



Battery Pass

CONTENT GUIDANCE

QUESTION 2

For which batteries will the digital battery passport be required?



The EU Battery Regulation outlines its requirements for different battery categories.

According to Article 77(1), the battery passport will be mandatory from February 2027 for batteries placed or put into service on the EU market including:




- Electric vehicle (EV) batteries.
- Light means of transport (LMT) batteries, such as e-bikes and e-scooters.
- Industrial batteries with a capacity above 2 kWh, such as those used in industrial activities, communication infrastructure or energy storage.

Further details on how the Battery Regulation defines different batteries are shown on the back.

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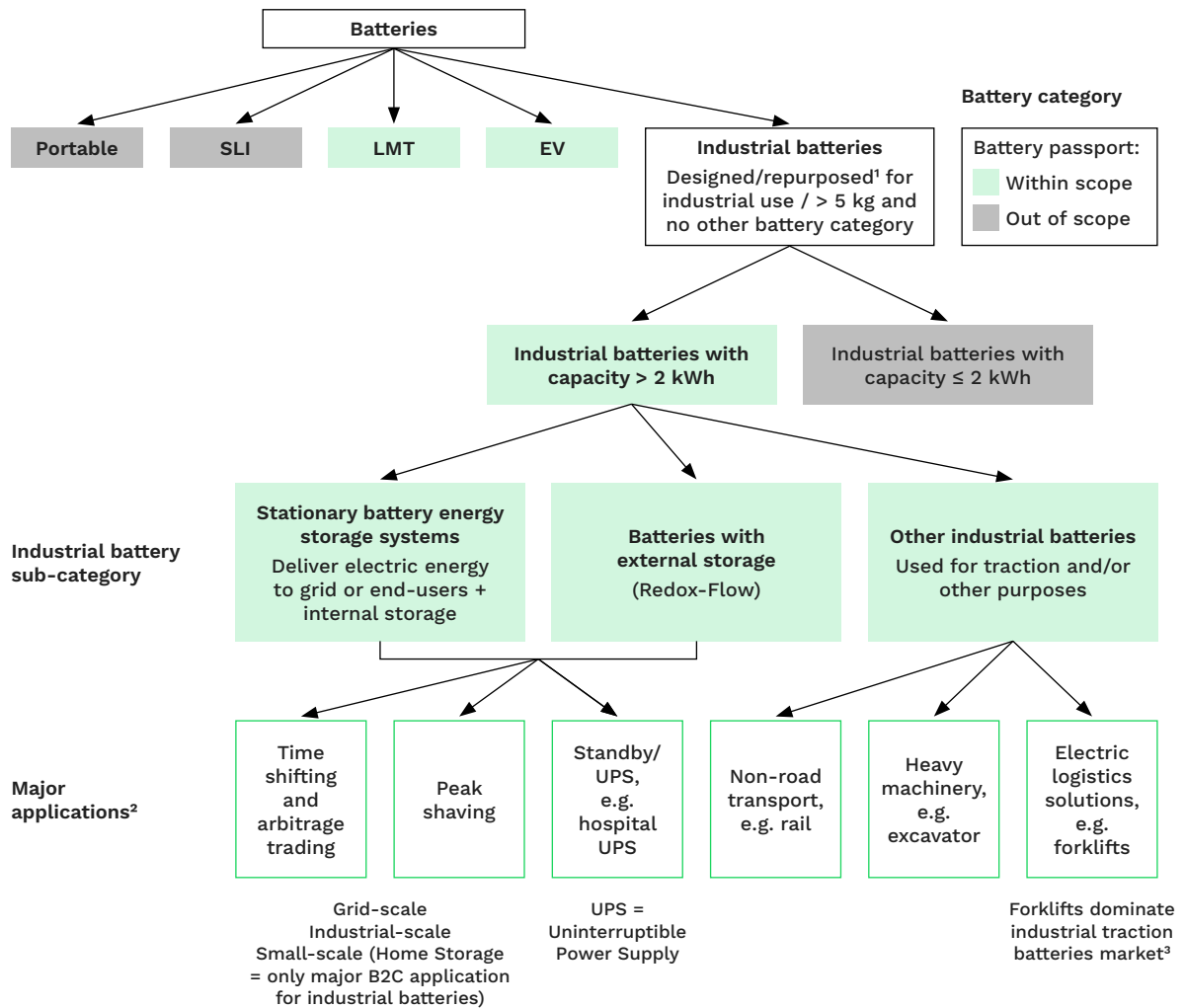
Electric vehicle, light means of transport, and industrial batteries with a capacity above 2 kWh will be in scope for the EU battery passport

Battery categories	Battery categories	Battery weight
 <p>Electric vehicle (EV) battery</p>	<p>Provide electric power for the traction to hybrid or electric vehicles</p> <ul style="list-style-type: none"> • of categories L (Regulation (EU) No 168/2013), if larger than 25 kg, or • of categories M, N or O (Regulation (EU) 2018/858) 	<p>> 25 kg (category L)</p>
 <p>Light means of transport (LMT) battery</p>	<p>Provide electric power for traction to wheeled vehicles that can be powered by the electric motor alone or by a combination of motor and human power including type-approved vehicles of category L (Regulation (EU) No 168/2013), e.g., e-bikes and e-scooters</p>	<p>≤ 25 kg</p>
 <p>Industrial battery¹</p>	<ul style="list-style-type: none"> • Designed specifically for industrial uses, or • intended for industrial uses after being subject to preparing for repurpose or repurposing, or • any battery above 5 kg that is not an LMT, EV or SLI battery • Industrial uses include (Recital 15) <ul style="list-style-type: none"> – industrial activities – communication infrastructure – agricultural activities – energy storage in private or domestic environments – generation and distribution of electric energy – traction in other transport vehicles incl. rail, waterborne, aviation or off-road machinery <p>Sub-category: Stationary battery energy storage system</p> <ul style="list-style-type: none"> • Industrial battery with internal storage • specifically designed to store and deliver electric energy from and into the grid or store and deliver electric energy to end-users, regardless of where and by whom this battery is being used 	<p>≤ 25 kg</p>

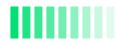
1) Only industrial batteries above 2 kWh within scope of battery passport



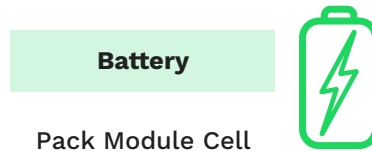
Industrial batteries are characterised in different sub-categories and a broad range of applications, with varying market conditions and processes affecting the use cases







1) A number of industrial batteries may be repurposed batteries (e.g. a former EV battery is repurposed into an industrial battery). However, repurposing used industrial batteries is a less likely scenario.
 2) Market conditions and processes (e.g. servicing processes) can vary among industrial batteries applications, resulting in an impact on the applicability of the overall use case assessment.
 3) cf. Global Market Insights Report (2023)



Overview of the hierarchy of battery definitions



Major general characteristics	Grouping of batteries based on production
 <p style="text-align: center;">Battery category Discern different use categories (e.g., EV, industrial...)</p>	<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 80%;"> <p style="text-align: center;">Battery model</p> </div> <p>All batches and individual batteries within a model share the same technical characteristics</p>
 <p style="text-align: center;">Battery chemistry Active materials in anode, cathode, and electrolyte</p>	<div style="display: flex; justify-content: space-around; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 2px 5px; font-size: small;">Battery batch</div> <div style="border: 1px solid black; padding: 2px 5px; font-size: small;">Battery batch</div> <div style="border: 1px solid black; padding: 2px 5px; font-size: small;">Battery batch</div> </div> <p>Consistently manufactured group of batteries within a model, identifiable by a batch identification code</p>
 <p style="text-align: center;">Internal vs. external storage Energy stored within the battery or in one or more external devices (e.g., redox flow)</p>	<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 80%;"> <p style="text-align: center; font-size: small;">Particular / individual batteries</p> </div> <p>Singular battery, identifiable by product serial number with an individual use phase</p>
 <p style="text-align: center;">Rechargeable vs non-rechargeable (Not) designed to be electrically recharged</p>	

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* under subcontract

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