





Photography, b-roll and other information available on our press page.



MEDIA CONTACTS:

Val Gent

LG Energy Solution Michigan vgent@lgensol.com

Sophia Kim

LG Energy Solution HQ(Seoul) sophiakim32@lgensol.com



lgenergymi.com



/lgenergymi



linkedin.com/company lg-energy-solution-michigan/





FACT SHEET



POWER TODAY. PRESERVE TOMORROW.



MESSAGE FROM PRESIDENT CHARLES HYUN

As leaders in the EV battery industry, we drive the way our world views, produces and uses sustainable energy. With our persistent innovation and expansion, we are transforming the world of sustainable energy for a better world.

LG Energy Solution is taking the lead in popularizing electric vehicles that are safe, fast, and environmentally friendly through cells, modules, BMS (Battery Management Systems), and pack products.

We are shaping the future of the automotive industry by leading the EV charge and paving the path toward a more sustainable future. By powering EV today, we are preserving tomorrow.

THANK YOU FOR YOUR INTEREST IN LG ENERGY SOLUTION MICHIGAN, INC.









ABOUT LG ENERGY SOLUTION MICHIGAN, INC.

ENERGY SOLUTIONS FOR A BETTER WORLD

LG Energy Solution Michigan (LGES Michigan) is a wholly-owned subsidiary of LG Energy Solution, a leading global manufacturer of lithium-ion batteries. Since its establishment in 2012, LGES Michigan has been manufacturing innovative batteries for electric vehicles for major automotive OEMs in the U.S. The company currently has more than 1,800 employees, and aims to foster more next-generation battery professionals in the future, thereby contributing to the state's strong standing as the center of high-tech EV component production.

First U.S. battery Research and Development center built in Colorado in 2000
The R&D center moved to Troy, MI in 2005
Holland, Michigan plant (America's first gigafactory) construction completed in 2012
Hazel Park, MI, location becomes part of LG Energy Solution Michigan in 2020



OUR LOCATIONS

ABOUT OUR MICHIGAN FACILITIES

Holland is the home of our Michigan headquarters. This location houses a large production facility and corporate offices.



- ★ U.S. Research and Development office moved to **Troy**, **MI** in 2005
- ★ Holland, MI, plant construction completed in 2012
- ★ Hazel Park, MI, location becomes part of LG Energy Solution Michigan in 2020

EXPANSION AND GROW/TH With a \$1.7 billion investment announced in early

2022, LG Energy Solution MIchigan is currently constructing its second EV battery manufacturing plant, aiming to increase its annual production capacity by five times (5GWh to 25GWh). With enhanced production capacity, LGES Michigan will ensure faster delivery of products to automotive OEMs in the U.S. The project is also expected to create more than 1,000 new well-paying technical jobs for locals and the surrounding area, attracting more workforce and capital to West Michigan. Construction is expected to complete in 2024 and production to begin in 2025.



SMART FACTORY

The new facility is being built as a smart factory, which will digitalize and streamline battery manufacturing technologies, bolster battery quality, and maximize the efficiency of the manufacturing supply chain.

COMMUNITY **MEMBERS**

We are proud to be active members of the communities we live, work and go to school in. We make it a priority to sponsor events and organizations that represent us and align with our values.



























WHAT WE DO: LITHIUM-ION BATTERIES FOR ELECTRIC VEHICLES

We design and manufacture lithium-ion batteries that power automotive technology.

- Electrode: Raw materials are mixed into an electrode coating that is then applied as a coating to sheets of copper and aluminum foil.
- Assembly: A separator and sheets of the electrode-coated material are joined together in a cell using an LG-patented folding and stacking process. Cells are filled with electrolytes.
- Formation: Cells are activated through charge and discharge in the formation process.
- Pack: Cells are packed into batteries for the automotive industry

ABOUT LG ENERGY SOLUTION

LG Energy Solution has positioned itself as a global battery innovator after three decades of groundbreaking innovations. These innovations have been enabled by its four core strengths:

- Extensive experience in the battery business
- Global production network and operational expertise
- Innovative battery technologies and broad applications
- Dedication to sustainability and green battery ecosystem







30-YEAR EXPERIENCE THAT **STARTED WITH A VISION**

LG Energy Solution began rechargeable battery research in 1992, before many companies noticed its potential to change the world.

LG Energy Solution's rechargeable battery business persevered to become the world's No.1 battery company through bold investment and Research & Development. At the center of its rise was a visionary leader - the late chairman of LG Group, Koo Bon-moo, who discovered rechargeable batteries during a business trip to the UK in 1992, saw great potential, and brought samples back to Korea for further research. As a result, in 1999, LG Energy Solution became the first Korean company to successfully mass produce cylindrical lithium-ion batteries.

The company believed in the potential of the electric vehicle battery sector and entered the North American market before anyone else in the industry, establishing a Research & Development facility in Colorado in 2000. This facility secured a development base in the U.S. market. Later, in 2005, the R&D facility was moved to Detroit, the hub of the automotive industry.

Thanks to the U.S. government's consistent initiatives toward green energy and strong support for the electric vehicle industry, the company began producing EV batteries at its Michigan plant in 2012, the first EV battery plant in the U.S.

GLOBAL PRODUCTION NETWORK AND OPERATIONAL EXPERTISE

LGES has established the largest manufacturing network in the battery industry with its manufacturing facilities currently running in South Korea, U.S., China, and Poland. In the U.S., LGES has seven facilities currently operating or under construction, including two stand-alone (Michigan & Arizona) and five joint venture facilities.

With this extensive network in place, LGES can optimize the cost of logistics through local production, better adapt to local market changes, and position itself close to the customers to ensure timely delivery and technical support, enhancing global competitiveness.

With its global production network in place, LGES's global annual production capacity is expected to reach 540GWh by the end of 2025.

Global Network of Innovators

LG Energy Solution is a global company with locations around the world, with outstanding product competitiveness and global operational expertise.



Our Joint Venture Projects

Part of our mission to create a more sustainable future includes partnering with global top automotive manufacturers to accelerate electrification.









INNOVATIVE BATTERY TECHNOLOGIES AND BROAD APPLICATIONS

LG Energy Solution invested \$4.2 billion (KRW 5.3 trillion) in R&D over the past 10 years and has secured the most patents (26,641 as of Dec. 31, 2022) and groundbreaking innovations in the battery industry.

As the only chemical-based battery manufacturer, LGES has a competitive edge in developing innovative battery technologies, such as high-nickel NCMA cathode material and safety-enhancing separator. The company also developed groundbreaking manufacturing technologies, such as "lamination and stacking" and "double layer slot die coating (DLD)."

Based on these constantly-evolving technologies, LGES provides power solutions for a variety of applications, ranging from advanced automotive batteries for electric vehicles, mobility, IT and energy storage systems.

In addition, with its continued investments in next-generation battery technologies, such as solid-state batteries and lithium-sulfur batteries, LGES is aiming to expand its product applications further, to ships and UAMs.

DEDICATION TO SUSTAINABILITY AND GREEN BATTERY ECOSYSTEM

Battery, by nature, is closely related to the concept of "eco-friendliness" and is a key driver to sustainable life and a core industry of the future. With the ultimate goal of going "carbon negative" beyond "carbon neutral" throughout the entire business operations, LG Energy Solution will strive to take the lead in the global efforts to tackle climate change.

LGES works to achieve carbon neutrality throughout the entire value chain by 2050, encompassing raw material sourcing, battery manufacturing, reuse and recycling of end-of-life batteries. We are creating a closed loop for reuse and recycling of raw materials from end-of-life batteries and, by 2025, such closed loop systems will be in place in each of our manufacturing sites. In addition, we continue expanding and strengthening partnerships with competitive recycling companies around the world.