

Can cathode materials increase the energy density of lithium-ion batteries?

The CATMAT project is researching next-generation cathode materials that could significantly increase the energy density of lithium-ion batteries. There is an urgent need to increase the range of electric vehicles (EVs) by developing battery materials that can store more charge at higher voltages, achieving a higher energy density.

How big will lithium-ion batteries be in 2022?

But a 2022 analysis by the McKinsey Battery Insights team projects that the entire lithium-ion (Li-ion) battery chain, from mining through recycling, could grow by over 30 percent annually from 2022 to 2030, when it would reach a value of more than \$400 billion and a market size of 4.7 TWh. 1

What is the global market for lithium-ion batteries?

The global market for Lithium-ion batteries is expanding rapidly. We take a closer look at new value chain solutions that can help meet the growing demand.

What is the Faraday Institution funding for a battery research project?

Two projects led by the University of Oxford have received a major funding boost from the Faraday Institution, the UK's flagship institute for electrochemical energy storage research. The funding is part of a £19 million investment to support key battery research projects that have the potential to deliver significant beneficial impact for the UK.

Should Europe develop a competitive lithium-ion battery?

To avoid relying on other countries to meet its energy transition goals, Europe is faced with the challenge of developing and producing competitive lithium-ion (Li-ion) batteries. While a promising option, Li-ion technology stills needs further development in order for mass production to be economically viable and environmentally friendly.

Why do we need lithium-ion batteries?

There is a need to develop batteries which supersede the practical capabilities of lithium-ion batteries to enable the electrification of applications including aerospace and heavier electric vehicles.

With \$110 million from the Clean Energy Finance Corporation (CEFC) and \$120 million from Export Finance Australia (EFA), the government's investment will help battery minerals producer Lontown Resources secure the final stages of construction of the company's Kathleen Valley Lithium Project.

All global regions are working on increasing production of battery-grade lithium, and wider developments within the electric vehicle and renewable energy markets are also adding to the demand for lithium. Lithium ...

General Motors and TSX-listed Lithium Americas Corp. announced a joint venture on Oct. 16 to develop the Thacker Pass lithium carbonate project in Nevada, with GM investing US\$625 million for a 38 per cent stake in the project. Lithium Americas will contribute US\$387 million for 62 per cent ownership and will manage the project. This investment ...

The CATMAT project is researching next-generation cathode materials that could significantly increase the energy density of lithium-ion batteries. There is an urgent need to increase the range of electric vehicles ...

The United States of America is the third largest manufacturer of the lithium-ion batteries in the world. It occupies this coveted position after China and Poland. Being the world leader in the manufacturing of lithium-ion ...

The state government has offered 450 acres of land in Butibori for JSW Group's ambitious lithium-ion battery project, which is set to create over 5,000 jobs and involve a massive investment of ...

LiSTAR is tracking the technical requirements for Li-S batteries in strategic markets with near term opportunities such as aerospace applications. The project anticipates that ...

Formerly known as the Export Finance and Insurance Corporation, Export Finance Australia will now be providing finance to Liontown's Kathleen Valley Lithium project in Western Australia after US giant Albemarle ...

Lithium front and center. Lithium supply is a key part of an initiative with funding aiming to support "developing enough battery-grade lithium to supply approximately 2 million EVs annually," with major lithium miner Albemarle receiving \$150 million, and lithium project developer Piedmont Lithium receiving \$141.1 million.

The award of Major Project Status for our flagship Finnis Lithium Project is another major milestone for both the company and the Federal Government, as we strive to enter the construction phase in 2021, subject to a ...

Global GHG emissions of select major mining companies FY 2024; Global lithium-ion battery recycling market value 2023-2033 ... "Value of lithium-ion battery projects in the pipeline worldwide as ...

Web: <https://agro-heger.eu>