FACTSHEET

BATTERY MARKET

ADVANCED RECHARGEABLE AND LITHIUM BATTERIES

A STRONG EU BATTERY INDUSTRY

1

According to the European Battery Alliance, the European battery market is estimated at €250 billion from 2025 onwards.

2

The European Commission put batteries at the core of its 2050 target of a climate-neutral Europe. World-leading environmental and social standards will provide for the right framework to ensure a vital but sustainable battery industry.

3

While most of the raw material sourcing, and cell/battery manufacturing takes place outside of Europe, European companies own a significant portion of the intellectual property and technological know-how in the battery industry.

4

The European battery industry has managed to develop a strong presence in the battery pack assembly and waste treatment sector.

5

Solid funding opportunities as well as a highly skilled workforce add on to a strong industry environment for the further development of the European battery value chain.

RECHARGE

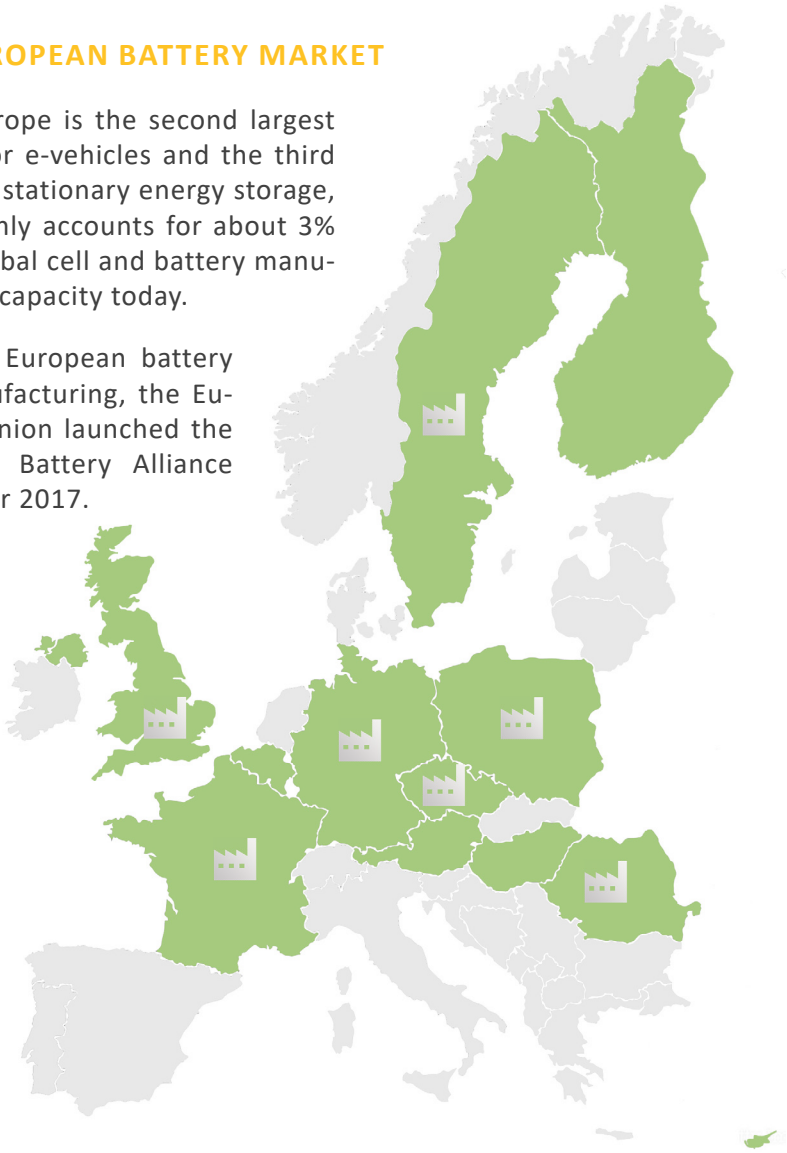
ADVANCED RECHARGEABLE & LITHIUM BATTERIES ASSOCIATION

Advanced rechargeable batteries are key to achieving the goals for a climate-neutral society and play a pivotal role in an increasingly electrified world: They are a main enabler for the transition towards low-emission mobility and decarbonized energy generation, and provide power to a number of everyday applications, such as smartphones, tablets, power tools and robots.

THE EUROPEAN BATTERY MARKET

While Europe is the second largest market for e-vehicles and the third largest in stationary energy storage, Europe only accounts for about 3% of the global cell and battery manufacturing capacity today.

To boost European battery cell manufacturing, the European Union launched the European Battery Alliance in October 2017.



With the aim of making “Europe a global leader in sustainable battery production and use”, industry partners, R&I as well as Member States joined forces to create a sustainable, competitive battery manufacturing value chain in Europe.

It is estimated that about 10 to 20 large-scale battery cell production facilities are required to meet the future European battery demand.

BATTERY MARKET TRENDS AND APPLICATIONS

MAIN APPLICATIONS

Continuous improvements in rechargeable battery technology have shown to enable the creation of new products or applications. For example, the strong improvement of the life duration and the autonomy of batteries used in e-mobility can further the deployment of other autonomous equipment like robots for personal care or gardening.

While the expansion of batteries for electric mobility is increasing very rapidly, other markets like batteries for portable equipment are already very developed.

Market studies show that the following three areas are going to increase significantly in the years to come:

Communication

Modern society relies on cordless electric energy sources such as rechargeable batteries to satisfy our needs for barrierless, mobile communication.

Low-emission Mobility

In the changing world of individual and mass transportation, the recent progresses made in rechargeable batteries performance open opportunities for transport with lower emissions and increased environmental performances.

Stationary Energy Storage Systems

Rechargeable batteries are a flexible storage solution in renewables-based energy production. They ensure electricity supply in low production periods and help optimize the electric system by balancing the electricity distribution. What's more, rechargeable batteries are an affordable and sustainable solution for off-grid energy generation in remote areas.

TRENDS

Supported by legislative ambitions to fight climate change and reduce greenhouse gas (GHG) emissions, battery-powered cars are expected to increase from today 1% of all vehicles globally to more than 20% by 2030[1].

Contrary to traditional internal combustion engines, battery electric vehicles (BEV) do not emit any GHG, nitrogen oxides or particulates during their use, and generate significantly less noise. This is especially important for traffic-intense areas such as cities, and the health and environment conditions there.

But e-mobility is not limited to road transport. Amid efforts to decarbonize mobility, airplane operators and shipping fleets started to explore the vast possibilities of electric power.

The market for stationary energy storage systems is expected to increase too, from 36 GWh in 2015 to 65 GWh in 2025[2]. To support this development, the battery industry is investing in continuous improvements, striving for the best smoothing functions along with ancillary network services, such as frequency regulation or primary power regulation.

According to the Union Of Concerned Scientists, BEVs generate half the emissions of the average comparable gasoline car, even when potential CO_2 pollution from battery manufacturing is accounted for. BEVs make up for their generally higher manufacturing emissions within six to eighteen months of driving - and continue to outperform gasoline cars until the end of their lives. To further decrease battery-related CO_2 emissions, RECHARGE and its members advocate a greater contribution of renewables to the energy mix.

[1] McKinsey & Company, 2018
[2] Avicenne, 2016

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