Ford Media Center

FORD, REDWOOD MATERIALS TEAMING UP ON CLOSED-LOOP BATTERY RECYCLING, U.S. SUPPLY CHAIN

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- Ford Motor Company and Redwood Materials, a leading battery materials company, are collaborating to make electric vehicles more sustainable and affordable for Americans by localizing the complex supply chain network, creating recycling options for end-of-life vehicles, ramping lithium-ion recycling and increasing U.S. battery production
- Closing the loop ensures valuable materials that are used in battery production are recycled to be used again to drive down costs and reduce reliance on imports and mining of raw materials
- Creating a U.S. circular supply chain is a major step toward making battery electric vehicles sustainable, accessible and affordable for more Americans
- As part of Ford's plan to invest more than $30 billion in electrification through 2025 and to further advance their joint business opportunities, Ford has invested $50 million in Redwood to help expand Redwood's manufacturing footprint.

DEARBORN, Mich. Sept. 22, 2021 – Ford Motor Company and Redwood Materials today announced they are working together to build out battery recycling and a domestic battery supply chain for electric vehicles. Ford and Redwood's goal is to make electric vehicles more sustainable, drive down the cost for batteries, and ultimately help make electric vehicles accessible and affordable for more Americans.

Ford and Redwood are collaborating to integrate battery recycling into Ford's domestic battery strategy. Redwood's recycling technology can recover, on average, more than 95% of the elements like nickel, cobalt, lithium and copper. These materials can be reused in a closed-loop with Redwood moving to produce anode copper foil and cathode active materials for future battery production. By using locally produced, recycled battery materials, Ford can drive down costs, increase battery materials supply and reduce its reliance on imports and mining of raw materials.

"Ford is making electric vehicles more accessible and affordable through products like the all-electric F-150 Lightning, Mustang Mach-E and E-Transit, and much more to come," said Jim Farley, Ford president and CEO. "Our partnership with Redwood Materials will be critical to our plan to build electric vehicles at scale in America, at the lowest possible cost and with a zero-waste approach."

Ford is investing more than $30 billion in electrification through 2025, including the collaboration between Ford and Redwood, which will help deliver on Ford's plans to localize the battery supply chain.

This builds on Ford's previously announced plans to scale battery production through multiple BlueOvalSK battery plants in North America starting mid-decade. By building out a domestic, sustainable supply chain with recycled materials, Ford can drive down battery costs and help protect the environment. BlueOvalSK is the U.S. joint venture that Ford and SK Innovation intend to form, subject to definitive agreements, regulatory approvals, and other conditions.

Last week, Redwood announced it will produce strategic battery materials, supplying anode copper foil and cathode active materials to U.S. partners. Redwood plans to transform the lithium-ion battery supply chain by offering large-scale sources of these domestic materials to reduce the cost and environmental footprint of electric vehicle production. The local supply of these two materials is a key part of Ford's commitment to reduce the environmental impact of battery manufacturing and continue to ramp up electric vehicle production in the U.S.

"We are designing our battery supply chain to create a fully closed-loop lifecycle to drive down the cost of electric vehicles via a reliable U.S. materials supply chain," said Lisa Drake, Ford's North America chief operating officer. "This approach will help ensure valuable materials in end-of-life products re-enter the supply chain and do not wind up in landfills, reducing our reliance on the existing commodities supply chain that will be quickly overwhelmed by industry demand."

Redwood Materials, founded by JB Straubel and based in northern Nevada, is creating a circular supply chain for batteries and helping partners across the electric vehicle and clean energy industries by providing pathways, processes, and technologies to recycle and remanufacture lithium-ion batteries.

"Increasing our nation's production of batteries and their materials through domestic recycling can serve as a key enabler to improve the environmental footprint of U.S. manufacturing of lithium-ion batteries, decrease cost and, in turn, drive up domestic adoption of electric vehicles," said Straubel, Redwood Materials CEO. "Redwood and Ford share an understanding that to truly make electric vehicles sustainable and affordable, we need to localize the existing complex and expensive supply chain network, create pathways for end-of-life vehicles, ramp lithium-ion recycling and increase battery production, all here in America."

Longer-term, Ford and Redwood plan to work together on the best approach to collect and disassemble end-of-life batteries from Ford's electric vehicles for recycling and remanufacturing to help reduce the cost associated with battery repairs and raw materials to manufacture all-new batteries.

"Our work with Redwood will, by design, help ensure the infrastructure is in place to cost-effectively recycle end-of-life Ford batteries to create a robust domestic materials stream and drive down the cost of electric vehicles," Drake said.

Ford to support Redwood Materials expansion

To further advance these business opportunities between the companies, Ford invested $50 million into Redwood Materials to help the company expand its footprint in the U.S.

MORE: Redwood Materials and Ford Motor Company Announce Strategic Relationship

About Ford Motor Company

Ford Motor Company (NYSE: F) is a global company based in Dearborn, Michigan, that is committed to helping build a better world, where every person is free to move and pursue their dreams. The company's Ford+ plan for growth and value creation combines existing strengths, new capabilities and always-on relationships with customers to enrich experiences for and deepen the loyalty of those customers. Ford designs, manufactures, markets and services a full line of connected, increasingly electrified passenger and commercial vehicles: Ford trucks, utility vehicles, vans and cars, and Lincoln luxury vehicles. The company is pursuing leadership positions in electrification, connected vehicle services and mobility solutions, including self-driving technology, and provides financial services through Ford Motor Credit Company. Ford employs about 182,000 people worldwide. More information about the company, its products and Ford Motor Credit Company is available at corporate.ford.com.

About Redwood Materials

Redwood Materials is inventing sustainable materials to build the world by creating circular supply chains, turning waste into profit and solving the environmental impacts of new products before they happen. Founded by JB Straubel, the Nevada-based company is working to transform the lithium-ion battery supply chain by offering large-scale sources of domestic anode and cathode materials produced from recycled batteries, creating a fully-closed loop that will drive down the costs and environmental footprint of electric vehicles. More information available at redwoodmaterials.com.