

Energy Storage in the EU: State-of-the-Art Report

EU LI-ION PRODUCTION

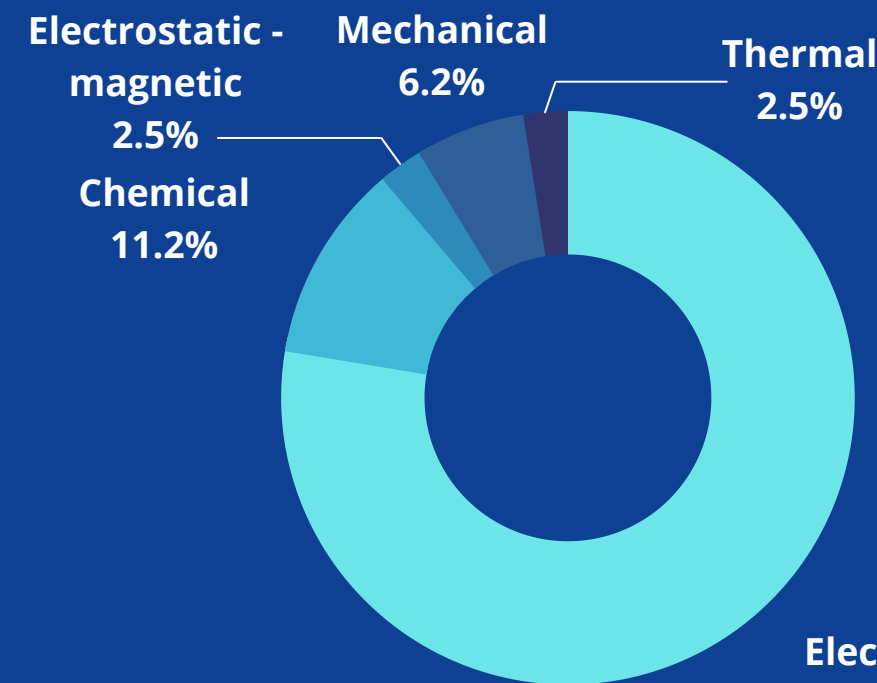


STATE OF THE ART

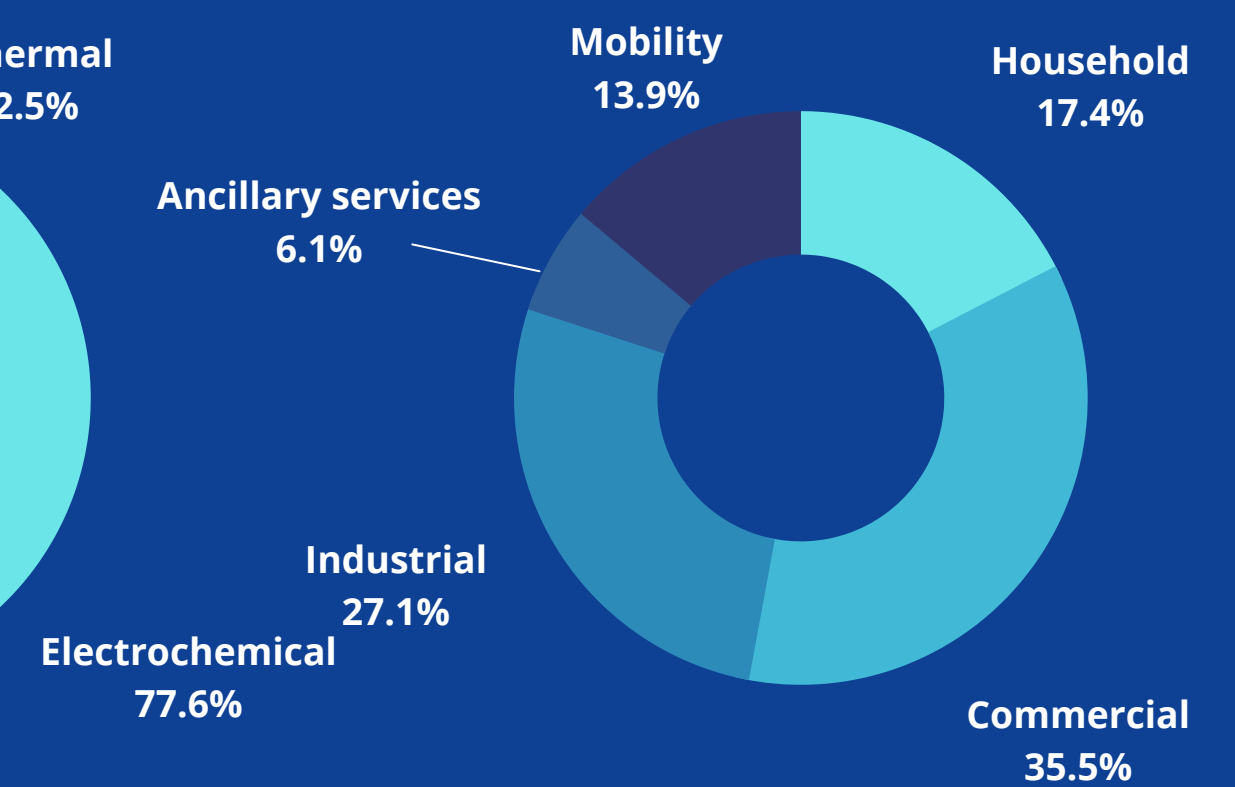
- It is estimated that the total European battery capacity production will reach 207 GWh by 2023
- Local design and production of energy storage is desired to create jobs and decrease the carbon footprint
- Currently 30% of the global cell assembly of technologically sophisticated applications happens in the EU. A variety of EU policy stimulates expansion into local design, manufacturing and recycling
- The map shows current success of attracting investors in production facilities

PRELIMINARY RESEARCH ON THE SME LANDSCAPE IN NWE

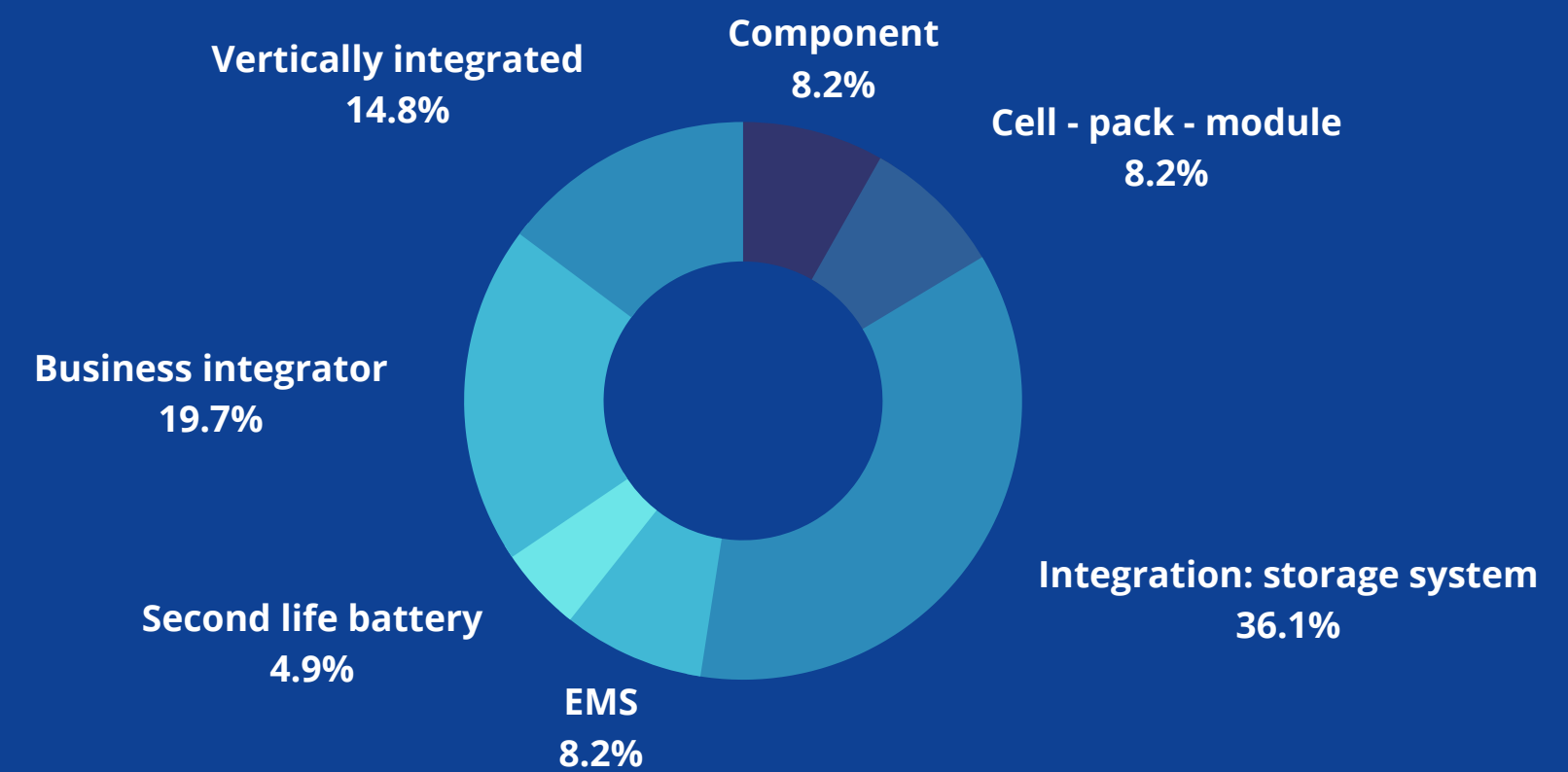
TECHNOLOGY



TARGET MARKET

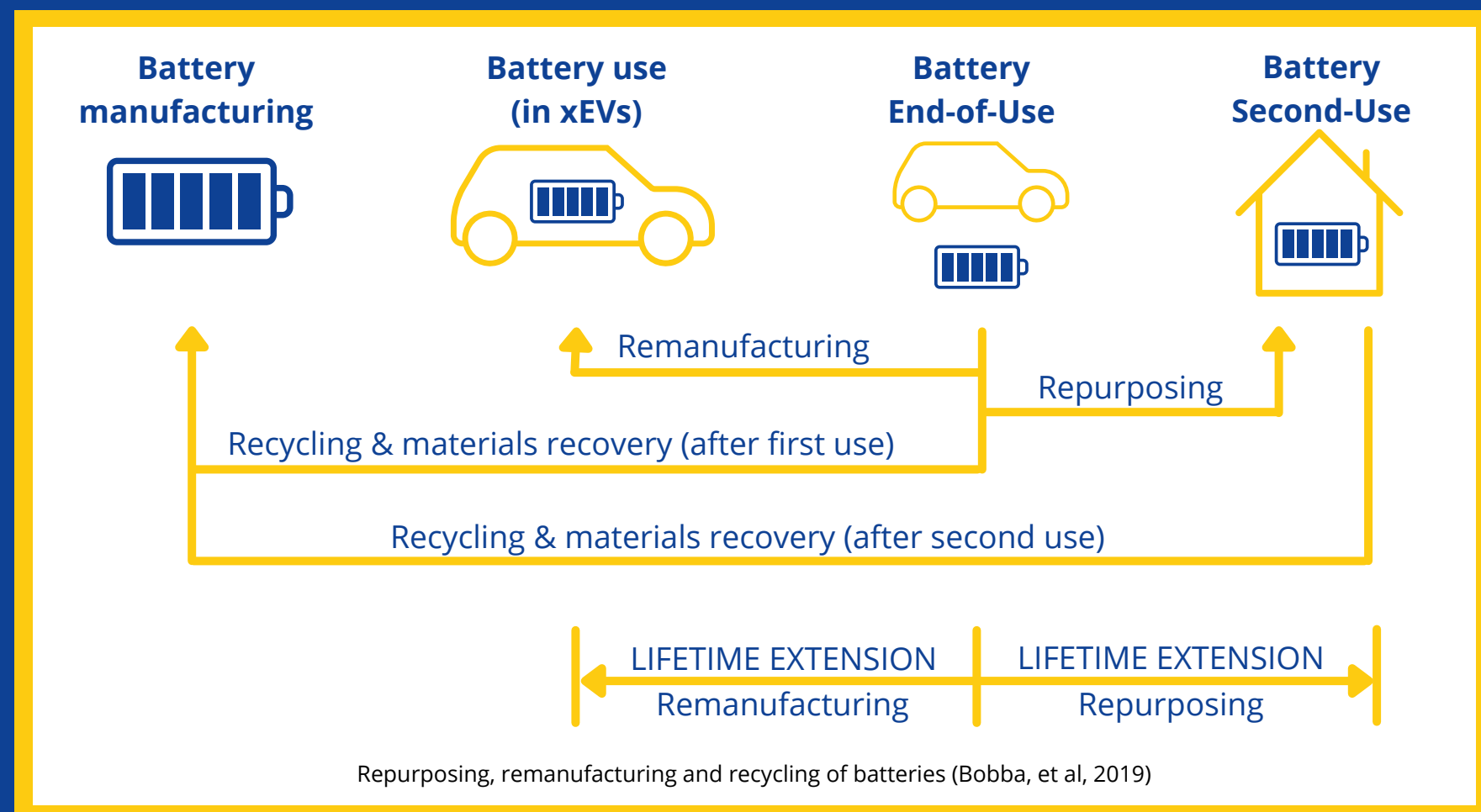


VALUE CHAIN



RECYCLING

As part of the approach of the **European Battery Alliance (EBA)**, launched in 2017, the EU is developing **full value chains** to include a focus on recycling batteries. Their goal is to decrease dependence on materials from other countries and achieve both **circularity** and more **sustainable production**. Outlined below are the different types of recycling:



TRENDS

1. R&D improves electrochemical storage
2. Research in Sodium-ion cells
3. Growing use of Li-ion batteries combined with PV's
4. Electrification of light duty commercial vehicles
5. Electrification of short-range public transport

OPPORTUNITIES

1. New selling points for energy management systems of home storage applications
2. Subsidies and policies for carbon neutral fuels
3. Repurposing enables affordable second life batteries
4. Job opportunities in energy storage value chain