



January 9, 2024

Joint News Release

BASF and Stena Recycling partner in recycling of electric vehicle batteries in Europe

- Cooperation between Stena Recycling and BASF allows the parties to leverage their complementary footprints and capabilities to enhance both parties' individual offerings to their respective European OEM customers
- Stena Recycling will collect, assess, and pre-treat end-of-life batteries and battery production scrap to produce black mass in its battery recycling facility in Halmstad, Sweden
- BASF will further process and refine black mass in its battery recycling prototype metal refinery in Schwarzheide, Germany

Ludwigshafen, Germany, and Gothenburg, Sweden – BASF, a global battery materials producer and battery recycler, and Stena Recycling, one of Europe's leading recycling companies, offering comprehensive solutions in recycling and circular services, have entered into a black mass purchase agreement. This agreement is part of a broader collaboration envisaged by BASF and Stena Recycling with the goal of setting up a battery recycling value chain for the European electric vehicle battery market.

The focus of the co-operation will be on developing improved black mass production processes to achieve high recovery rates for metals such as lithium, nickel, and cobalt to support closed loop solutions for the European electric vehicle battery market. Collection, assessment, and pre-treatment of end-of-life lithium-ion batteries, followed by black mass production are the first steps in the battery recycling process. Black mass is produced by mechanical treatment of end-of-life lithium-ion batteries and battery production scrap. In a second step, valuable metals, such as lithium, nickel, cobalt and manganese, in the black mass can be chemically recovered. Following the collection of end-of-life lithium-ion batteries and battery production scrap, and the production of black mass by Stena Recycling in Halmstad, the black mass will be further processed in BASF's prototype metal refinery in Schwarzheide. Stena Recycling and BASF aim to transfer such a model into BASF's planned commercial scale battery recycling metal refinery in Europe.

"The electrification of society has only just begun, and we want to boost a circular approach

to battery production. Cooperation between industry actors will be essential for a successful green transition. With this agreement in place, Stena Recycling strengthens its position as one of the leading recycling partners in Europe, to both battery manufacturers and the vehicle industry," says Marcus Martinsson, Product Area Manager Batteries at Stena Recycling Group.

The use of recycled metals in the production of new batteries reduces a battery's carbon footprint significantly. Battery producers and electric vehicle manufacturers in Europe can choose from a range of services. Under this collaboration, Stena Recycling will be responsible for collection of end-of-life lithium-ion batteries and battery production scrap, dismantling and discharging, as well as the black mass production. BASF will recover valuable metals from black mass and can produce new cathode active materials for new lithium-ion batteries.

"By entering into a co-operation with Stena Recycling, we are strengthening BASF's ability to offer a broadened battery collection network with a strong partner in the Scandinavian countries so that we can expand our offer for individual and closed loop solutions to battery producers and electric vehicle manufacturers in Europe," said Dr. Daniel Schönfelder, President of BASF's Catalysts division, who is also responsible for the company's battery materials and battery recycling business. "This is an important step towards a circular economy for the European electric vehicle battery market."

BASF Media Contact

Sarah Katharina Müller
Global Media Relations Manager
sarah-katharina.mueller@basf.com
+49 173 3099 741

Stena Recycling Media Contact

Marie Vassiliadis
External Communications Manager

Marie.vassiliadis@stenametall.se

+46 172 163 98 30

About BASF Battery Materials and Recycling

BASF is a leading global supplier of advanced cathode active materials (CAM) for the lithium-ion batteries market, providing high performance CAM to the world's largest cell producers and for leading platforms of OEMs. In addition, we offer base metals sourcing and management as well as closed-loop battery recycling solutions. By leveraging our industry-leading R&D platforms and passion for innovation, BASF's Battery Materials and Recycling unit develops unique, proprietary solutions that drive customer success.

BASF Battery Materials and Recycling is part of BASF's Catalysts division. The division's portfolio also includes Environmental Catalysts and Metal Solutions, as well as process catalysts. Customers

from a variety of industries including Automotive & Transportation, Chemicals, Plastics or Energy & Resources benefit from our innovative solutions. Further information on BASF's Catalysts division is available on the Internet at www.catalysts.basf.com.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. More than 111,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio comprises six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €87.3 billion in 2022. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the United States. Further information at www.basf.com.

About Stena Recycling

Stena Recycling is one of Europe's leading recycling companies, offering comprehensive solutions in recycling and circular services. Every year, around six million tons of waste and end-of-life products are recycled from more than 100,000 customers across a range of industries. By keeping resources in the loop, Stena Recycling plays an important and central role in the transition to a circular economy. Besides actual recycling, Stena Recycling also supports its customers in their development towards sustainable business models through its consulting business Stena Circular Consulting. Stena Recycling is part of the Stena Metall Group. To learn more, please visit www.stenarecycling.com

About Stena Metall Group

Stena Metall Group has eight business areas and operations at around 220 locations in nine countries. Net sales for the group total the last fiscal year was MSEK 44,334. Each year, six million tons of waste and end-of-life products are recycled and refined, and customers are supplied with many essential raw materials, steel products and marine fuels. Through research and development, Stena Metall is working to meet the challenges of the future with new, sustainable solutions. Stena Metall's 4,400 employees work closely together with partners and customers in creating value, both from the business perspective, as well as for the environment and society. To learn more please visit www.stenametall.com