

Cirba Solutions Helps Toyota Expand Battery Recycling Network to Nationwide Program

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PLANO, Texas and LANCASTER, Ohio (Dec. 7, 2023) – Furthering its mission to create a closed-loop battery ecosystem while working toward its carbon neutrality goals, Toyota Motor North America (Toyota) today announced that it is expanding its battery recycling network with a new collaboration with Cirba Solutions, a premiere battery recycling materials and management company. The agreement enhances Toyota and Cirba Solutions’ growing relationship by expanding Toyota’s battery recycling network and optimizing its logistics network for end-of-life electrified vehicle battery collection, including those from hybrid (HEV), plug-in hybrid (PHEV) and battery electric vehicles (BEV).

“Cirba Solutions’ large and well-established transportation and recycling network ensures Toyota has nationwide battery collection and recycling to reduce both our costs as well as our operational carbon footprint,” said Christopher Yang, group vice president, Business Development, Toyota Motor North America. “This moves us closer to our ultimate goal of creating a sustainable, closed-loop ecosystem for our automotive batteries.”

As one of the largest battery recycling companies in North America, Cirba Solutions has extensive experience and offers a coast-to-coast collection and recycling network. Toyota’s collaboration with Cirba Solutions will focus on the collection, transportation, dismantling and processing of end-of-life lithium-ion electrified vehicle batteries from the Midwest and East Coast regions. Processing will take place at Cirba Solutions’ Lancaster, Ohio facility, which recently received an \$82+ million Department of Energy grant as part of the Bi-Partisan Infrastructure Law. This facility will use advanced technology to extract critical minerals from scrap and end-of-life batteries with an up to 95 percent recovery rate, then supply battery-grade metals back into the supply chain.

“Our collaboration with Toyota helps move toward a long-term vision of a sustainable closed-loop battery supply chain. With aligned purpose, and Toyota’s growing electric vehicle line-up in North America, we are proud to be a partner,” said Jay Wago, chief commercial officer at Cirba Solutions.

Toyota currently collects approximately 25,000 used automotive batteries, primarily nickel-metal hydride batteries found in its hybrid electric vehicles, from its dealership network each year, and expects the number of batteries, particularly end-of-life lithium-ion batteries, to rise as the number of battery electric vehicles it sells increases in the future. Through the agreement with Cirba Solutions, Toyota expects to reduce its overall transportation and logistics costs by at least 70 percent from reducing the average miles driven for collection and recycling from 1,251 to 582, based on 2022 data, and by focusing on the Midwest and East Coast regions. In some cases, such as the Cincinnati region, the new recycling collaboration should reduce the total mileage driven for these activities by approximately 94 percent. In addition, the company expects that by reducing the amount of miles driven for collection and recycling activities, it will be able to make a significant reduction in transportation-related emissions as well.

Globally, Toyota has been the number one seller of electrified vehicles for more than 25 years, and, in North America, Toyota has sold more than 6.2 million combined PHEVs and HEVs since 2000. With decades of electrified vehicles in the market, Toyota is focused on how to recycle, remanufacture, or repurpose automotive batteries used in Toyota’s electrified vehicles that have reached the end of their life, a number that is set to increase in the coming years. In fact, Toyota forecasts that its end-of-life batteries will likely double by 2030.

The company also has a new plant for automotive batteries, Toyota Battery Manufacturing North Carolina (TBMNC), currently under construction that is anticipated to go online in 2025 and has a total announced investment of nearly \$14 billion. Originally announced in 2021, the North Carolina facility will have a phased ramp up for production and will support the creation of more than 5,000 new jobs to support vehicles assembled in North America.