MARKET INTELLIGENCE REPORT

COBRA

KEY TECHNICAL, POLICY AND MARKET DEVELOPMENTS INFLUENCING THE ELECTRIC VEHICLE BATTERY LANDSCAPE

CURATED BY
MAARTEN BUYSSE
OLA OLUGBAYILA
PHILIPP ZENG
MARCOS IERIDES &
AMY MCCREADY

bax

EU BATTERY REGULATIONS

JULY 2024

INTRODUCTION

The European Union (EU) is steadfast in its commitment to becoming a climate-neutral economy with net-zero greenhouse gas emissions by 2050, a core objective of the European Green Deal and in line with the Paris Agreement. To reinforce this commitment, the European Climate Law mandates a reduction of net greenhouse gas emissions by at least 55% by 2030. Meeting these ambitious targets requires a rapid shift from fossil fuels to renewable energy sources, with batteries playing a pivotal role in this transition, particularly within the transport and energy sectors.

The EU's strategic pivot towards electrification aims not only to meet decarbonisation targets but also to enhance energy security by reducing dependency on foreign fuels. This transition is set to reshape the European battery value chain, driving innovation, investment, and strategic autonomy in energy technology. This market intelligence report discusses the EU's battery strategy and policies, outlining the ambitions and challenges at the European level. Additionally, the report features **insights from battery policy experts at BEPA (Batteries European Partnership Association)**, providing a comprehensive overview of the current policy landscape, implementation challenges from an industrial perspective, and future prospects.

DEVELOPED BY

Bax
cobra@baxcompany.com
Phone: +34 93 476 04 44
www.baxcompany.com

Olamilekan Olugbayila
Innovation Consultant
o.olugbayila@baxcompany.com

Maarten Buysse
Innovation Consultant
m.buysse@baxcompany.com

Philipp Zeng
Intern
P.zeng@baxcompany.com

Marcos Ierides
Senior Innovation Consultant
m.ierides@baxcompany.com

Amy McCready
Communications Consultant
a.mccready@baxcompany.com

IN COLLABORATION WITH

Fabrice Stassin
Secretary General
BEPA

Wouter Ijzermans
Executive Director
BEPA

BEPA
Batteries European Partnership Association

OVERVIEW

Driven by the EU's long-term vision for a climate-neutral economy by 2050, electrification is set to be a primary technological pathway to achieve this goal [1]. Batteries have been identified as an enabler for this transition due to their vital role in clean mobility applications and power grid stabilisation [2]. The projected increase in battery demand over the coming years, with a potential European market value of up to EUR 250 billion annually from 2025 onwards [3], has prompted the EU Commission to recognise batteries as a strategic value chain. Consequently, policies have been developed to boost investments and innovation, establishing the EU as a global, sustainable, and competitive industrial base.

The EU Commission's strategy to bolster the battery industry involves a coordinated approach addressing multiple interconnected issues. This strategic approach encompasses developments in areas such as energy storage, raw materials security, trade and investments, as well as jobs and skills [4]. Key policies within this context include the European Green Deal, a Europe fit for the digital age, and a stronger Europe in the world. Additionally, strategic initiatives like the Strategic Action Plan on Batteries, the New Circular Economy Action Plan, battery regulation, and the End-of-Life Vehicle Regulation further support the industry's growth. The figure below shows a timeline for EU public policies and strategies relevant to the battery industry.

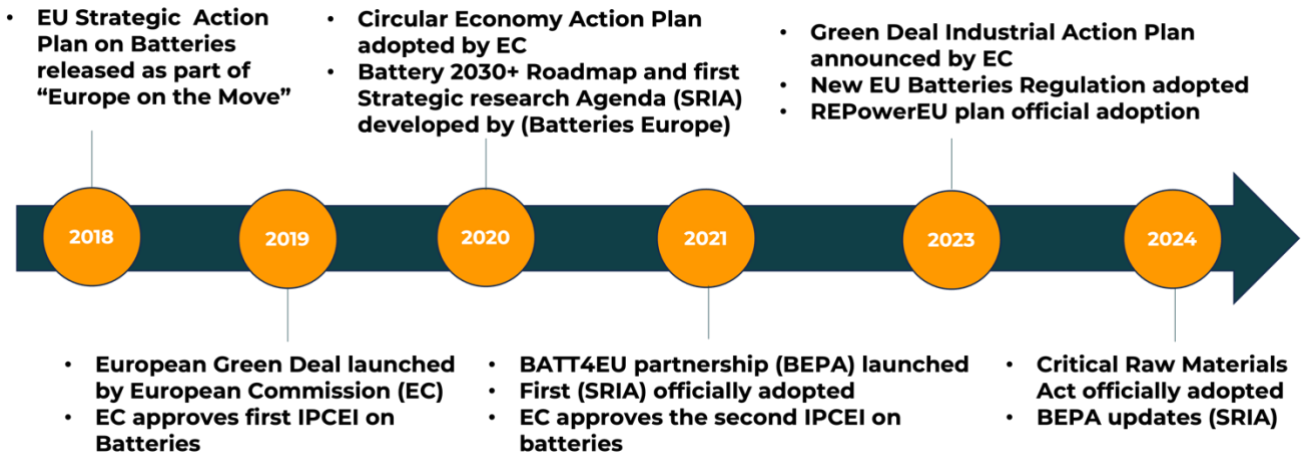


Figure 1: Timeline of relevant EU public policies and strategies relevant to battery industry

The objective of this report is to provide an overview of the EU's strategy for battery development by analysing key battery policies, their framework conditions and technological objectives to understand their role in shaping the European battery value chain.

GLOBAL PERSPECTIVE (BATTERY INDUSTRY POLICY SUPPORT)

The battery industry has enjoyed growth in recent years partly due to increased governmental support. The global EV battery demand has been concentrated in a few countries, with China, the EU, and the US dominating the market [5].

At the **US federal level**, the battery industry has been given a boost through the Inflation Reduction Act (IRA) of 2022 [6], where priority is given to securing raw material supply, improving processing capacity and restoring global competitiveness in battery value chains. Tax credits of up to 10 years are provided through a clause in the legislation "Advanced Manufacturing Production Credit" for the domestic manufacturing of battery cells and modules [7]. The figure below shows European Battery Alliance (EBA)'s estimation of the impact of the IRA tax credits on the competitiveness of EU's battery industry and how it has driven costs down for US domestic battery production to match China. The impact assessed also shows battery costs in Europe at almost 40% higher when compared with competing regions partly due to higher price of electricity needed for production within the EU [8].

Impact of the US Inflation Reduction Act (IRA) on EU battery industry competitiveness *(Source: EBA)*

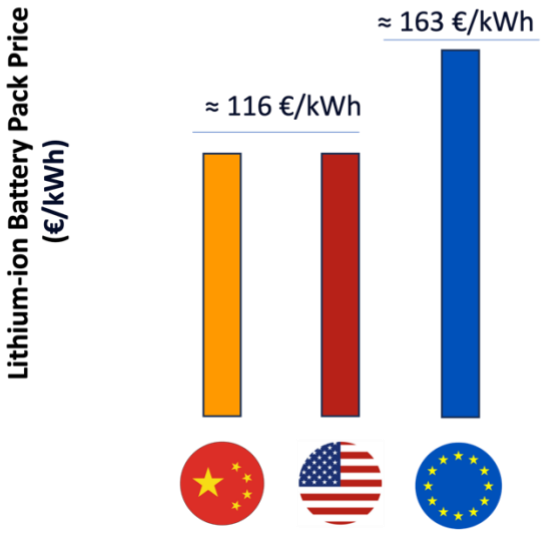


Figure 2: Assessed impact of the US IRA on EU battery industry competitiveness

In China, as the EV market matures, national subsidies are decreasing, and regional targets and policies are becoming more influential [5]. Until recently, China's policies have been more focused on demand-side, treating battery technology as a core element in its New Energy Vehicle Strategy for the huge domestic market [9]. Now their policy landscape is gradually shifting towards increasing supply-side measures via efforts focused on battery circularity with China's 2020 New Electric Vehicle battery recycling regulation coming into effect, building on their 2018 Extended Producer Responsibility (EPR) regulation [10], [11].

The table below shows an overview of some public battery strategies for the US, EU, and China, and their main objectives.

Country	Official Strategies	Main Objectives
EU	EU Action plan on batteries (2018); Batteries Europe: SRA (2020); Green Deal Industrial Plan (2023); EU Batteries Regulation (2023); Update of SRIA - BEPA(2024); Critical Raw Materials Act;	Establishment of competitive and sustainable value chain in EU; Become leading supplier for sustainable battery technologies
US	National Blueprint for Lithium Batteries 2021 -2030; DOE's Actions to Bolster Domestic Supply Chain of Advanced Batteries (2021); Inflation Reduction Act (2022)	Competitive US Value chain; Supply chain, R&D leadership Independence from competitors, especially China
China	Made in China 2025; Industrial Development Plan for EV 2021 – 2035; National Key R&D Program	Domestic Autonomy development and production of EVs and Batteries in China; Further capacity expansions in value chain

Table 1: Global battery strategies (US, EU, and China) and their main objectives

EU BATTERY STRATEGY & KEY AREAS OF INTERVENTION

Europe's approach to remain globally competitive in the battery sector involves multiple key areas of intervention, including a focus on enhancing capabilities in materials development, innovative and sustainable battery manufacturing through the EU's twin green and digital agenda. There's also an emphasis on reduced dependency on critical raw materials via promotion of higher levels of circularity and the establishment of a resilient supply chain. In this section, we analyse some strategic initiatives, key intervention areas, and policies relevant to EU battery development.

Goals by 2030:

- Up to 90% of EU's battery annual demand to be met domestically, with manufacturing capacity aims of at least 550 GWh in 2030 (Net-Zero Industry Act)
- Clear benchmarks for domestic capacities along strategic raw material supply chain and diversified EU supply
- Minimum collection and materials recovery targets for end-of-life batteries (Battery Regulation)
- Establish the world's best battery innovation ecosystem (BATT4EU)

Goals by 2035:

- All new cars and vans registered in Europe to be Zero-Emission (Fit for 55 Package)

Figure 3: Overview of some of the main EU public policy goals with targets for 2030 & 2035

Key policies, their objectives, relevance and impact to battery development

The **European Green Deal** aims to transition Europe into a climate neutral continent by 2050 and decouple its economic growth from resource use **[1]**. Aligned with the Paris agreement, it aims to achieve a rapid shift from fossil fuel usage to renewable energy sources and through the electrification of mobility and energy, with batteries as a key enabling technology.

The projected increase in demand for batteries in the coming years, for both mobility and storage applications, has created urgency for the EU battery industry to ramp up battery cell production capacity to meet this demand. However, the EU's current high dependence on third countries for cell materials supply is seen as a significant risk for securing a stable supply chain.

The **European Green Deal** aims to transition Europe into a climate neutral continent by 2050 and decouple its economic growth from resource use **[1]**. Aligned with the Paris agreement, it aims to achieve a rapid shift from fossil fuel usage to renewable energy sources and through the electrification of mobility and energy, with batteries as a key enabling technology. The Green Deal pushes for innovation and competitiveness within the EU battery industry through initiatives that includes strategic investments and funding towards developing climate-neutral technologies and improving battery performance and sustainability **[12]**.

The **Strategic Action Plan for Batteries** published by the EC in 2018, supports the development of an interconnected and competitive battery value chain **[13]**. Specifically, the plan aims to secure access to battery raw materials from resource-rich third countries and through battery recycling, support the scale up of battery cell production, foster a competitive European battery value chain, strengthen technological capacities through research and innovation activities, develop a highly skilled workforce across all parts of the value chain, and promote an environmentally sustainable battery manufacturing industry.

Certain legislations apply directly to the battery industry, including the 2006 Batteries Directive, which applies to all battery types regardless of cell chemistry, size, or design. The updated regulation adopted in July 2023 – the **New Batteries regulation -** sets objectives for minimum sustainability standards and extended producer responsibilities for batteries placed on the EU single market. It introduces circular economy principles such as minimum recycled content and sets guidelines for due diligence and information traceability across the battery lifespan through the creation of the digital battery passport **[14]**. Specific targets with their respective timelines are highlighted in the table below. A detailed description of this regulation and its assessed impact on battery value chain stakeholders is documented in a previous COBRA market intelligence report **[15]**.

Targets	Details
Minimum Recycled Content by 2030	12% for cobalt, 4% for lithium, 4% for nickel, 85% for lead
Recycling Efficiency and Material Recovery by 2030	80% recycling target by weight for lead-acid batteries, 70% for lithium-ion batteries; Material recovery targets: 95% for cobalt, copper, lead, and nickel, 70% for lithium
Collection Rates for Portable Batteries	45% by the end of 2023, 63% by the end of 2027, 73% by the end of 2030
Collection Rates for LMT Batteries	51% by the end of 2028, 61% by the end of 2031

Table 2: EU Battery Regulation (specific targets & timeline)

The **Circular Economy Action Plan** (March 2020) is also highly relevant to the EU battery industry, aiming to improve circularity measures and integrate secondary raw materials from spent batteries through recycling. The plan identifies batteries and vehicles as part of seven key product value chains **[16]**. A significant aspect includes sustainability and transparency requirements for batteries, encompassing the carbon footprint of battery production, ethical sourcing of raw materials, and promoting reuse, repurposing, and recycling.

Certain policies serve as incentives for the development of e-mobility, and consequently - battery solutions. The **Regulation (2019/631)** on CO2 emission performance standards for cars and vans, encourages the purchase of Zero and low-emissions vehicles (ZLEV) with a super credits system **[17]**. Additionally, within the Fit for 55 legislative package, aiming for a minimum 55% reduction in greenhouse gas emissions by 2030 and climate neutrality by 2050, the **Alternative Fuels Infrastructure Regulation (AFIR)** mandates the deployment of electric recharging infrastructure **[18]**. This includes facilities for road transport, shore-side electricity for ships, and stationary aircraft, aimed at facilitating rapid electrification of the transport sector and boosting demand for electric mobility and battery development.

Other public policies relevant to the battery industry respond to global initiatives. For example, the EU's **Green Deal Industrial Plan**, developed in February 2023 as a response to the US's Inflation Reduction Act (IRA), aims to create a supportive environment to enhance manufacturing capacity for net-zero technologies in the EU. This includes the **Net-Zero Industry Act (NZIA)** to simplify regulatory frameworks and improve investment conditions for European industry **[19]**.

The **Critical Raw Materials Act (CRMA)** aims to reduce the EU's dependency on CRMs from non-EU countries by promoting a secure and diversified supply chain **[20]**. The policy supports the extraction and processing of CRMs within Europe by streamlining permit procedures and overcoming regulatory barriers. It sets specific benchmarks, including targets for annual consumption: at least 10% from locally extracted minerals, 40% from elements processed within the EU, and 25% from recycled materials, with no more than 65% from a single third country **[20]**. The EC has also negotiated a Critical Raw materials agreement with the US government to recognise the EU as a Free trade Agreement partner under the IRA **[21]**.

Policy	Main Objective	Key Measures
European Green Deal	Transition Europe into a climate-neutral continent by 2050 and decouple economic growth from resource use	• Rapid shift from fossil fuels to renewable energy sources • Electrification of mobility and energy
Strategic Action Plan for Batteries	Develop an interconnected and competitive battery value chain	• Secure access to battery raw materials • Scale-up battery cell production • Strengthen technological capacities through R&D • Develop a skilled workforce • Promote sustainable battery manufacturing
Battery Regulation	Sets minimum sustainability standards and extended producer responsibilities for placing batteries on the EU single market	• Carbon footprint declarations • Minimum targets for material recovery • Restrictions of substances to be used for cell production • Data gathering for battery passport
Circular Economy Plan	Improve circularity measures and integrate secondary raw materials from spent batteries through recycling	• Include batteries and vehicles in key product value chains • Sustainability and transparency requirements • Facilitate reuse, repurposing, and recycling
Alternative Fuels Infrastructure Regulation	Mandate deployment of electric recharging infrastructure for various transport sectors	• Electric recharging facilities for road transport, shore-side electricity for ships, and stationary aircraft
Net-Zero Industry Act	Simplify the regulatory framework and stimulate better investment conditions for the European net-zero technology industry	• Create a supportive environment for manufacturing net-zero technologies • Simplify regulatory processes
Critical Raw Materials Act	Reduce EU dependency on critical raw materials (CRMs) from non-EU countries towards a secure and diversified supply chain	• Streamline permit procedures for CRM extraction and processing • Sets Targets for recycling and reuse • EU-US Critical Raw Materials Agreement

Table 3: Relevant EU policies for battery industry including main objectives and key measures

Challenges and Opportunities – EU Battery Strategy & Policies

Conversation with Fabrice Stassin (Secretary General) and Wouter Ijzermans (Executive Director)

Battery European Partnership Association (BEPA) within the BATT4EU Partnership.

What are some challenges faced by the industrial sector in implementing EU battery policies?

We have identified four main challenge areas that we call the 4S: Scope, Scale, Speed, and Sustainability.

Scope: Industrial players struggle to develop the entire value chain simultaneously. Managing both upstream and downstream parts of the value chain at the right moment and appropriate scale can be tricky. The value chain is only as strong as its weakest link, making synchronised development within time constraints a significant challenge.

Scale: Transitioning to an all-electric vehicle future demands massive scale, increasing the need for batteries and chemicals. Financing this scale is a major challenge, especially for European companies. Securing Capex can be difficult, and some investment hesitations can lead to losing market position, similar to being thrown off a treadmill if not running fast enough.

Speed: Regulatory requirements can cause significant delays in establishing licenses to operate or grow. In Europe, environmental impact assessments can take up to a few years, while in other places like North America, they can take a maximum of a year. Speed is crucial not only for new projects but also for scaling up technologies. These technologies must meet existing specifications to be implemented quickly and effectively. Speed is not just about obtaining licenses to operate or grow but aligning the roadmaps of different parts of the value chain to stay ahead of market demands.

Sustainability: While everyone wants sustainability, few are willing to pay for it. Economic pressures can lead to purchasing less sustainable products. There is a tension between speed and sustainability and innovation can help bridge this gap, but companies risk scaling up products that may not comply with future regulations. Being highly sustainable ensures compliance but comes at a higher cost, requiring a balance between environmental and financial sustainability. Uncertainty about future compliance can delay investments. A prime example is the CO2 footprint of battery (materials) production. Any move towards not allowing industry to rely on power purchase agreements (PPAs) to calculate CO2 footprint could delay, suspend, or stop some investments in parts of the EU and redirect them to other parts of the EU (or beyond). All of this impacts the local communities that were willing to attract and support investments.

How does the EU policy strategy for batteries compare with other global policies, and what is its impact on the battery ecosystem?

From a macro perspective, the EU battery regulation and the ban on the sale of internal combustion engines (ICEs) cars from 2035 have certainly stimulated investments in the European battery chain. These elements signal a market driven by sustainability. However, there are still uncertainties regarding, for instance, the secondary legislation of the battery regulation, potentially delaying or

recalibrating investments. Globally, there are various financial incentives, such as the Inflation Reduction Act in the USA, which provide clarity and financial support to boost the battery market. Additionally, outside of Europe, other value chains can sometimes be easier to navigate and often come with significant financial incentives, making the investment landscape more attractive.

How does the EU policy strategy impact the global competitiveness and resilience of the European battery industry?

For now, it seems that the EU will be placing tariffs on EVs produced in China and exported to Europe as a way to account for discrepancies. However, we analyse the appropriateness of such an action, we should not lose focus on building and improving our local battery ecosystem to strengthen our competitiveness. Using trade tariffs is considered by many as a non-viable long-term solution since competition through innovation will continue. Unless Europe builds a strong industrial policy during this time, we risk falling behind once the tariffs are lifted. In this respect, we are very much looking forward to the EU Commission coming up with a Strategic Action Plan on Batteries, building on the last one dating back to 2018.

What is the role and strength of different European partnerships, including BEPA, in supporting the battery ecosystem?

The main task of the BEPA partnership is to focus on how innovation can help tackle the 4S challenges we referred to earlier. Ensuring that technologies can be scaled up quickly in the right scope and speed while meeting all sustainability criteria is crucial. As a partnership, we can build both the technology and knowledge bases that are essential. Additionally, we might consider a fifth S: developing the Skills of European people. This is essential for scaling up and ensuring we have the right skills in place. While this is already partially addressed by the Battery Academy initiative from the Net-Zero Industry Act, advancing knowledge within partnerships where research and industry converge is important to keep the battery ecosystem competitive and resilient.

What is an ideal policy scenario that helps the EU to achieve all targets and positions Europe strongly in the global market?

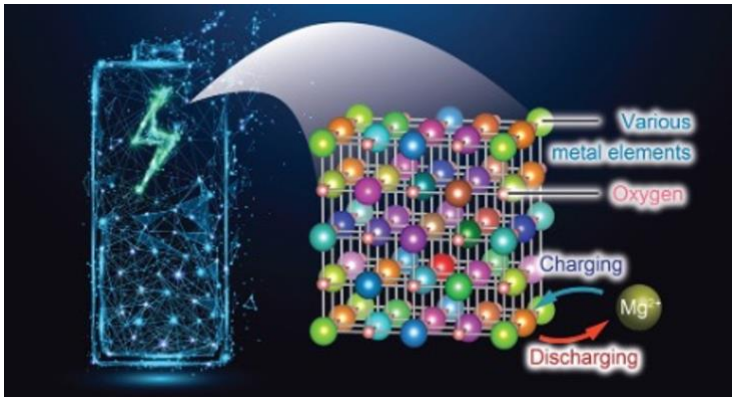
An ideal policy scenario would include an updated Strategic Action Plan on Batteries that fits the current landscape and addresses all dimensions of innovation and scaling up in Europe. We need to ensure continuous innovation while being well-positioned to scale up our technologies. A balanced approach, where innovation is driven by both technology push and market pull, is crucial. Future partnerships need more collaborative actions and related funding to transform research outputs into advanced Technology Readiness Levels without being stranded mid-development. This will reduce the growing complexity of the battery landscape and the higher costs associated with moving to higher TRLs. An ideal future allows us to compete globally on technology, sustainability, and circularity, and not just on cost.

BEPA is the private side association of the Batteries European Partnership under Horizon Europe gathering more than 140 stakeholders of the European battery community who strive towards a competitive European industrial battery value chain for stationary applications and e-mobility

TECHNICAL DEVELOPMENTS

NOVEL CATHODE MATERIAL FOR RECHARGEABLE MAGNESIUM BATTERIES (RMBs)

Researchers at Tohoku University have developed a novel cathode material for rechargeable magnesium batteries (RMBs), leveraging an enhanced rock-salt structure. This innovation promises efficient performance at low temperatures, marking a significant leap in battery technology. The new material, created by mixing seven metallic elements, improves magnesium diffusion and operates efficiently at just 90°C, unlike traditional high-temperature methods. This development addresses key limitations in RMBs and offers a more sustainable alternative to lithium-ion batteries. Applications include grid storage, electric vehicles, and portable electronics, supporting the global transition to renewable energy.



READ MORE

SAMSUNG SDI UNVEILS SBB 1.5 WITH 37% HIGHER ENERGY DENSITY

Samsung SDI Co. introduced the upgraded Samsung Battery Box (SBB) 1.5 at the Intersolar Europe trade fair in Germany, aiming to bolster its market position in renewable energy storage. The new SBB 1.5 features a 37% increase in energy density, reaching a total capacity of 5.26 megawatt-hours, thanks to enhanced direct injection technology that improves safety by injecting extinguishing agents directly into affected cell modules. They announced a two-track strategy starting in 2026, combining high-energy-density nickel-based cells with lower-cost lithium iron phosphate cells, and supplying high-output cells for uninterruptible power supplies to meet data centre demand.

READ MORE

SK ON DEVELOPS ADVANCED POLYMER ELECTROLYTES FOR LITHIUM METAL BATTERIES

SK On, in collaboration with the late Professor John B. Goodenough's research team from the University of Texas, has successfully developed a polymer electrolyte for lithium metal batteries that operates at room temperature. This new "single ion conducting polymer electrolyte" (SIPE) significantly enhances solid-state battery performance. The SIPE boasts improved ionic conductivity and lithium-ion transference number, enabling batteries to maintain 77% discharge capacity during high-rate charging and discharging, and preventing dendrite formation. This breakthrough is a step towards the commercialisation of all-solid-state batteries.

READ MORE

MARKET DEVELOPMENTS

BASF AND WHW RECYCLING PARTNERSHIP FOR BATTERY RECYLING

BASF, a key player in battery materials and recycling, has partnered with WHW Recycling GmbH to process cathode and anode waste, enhancing the sustainability of battery cell production in Europe. WHW Recycling, specialising in electrode foil recycling, will process and separate waste materials from battery cell production at its new plants in Baudenbach, Germany. This innovative approach allows for the recovery of valuable raw materials, such as aluminium from cathode foils and copper and graphite from anode foils, which BASF will further refine for reuse in battery production.

READ MORE

ECHION RAISES $35 MILLION TO SCALE NIOBIUM BATTERY MATERIALS

British battery materials firm Echion has raised $35 million to scale up its niobium-based anode materials, aimed at enhancing electric vehicle batteries and other applications. The Series B funding round was led by Volta Energy Technologies, with additional investments from CBMM and Cambridge Enterprise Ventures. Niobium, known for its stability and strength, enables super-fast charging and extended battery lifespan. Echion's partnerships with major automakers and cell manufacturers highlight the material's potential. A new manufacturing facility, in partnership with CBMM, will soon produce 2,000 metric tons of niobium anode materials annually.

READ MORE

UNIGRID RAISES $12 MILLION TO ADVANCE SODIUM-ION BATTERY PRODUCTION

San Diego-based UNIGRID Battery has closed an oversubscribed $12 million Series A funding round, co-led by Transition VC and Ritz Venture Capital, with new investor Union Square Ventures and existing investor Foothill Ventures. This investment will accelerate UNIGRID's production of advanced sodium-ion batteries to meet large-scale orders in electric mobility and stationary storage markets. UNIGRID's proprietary alloy anode technology doubles the volumetric energy density of sodium-ion batteries, surpassing lithium iron phosphate (LFP) batteries, while using only abundant materials.

READ MORE

POLICY DEVELOPMENTS

IEA PUBLISHES NEW REPORT FOR WORLD ENERGY INVESTMENT

The International Energy Agency's (IEA) World Energy Investment report for 2023 offers a comprehensive update on global energy investment trends and an initial outlook for 2024. The report benchmarks capital flows in the energy sector, highlighting persistent cost and interest rate pressures, new industrial strategies for clean energy manufacturing, and supportive policies for clean energy spending. It provides expanded analysis on investment sources, including development finance institutions' roles in emerging economies, and compares clean energy investments with fossil fuel trends. Additionally, it introduces a new regional section covering ten major economies and regions, assessing efforts needed to meet COP28 goals, such as transitioning from fossil fuels, tripling renewable capacity, and doubling energy efficiency improvements by 2030.

READ MORE

The COBRA project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement 875568.

REFERENCES

[1] "COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS The European Green Deal." 2019. [Online]. Available: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN

[2] "BATT4EU SRIA European Partnership," 2024.

[3] "Building a European battery industry," *European Battery Alliance*. [Online]. Available: https://www.eba250.com/

[4] "COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF THE REGIONS AND THE EUROPEAN INVESTMENT BANK A Clean Planet for all A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy." 2018. [Online]. Available: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018DC0773

[5] I. Energy Agency, "World Energy Outlook Special Report Batteries and Secure Energy Transitions." [Online]. Available: www.iea.org

[6] "One year on, Biden's IRA has changed the battery landscape," *Benchmark Source*. Aug. 2023. [Online]. Available: https://source.benchmarkminerals.com/article/one-year-on-the-ira-has-changed-the-battery-landscape-in-the-us

[7] "Domestic EV battery production is surging ahead, thanks to small clause in Inflation Reduction Act - CBS News." Jul. 2023. [Online]. Available: https://www.cbsnews.com/news/electric-car-batteries-inflation-reduction-act-us-manufacturing/

[8] "EBA Discussion Paper for the 7 th High-Level Meeting of the European Battery Alliance Fostering the global leadership of the European battery industry in the face of the Inflation Reduction Act and other recent challenges." [Online]. Available: www.innoenergy.com;andwww.eba250.com2https://eur-lex.europa.eu/resource.html?uri=cellar:0e8b694e-59b5-11e8-ab41-01aa75ed71a1.0003.02/DOC_3&format=PDF

[9] "Benchmarking International Battery Policies."

[10] "* Latest Market News Argus Media." Jan. 2020. [Online]. Available: https://www.argusmedia.com/en/news-and-insights/latest-market-news/2045403-china-launches-nev-battery-recycling-regulations

[11] "China makes policy to promote waste battery recycle industry." 2021. [Online]. Available: https://evertiq.com/news/51087

[12] "Investments in the sustainability transition: leveraging green industrial policy against emerging constraints," *European Environment Agency*. [Online]. Available: https://www.eea.europa.eu/publications/investments-

into-the-sustainability-transition/investments-in-the-sustainability-transition

[13] "COMMITTEE AND THE COMMITTEE OF THE REGIONS EUROPE ON THE MOVE Sustainable Mobility for Europe: safe, connected and clean." [Online]. Available: http://www.innoenergy.com/

[14] "Batteries Regulation Brief Overview – BATT4EU." [Online]. Available: https://bepassociation.eu/batteries-regulation-brief-overview/

[15] BAX, "COBRA MARKET INTELLIGENCE REPORT." Accessed: Jul. 10, 2024. [Online]. Available: https://projectcobra.eu/wp-content/uploads/2022/05/Market-Intelligence-Report-May-2022.pdf

[16] "Circular economy action plan - European Commission." [Online]. Available: https://environment.ec.europa.eu/strategy/circular-economy-action-plan_en

[17] "CO_2 emission performance standards for cars and vans - European Commission." [Online]. Available: https://climate.ec.europa.eu/eu-action/transport/road-transport-reducing-co2-emissions-vehicles/co2-emission-performance-standards-cars-and-vans_en

[18] "Alternative Fuels Infrastructure - European Commission." [Online]. Available: https://transport.ec.europa.eu/transport-themes/clean-transport/alternative-fuels-sustainable-mobility-europe/alternative-fuels-infrastructure_en

[19] "Net-Zero Industry Act - European Commission." [Online]. Available: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan/net-zero-industry-act_en

[20] "Critical Raw Materials Act - European Commission." [Online]. Available: https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials/critical-raw-materials-act_en

[21] "EU-US Critical Minerals Agreement," *European Commission - European Commission*. [Online]. Available: https://ec.europa.eu/commission/presscorner/detail/en/IP_23_3214

BECOME A SPONSOR

Support us in powering our Market Intelligence Reports!

We'd love to continue delivering valuable market intelligence reports on the battery industry. With the COBRA project soon coming to an end, new sponsorship opportunities are now available.

By becoming a sponsor, you'll gain exposure to COBRA's community of 2,000+ battery enthusiasts as well as 10,000+ users on evmarketreports.com, representing 3,000+ companies and governments.

If you're working in the battery field and share our enthusiasm for advancing battery technology, please contact **cobra@baxcompany.com** for more information.

bax