



Handbook on Extended Producer Responsibility (EPR) Guidelines for Battery Waste

by
Tamil Nadu Pollution Control Board
February 2025

P R E F A C E

Battery waste poses significant environmental and health challenges due to the hazardous materials they contain. Improper disposal can lead to soil and water contamination, adversely affecting ecosystems and human health.

To address these issues, The Ministry of Environment, Forest and Climate Change, Government of India, New Delhi notified the Battery Waste Management Rules, 2022 on 22/08/2022 in supersession of the Batteries (Management and Handling) Rules, 2001 under the provisions of the Environment (Protection) Act, 1986. These Rules apply to Producer, Dealer, Consumer of batteries, Entities involved in collection, segregation, transportation, refurbishment of used batteries and recycling of waste batteries. These Rules apply to all types of batteries regardless of chemistry, shape, volume, weight, material composition and use.

A key component of these rules is the Extended Producer Responsibility (EPR) framework. Producer shall have the obligation of EPR for the Battery that they introduce in the market to ensure the attainment of the recycling or refurbishing obligations. As per the Rules, Producer shall register through the online centralised portal of Central Pollution Control Board (CPCB) and obtain 'Certificate of Registration'. Refurbisher of used batteries and Recycler of waste batteries shall register with State Pollution Control Board (SPCB) on the centralised portal of CPCB and obtain 'Certificate of Registration' from SPCB. Producer shall also have the obligation with respect to the minimum use of domestically recycled materials in new battery as per the target mentioned.


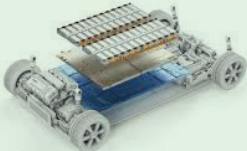


To facilitate understanding and compliance, the Tamil Nadu Pollution Control Board (TNPCB) presents the Handbook on EPR Guidelines for Battery Waste Management. This handbook serves as a comprehensive guide, simplifying the complex framework of Extended Producer Responsibility (EPR) for battery waste and is specially designed for Producers, Recyclers and Refurbishers.

While this handbook offers valuable insights, it is important to recognize that it should not be the sole reference for legal or regulatory compliance. For detailed, up-to-date and accurate information kindly refer Battery Waste Management Rules, 2022, its subsequent amendments and visit the official EPR portal maintained by Central Pollution Control Board at <https://www.eprbatterypcb.in/>.

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Tamil Nadu Pollution Control Board

Introduction to Battery Waste

Waste battery includes used, end of life battery and/or its components spares or parts or consumables which may or may not be hazardous in nature. It also includes pre-consumer off-spec battery, expired battery and battery discarded by the user.

SI No	Categories	Images
1.	Portable Battery that is sealed, less than five kilograms, not made for industrial purposes, electric vehicle or to be used as an Automotive Battery; 1.a) Portable Battery used in consumer electronics which are rechargeable 1.b) Portable Battery except those used in consumer electronics which are rechargeable	
2.	Electric Vehicle Battery specifically designed to provide traction to hybrid and electric vehicles for road transport; 2.a) Electric Vehicles Battery of three wheelers 2.b) Electric Vehicles Battery of two wheelers 2.c) Electric Vehicles Battery comprising of four wheelers	
3.	Automotive Battery used only for automotive starter, lighting or ignition power;	
4.	Industrial Battery designed for industrial uses, excluding Portable battery, Electric vehicle battery and Automotive battery. These may include sealed Battery (excluding portable battery); unsealed Battery (excluding automotive Battery) and energy storage system Battery;	

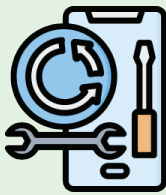
Entities to be Registered on EPR Portal



Producer

Producer means an entity who engages in:

- i. manufacture and sale of Battery including refurbished Battery, including in equipment, under its own brand; or
- ii. sale of Battery including refurbished Battery, including in equipment, under its own brand produced by other manufacturers or suppliers; or
- iii. import of Battery or equipment containing Battery
- iv. manufacture or assembling of Battery or refurbished Battery including in equipment for sale to the Producer without its own brand name



Refurbisher

Refurbisher means entity engaged in repairing, re-conditioning, re-purposing of used Battery for its second life



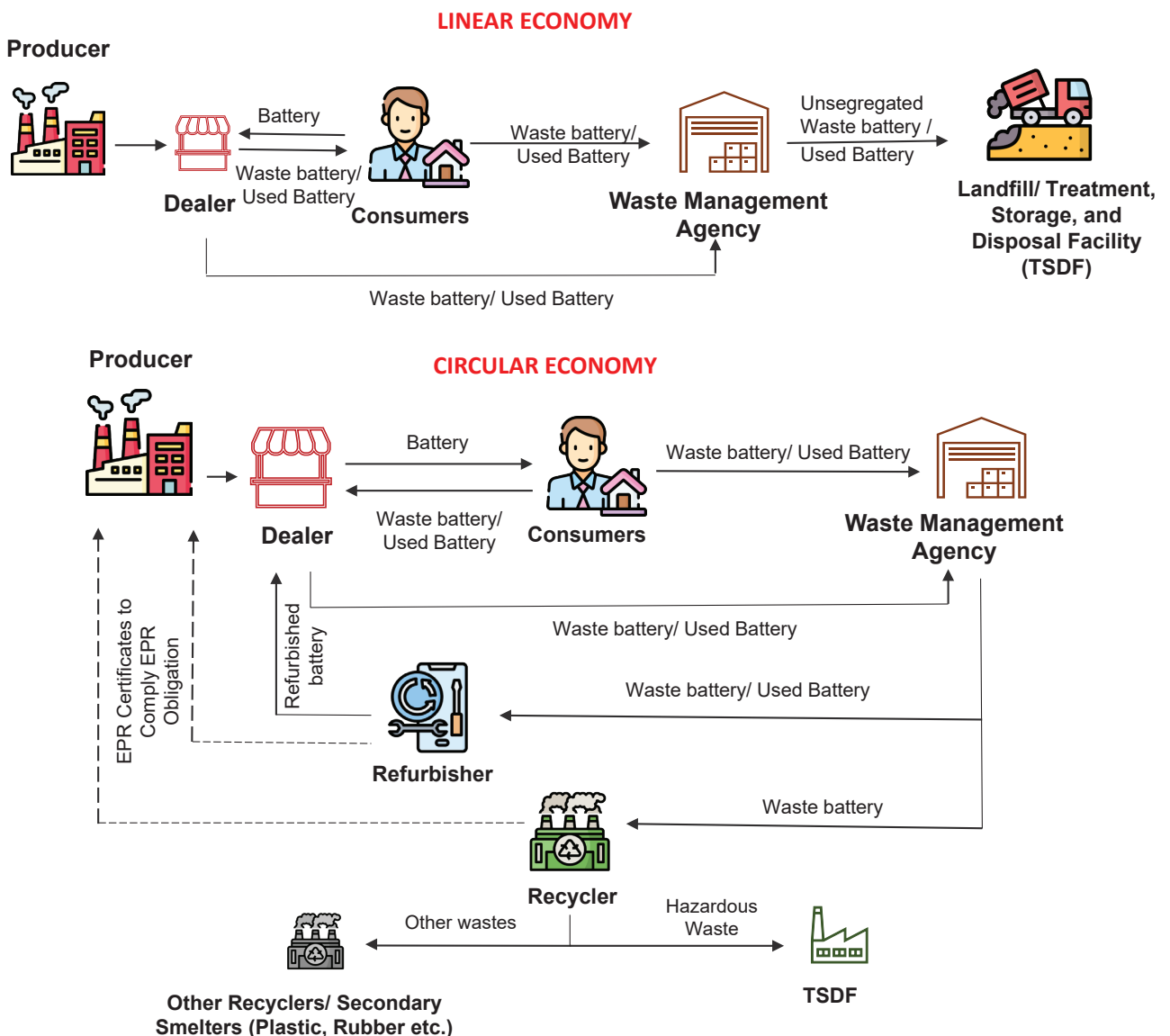
Recycler

Recycler means entity engaged in recycling of Waste Battery

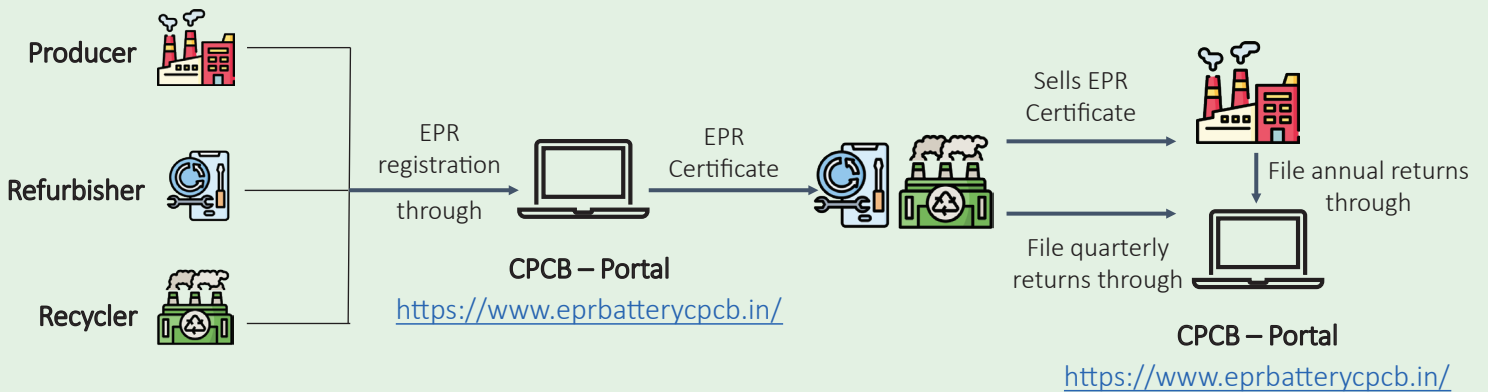
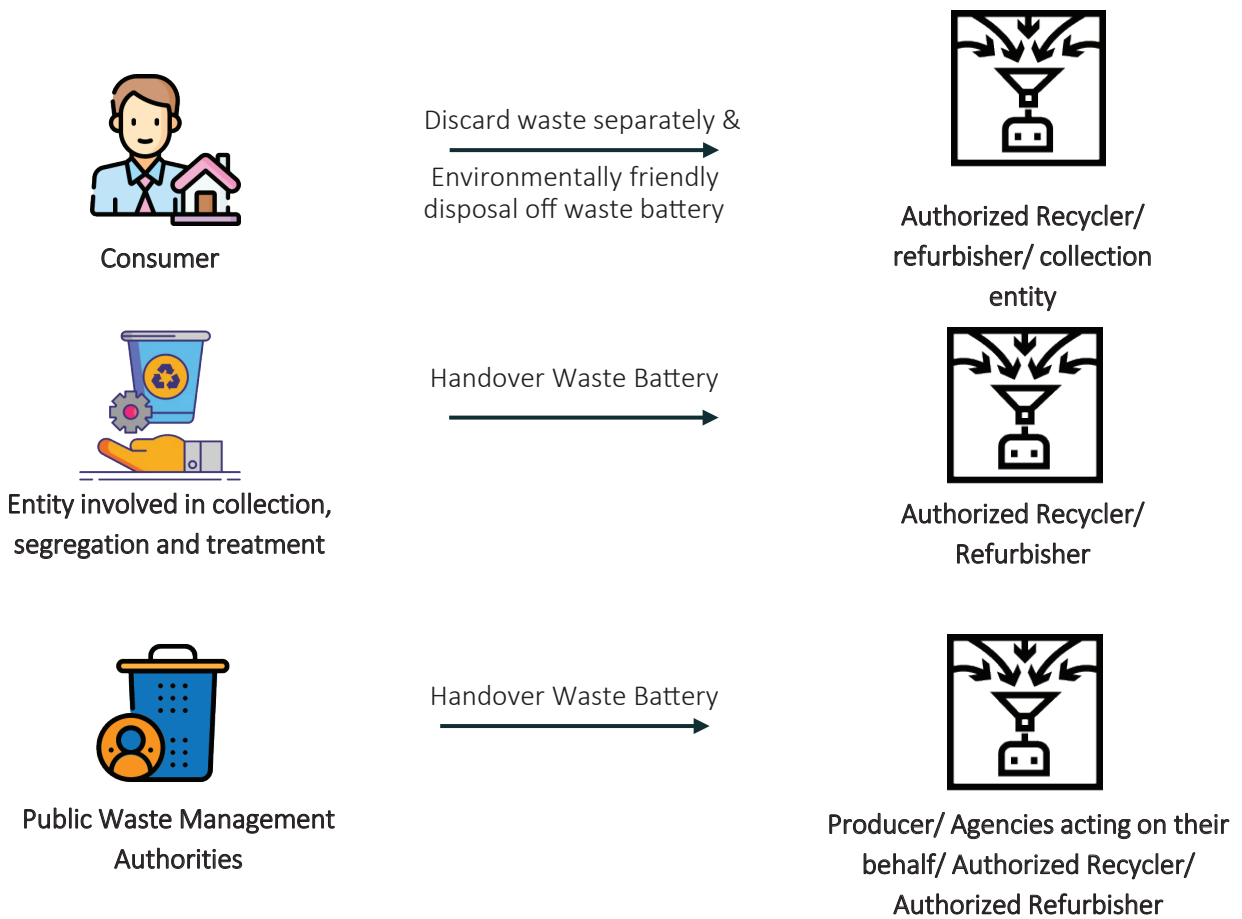
Extended Producer Responsibility

EPR and its Advantage

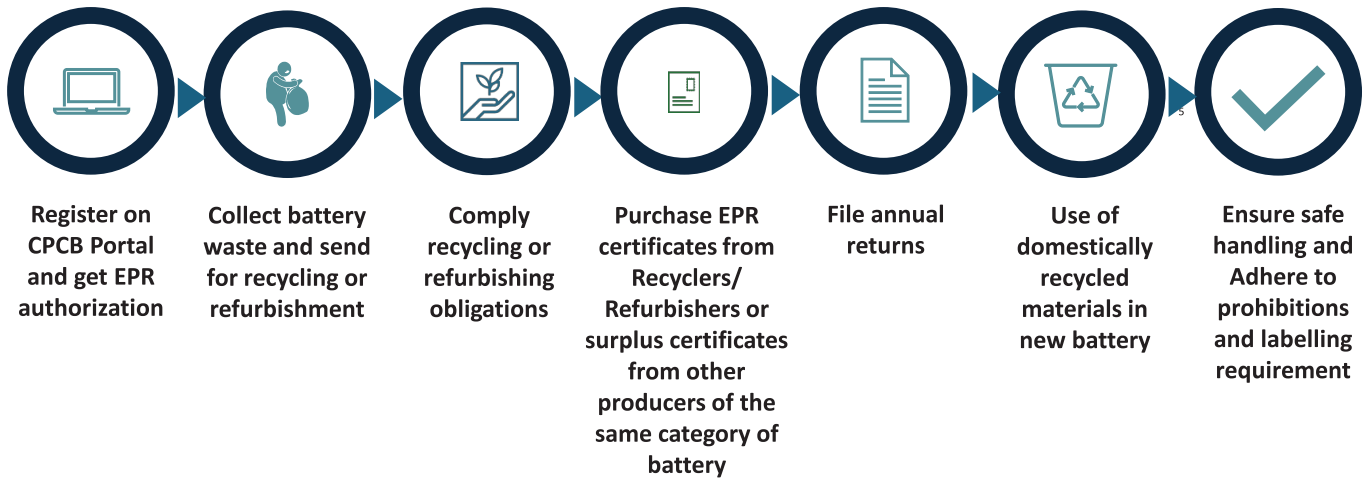
- Extended Producer Responsibility (EPR) is a policy that obligates producer (including importers) for environmentally sound management of Waste Battery, promoting a shift from linear to a circular economy.
- Recycling batteries helps recover valuable materials such as lead, nickel, lithium, cobalt, plastics etc., which can be reused in various industries.
- EPR target shall include the collection targets mentioned in the rules and 100% recycling and/or refurbishment target of EPR collection target of the respective year.
- EPR target for the Producer shall be specific to the kind of Battery (viz. Lead acid, Li-Ion, Nickel Cadmium, Zinc based Battery, etc.) within each type of Battery-portable, automotive, industrial and electric vehicle Battery.
- Producer to meet their EPR obligation through the EPR certificate made available by recycler or refurbisher. In case of non-availability of EPR certificates with recyclers or refurbishes, the Producer shall have the responsibility of collection in accordance with the allocated target.



Obligation of Stakeholders



Key Responsibilities of Producer



Minimum use of the recycled materials out of total dry weight of a Battery (in percentage) in respect of financial year

	2027-28	2028-29	2029-30	2030-31 and onwards
Portable	5%	10%	15%	20%
Electric Vehicle	5%	10%	15%	20%
Automotive	35%	35%	40%	40%
Industrial	35%	35%	40%	40%

Responsibilities of Refurbisher and Recycler

Refurbisher



Get consent from TNPCB



Register on CPCB portal with TNPCB and get EPR authorization



Carry activity in accordance with guidelines prescribed by CPCB



File quarterly returns



Total weight of waste processed shall be made available on the CPCB portal for generation of EPR certificates

Recycler



Get consent from TNPCB



Register on CPCB portal with TNPCB and get EPR authorization



Carry activity in accordance with guidelines prescribed by CPCB



File quarterly returns

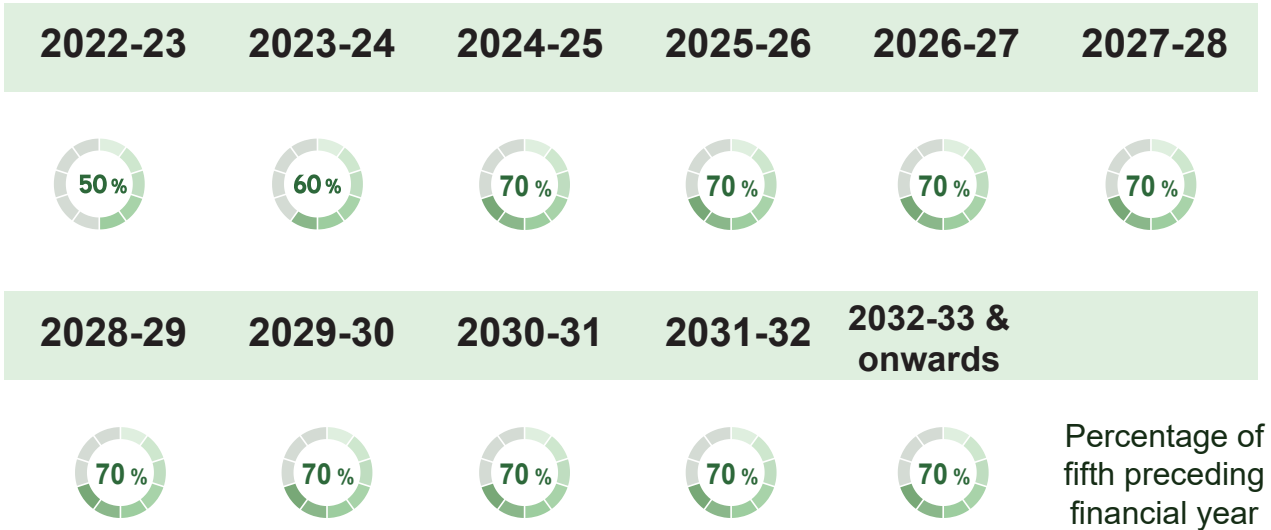


Total weight of waste processed shall be made available on the CPCB portal for generation of EPR certificates

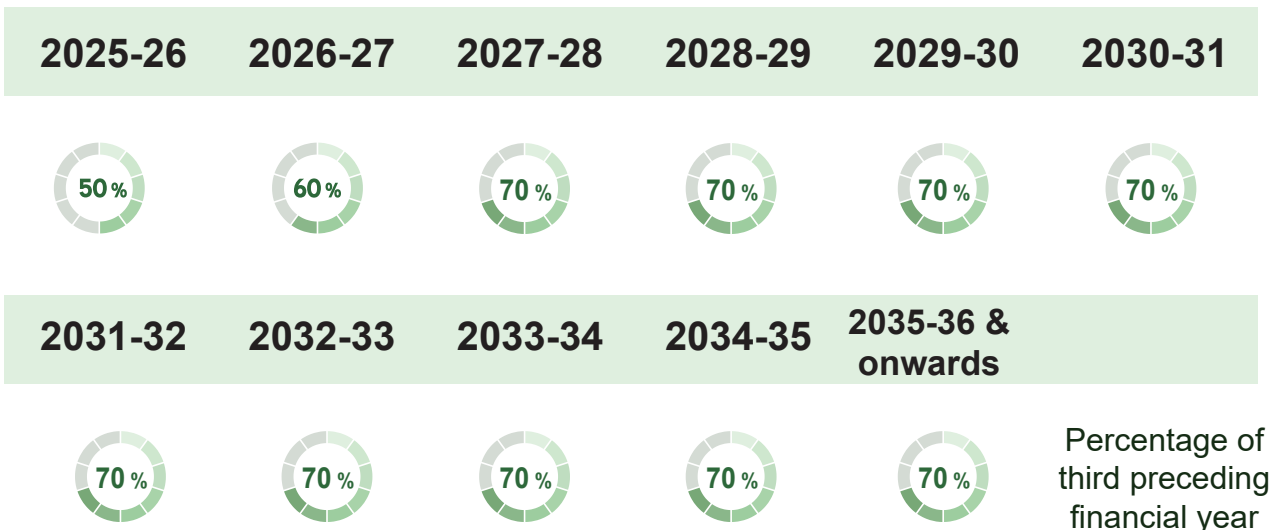
EPR Target for Producers

Waste Battery collection and refurbishment or recycling target by weight

1.a Portable Battery used in consumer electronics which are rechargeable



1.b Portable Battery except those used in consumer electronics which are rechargeable



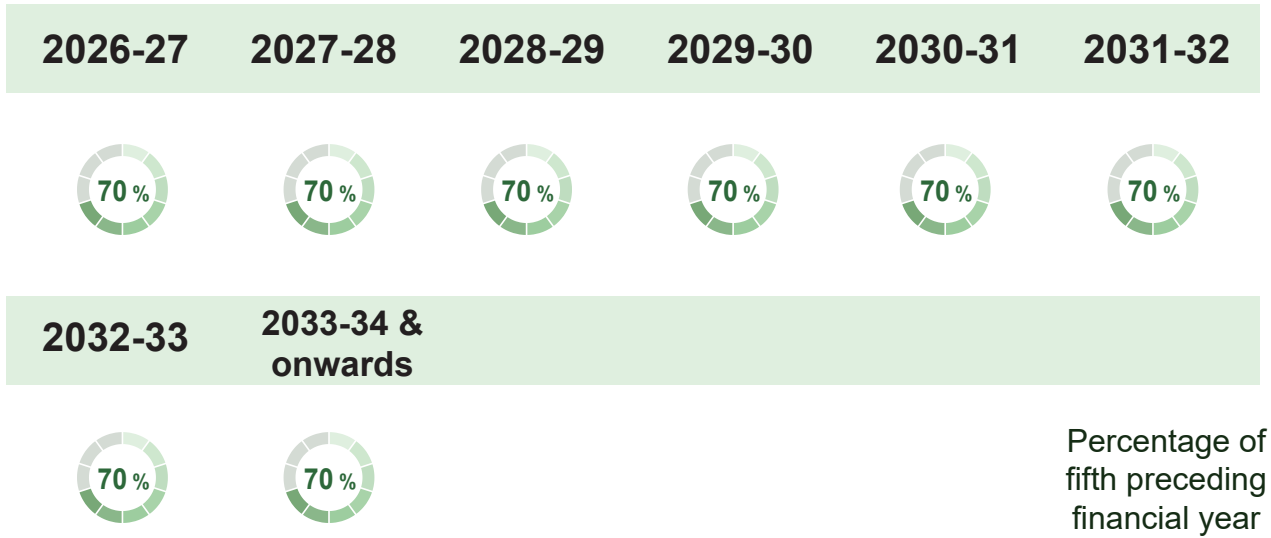
Collection of 100% Waste Battery and of 100% of refurbishment or recycling shall be mandatory by end of ten year compliance cycle (end of 10th year).

However, up to 60% of the remaining quantity of battery placed in the market during the applicable compliance cycle may be carried forward to the next compliance cycle.

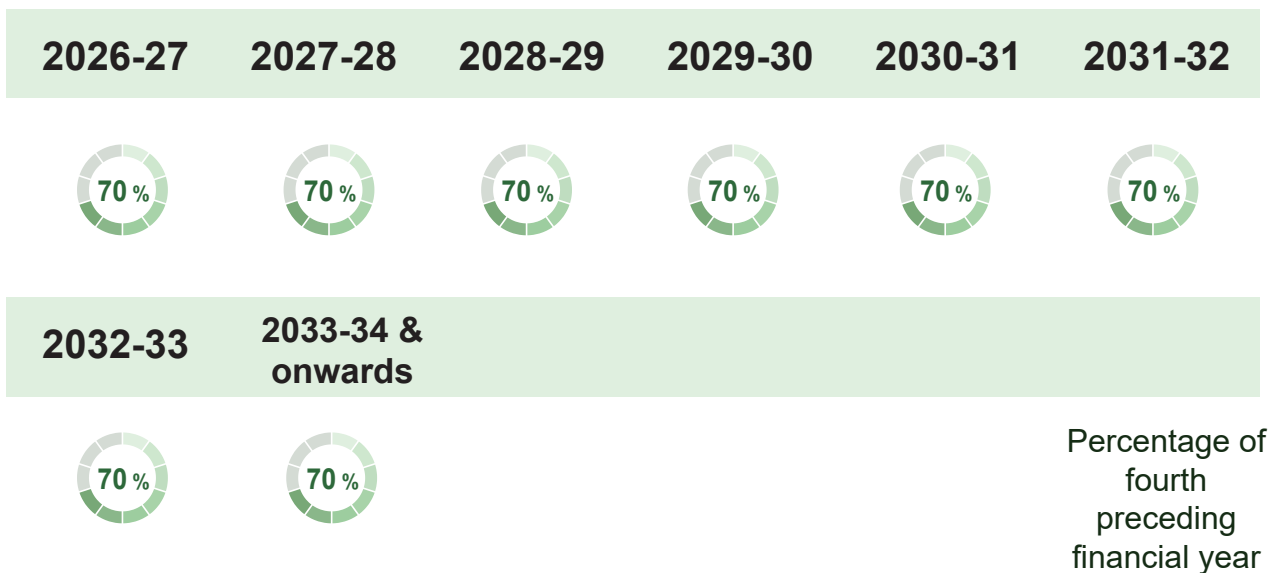
EPR Target for Producers

Waste Battery collection and refurbishment or recycling target by weight

2.a Electric Vehicles Battery of three wheelers



2.b Electric Vehicles Battery of two wheelers



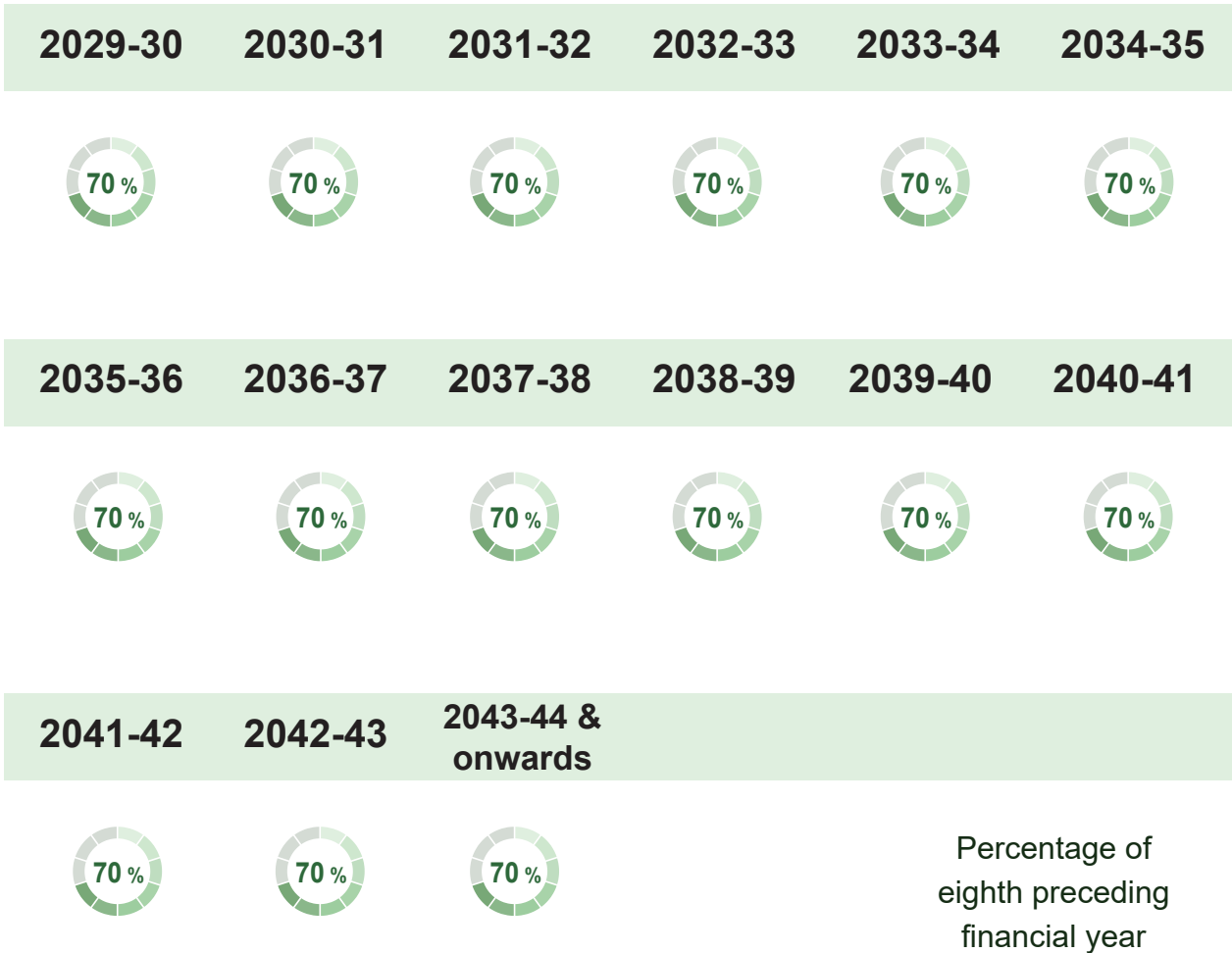
Collection of 100% Waste Battery and of 100% of refurbishment or recycling shall be mandatory by end of seven-year compliance cycle (end of 7th year).

However, up to 60% of the remaining quantity of battery placed in the market during the applicable compliance cycle may be carried forward to the next compliance cycle.

EPR Target for Producers

Waste Battery collection and refurbishment or recycling target by weight

2.c Electric Vehicles Battery comprising of four wheelers



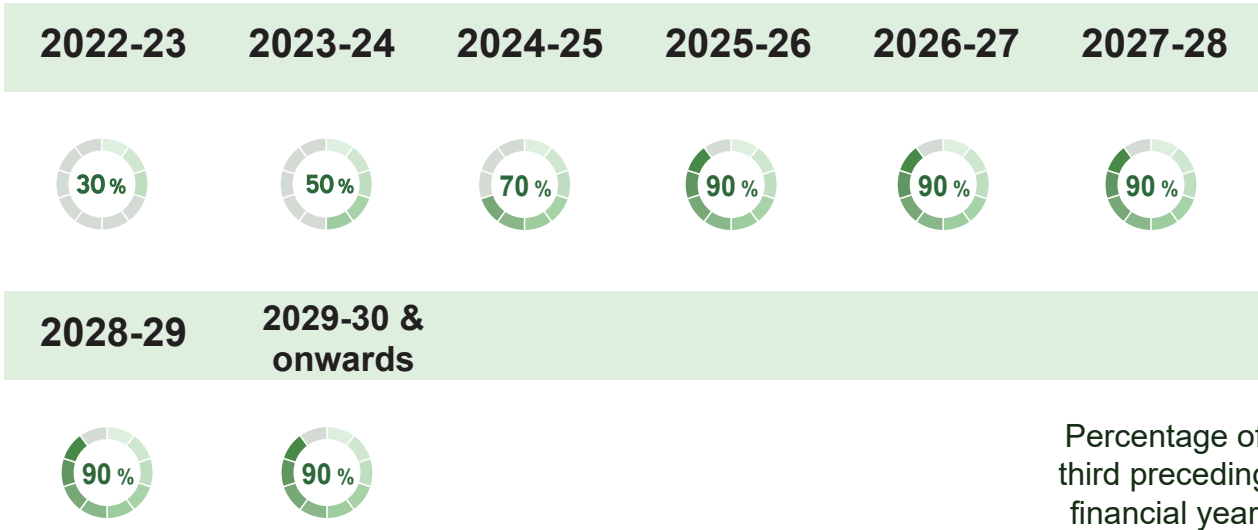
Collection of 100% Waste Battery and of 100% of refurbishment or recycling shall be mandatory by end of fourteen-year compliance cycle (end of 14th year).

However, up to 60% of the remaining quantity of battery placed in the market during the applicable compliance cycle may be carried forward to the next compliance cycle.

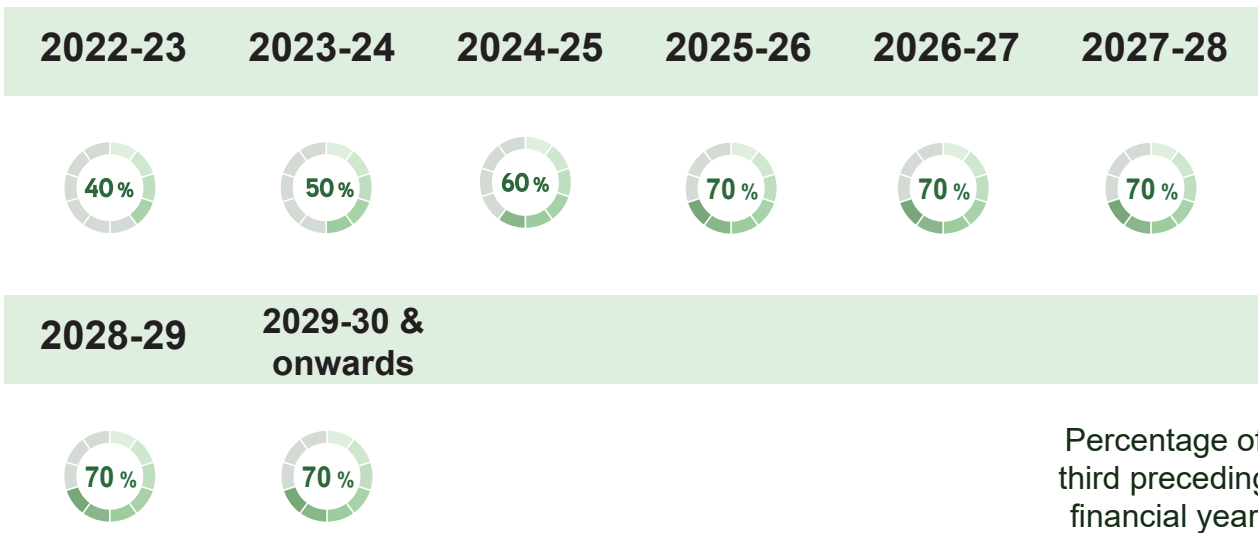
EPR Target for Producers

Waste Battery collection and refurbishment or recycling of the collection target by weight

3. Automotive Battery



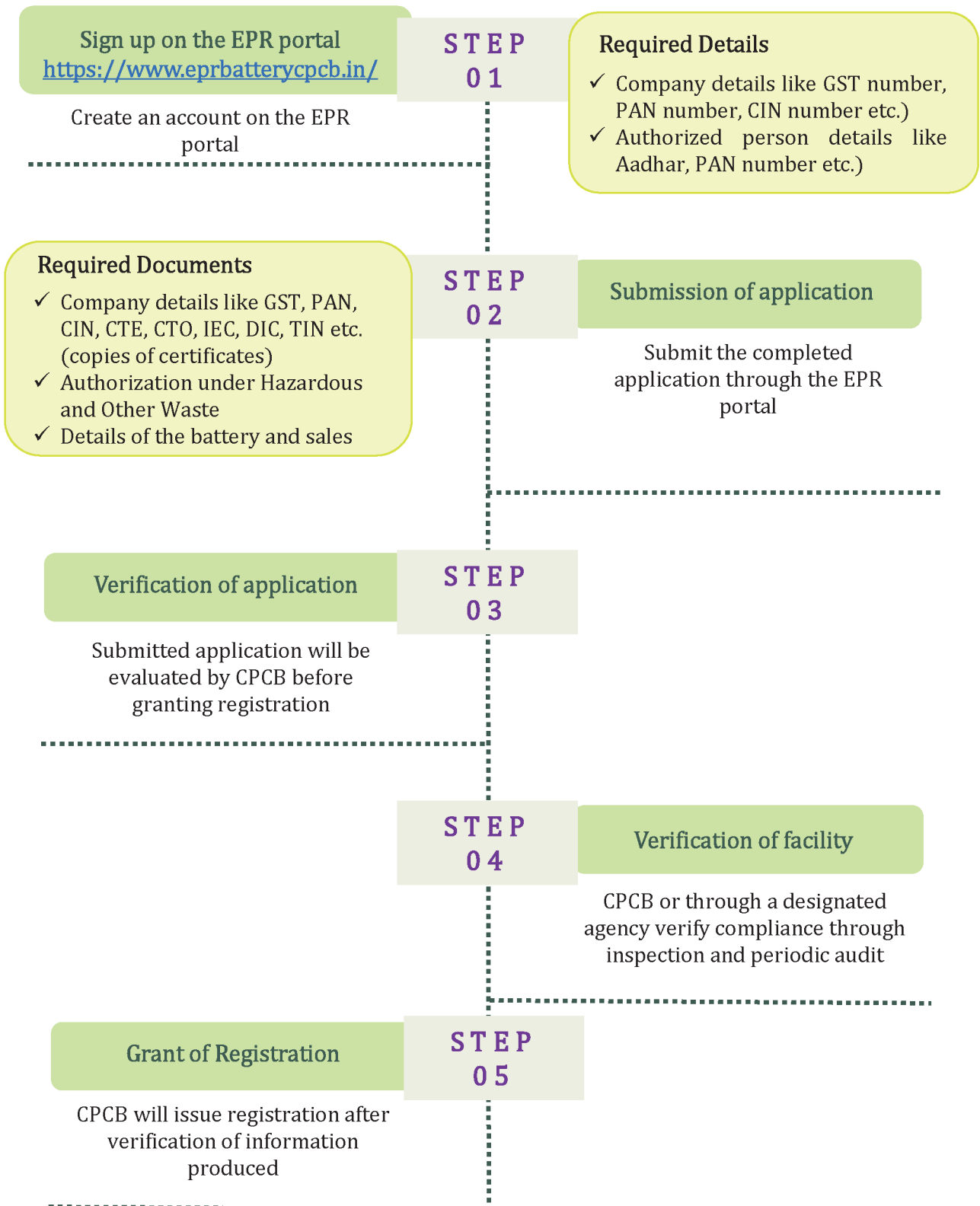
4. Industrial Battery



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).

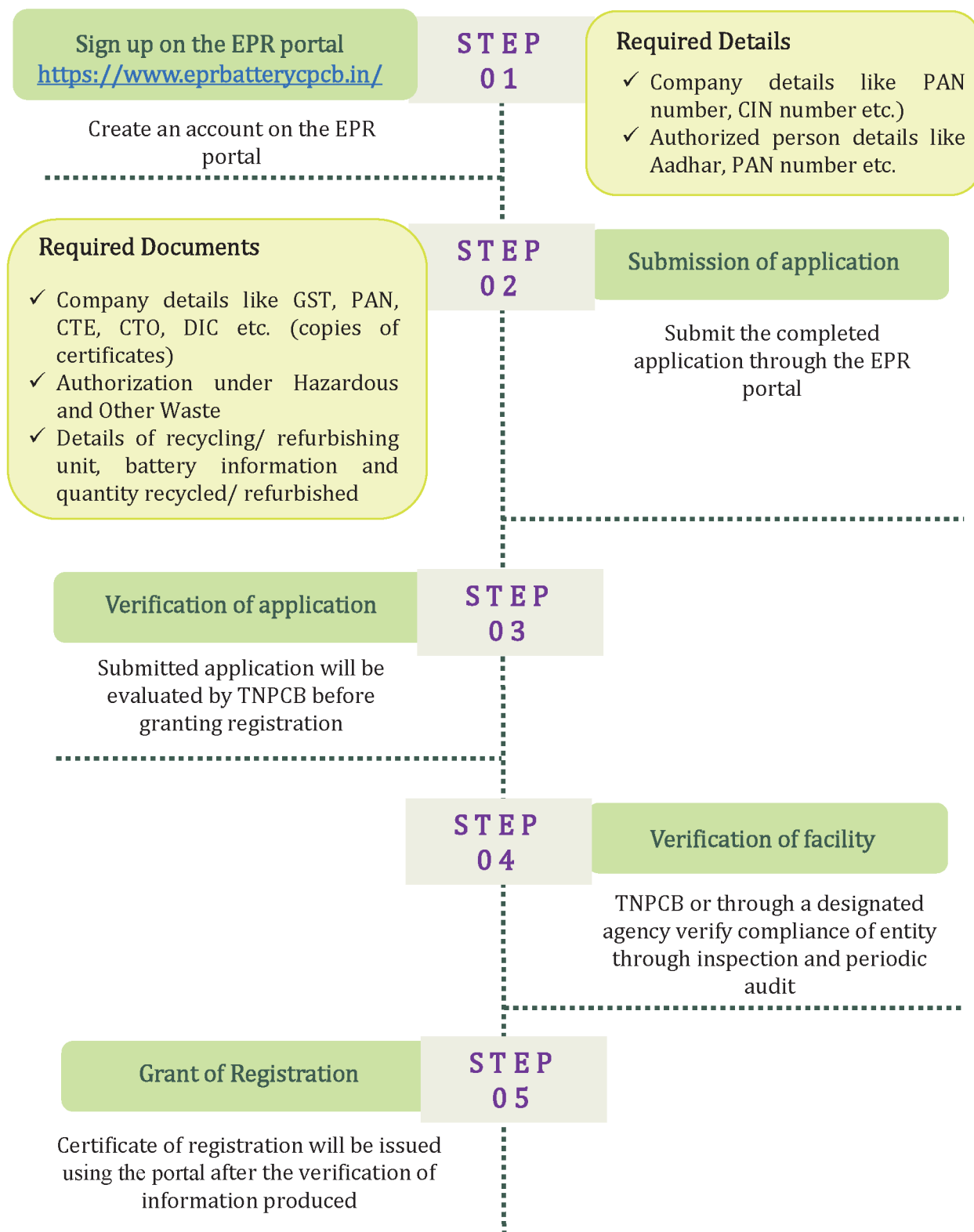
However, up to 60% of the remaining quantity of battery placed in the market during the applicable compliance cycle may be carried forward to the next compliance cycle.

Registration process for Producer



Refer EPR portal of CPCB for registration of producer
<https://www.eprbattery.cpcb.in/>

Registration process for Recycler/ Refurbisher



Refer EPR portal of CPCB for registration of recycler and refurbisher
<https://www.eprbattery-cpcb.in/>

Important Resources

1

Website of Tamil Nadu
Pollution Control Board
(Waste Management)



<https://tnpcb.gov.in/wastenew.php>

2

Website of EPR portal
for Battery Waste
Management



<https://www.eprbatterypcb.in/>

3

Battery waste
management rules 2022



<https://cpcb.nic.in/uploads/hwmd/Battery-WasteManagementRules-2022.pdf>

4

SOP for registration
of Producers



<https://www.eprbatterypcb.in/upload/adminDoc/SOP.pdf>

5

SOP for registration
of Recycler



https://www.eprbatterypcb.in/upload/adminDoc/SoP_for_recyclers.pdf



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