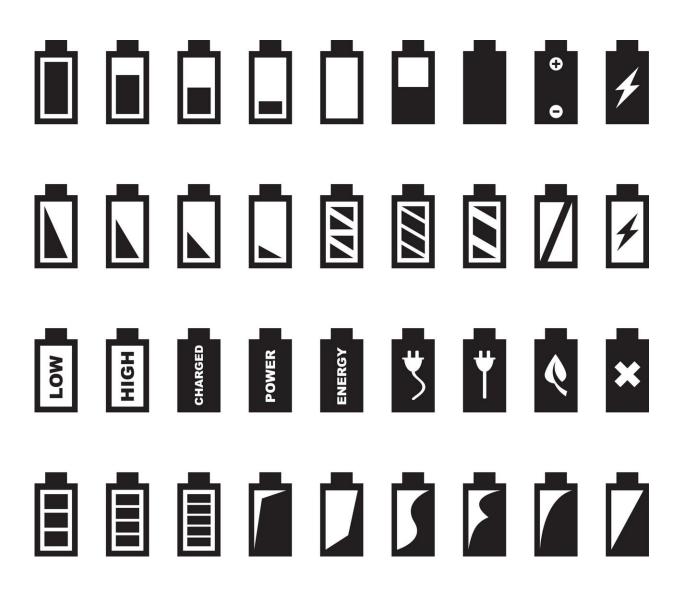


New plan outlines steps for US to double annual lithium battery revenues to \$33 billion, provide 100,000 jobs by 2030

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Li-Bridge, a public-private alliance representing the U.S. battery ecosystem, convened by the U.S. Department of Energy (DOE) and managed by Argonne National Laboratory, released today an action plan to accelerate the creation of a robust domestic manufacturing base and comprehensive supply chain for lithium-based batteries.

The Li-Bridge report, titled "Building a Robust and Resilient U.S. Lithium Battery Supply Chain," includes 26 recommended actions to bolster the domestic lithium <u>battery</u> industry. Underscoring the need to stabilize policy and spur investment, key recommendations in the report include a buying consortium for raw energy materials, a system of shared pilot lines to speed the commercialization of new battery technologies, significant additional investment in battery industry workforce training, and permitting reform.

The report complements a series of recent government initiatives designed to strengthen the country's battery and semiconductor industries including the Inflation Reduction Act (IRA), the Infrastructure Investment and Jobs Act (known as the Bipartisan Infrastructure Law or BIL) and the CHIPS and Science Act, which together represent some of the most significant industrial policy initiatives in U.S. history.

"The Biden-Harris administration investments in battery manufacturing and supply chain have set our country on a path towards a transportation system that provides cleaner and more accessible mobility options, provides good-paying jobs for American workers, and secures our national energy independence," said Deputy U.S. Energy Secretary David M. Turk. "The public-private partnerships described in this report will be crucial to realizing that safer, cleaner future that will benefit generations of Americans to come."

Announced in October 2021 by DOE and Argonne, Li-Bridge is spearheaded by three industry trade groups—NAATBatt International,



the New York Battery and Energy Storage Technology (NY-BEST) Consortium, and New Energy Nexus—with active involvement from DOE national labs and Boston Consulting Group. The first collaboration of its kind in the U.S. battery industry, Li-Bridge's report is a result of collaboration of more than 40 companies, spanning market leaders and startups across the automotive, advanced battery, mining and chemical, and electric utility sectors. Those organizations collectively employ more than 1.2 million people and generate approximately \$900 billion in annual revenues.

"This report provides key insights and solutions toward the goal of establishing a resilient domestic manufacturing base and supply chain for batteries, summarizing in-depth discussions between private industry, DOE's national labs, and federal partners," said Argonne Laboratory Director Paul Kearns. "As the Li-Bridge facilitator between private industry and the Federal Consortium for Advanced Batteries, Argonne believes adoption of the report's recommended actions can set the nation on a path for battery manufacturing and supply chain success."

Fueled by exponential demand, lithium-based batteries and the devices they power are major contributors to economic growth in the 21st century on par with semiconductors. According to the report, if the U.S. cannot establish a secure and stable supply chain for lithium battery technology within its borders, other countries will enjoy the economic growth and job creation that lithium battery technology will create. Today, about 76% of lithium battery cells and the large majority of cell components are made in China.

Lithium-based batteries are also critical for achieving U.S. climate objectives. The report states that without reliable access to lithium battery technology, the U.S. has no chance of meeting its 2050 net-zero carbon emissions goal or ensuring an inclusive and socially responsible industry. With U.S. defense applications increasingly dependent on



lithium-based batteries, the report warns of the national security risks in relying on batteries and battery components made abroad.

According to the report, the U.S. will not achieve complete lithium battery supply chain independence by 2030, but it estimates the country can capture 60% of the economic value consumed by domestic demand for lithium batteries by that year, generating \$33 billion in revenues and creating 100,000 jobs.

"Although we are starting to see activity in the domestic battery manufacturing sector thanks in large part to the Bipartisan Infrastructure Law and the IRA, U.S. industry is still 10 to 20 years behind Asia, and about five years behind Europe, in commercializing manufacturing of this critical technology," said James Greenberger, executive director at NAATBatt International. "The electrochemical storage of electricity will be as important a technology to the economy of the 21st century as the semiconductor chip has been."

"Battery technologies are essential to achieving a clean energy future, reducing our reliance on <u>fossil fuels</u>, and protecting our climate. From enabling renewable energy and providing reliability and resilience for our electric grid to powering our future electrified transportation systems, batteries are at the center of the clean energy transition," said Dr. William Acker, Executive Director of NY-BEST. "By moving forward aggressively with the recommendations Li-Bridge is advancing today, the U.S. will be well positioned to unlock the benefits batteries can provide to improve our environment and our economy."

"Reshoring supply chains reduces environmental footprints and builds social resilience during the energy shocks we're facing this decade," said Danny Kennedy, CEO at New Energy Nexus. "We have dozens of startups with American-made solutions ready to build an electric future here and abroad with better batteries. The IRA, CHIPS Act, and related



industrial policy efforts now need to be augmented with a focus on practical steps, such as pilot lines and workforce training, to ensure we're including people across the country in this opportunity."

More information: Report: <u>Building a Robust and Resilient U.S.</u> <u>Lithium Battery Supply Chain</u>

Provided by Argonne National Laboratory

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