations under these rules.
- 3. SPCB to submit annual report to CPCB by 30th June every year, regarding effective implementation of these rules.

