

Boosting Detroit's Circular Economy: EV Batteries into Long-Duration Energy Storage (LDES)



Technology

VMX is working to retrofit a former automotive facility and launch a robust collaboration to reduce costs and impacts of electric vehicle (EV) and LDES components, in particular multiday storage for co-location with EVSE, solar PV and wind energy generation. VMX offers major manufacturing, supply chain, and transportation advantages for rapid scale.

LDES components: VMX will diagnostic test and transport EV batteries for 2nd Life applications needing energy storage for 10+ hours. With proposed partners Call2Recycle, NextCycle, Perlmutter & Idea Development and others, VMX has a verified clear path to commercial offtake of used EV batteries for LDES as soon as facility retrofit is completed. Work will reduce material usage, improve supply chain resilience, and address handling to repurpose EV batteries into LDES.

Project Status

New business line of prominent Detroit automotive recycling firm VMX International, VMX Green (VMXG) is working to open the first independent EV battery recycling facility in Detroit and become the first U.S. minority-owned recycling firm working to distribute EV batteries for consumer and commercial 2nd life use. VMX will be a clean energy leader, processing 25,000 battery packs/year. New VMXG jobs at our proposed new LEED-certified neg-negative GHG facility will have local economic multiplier effects, showcasing how recycling and reuse can drive local and regional economic growth. Filling a critical domestic energy supply chain gap, VMXG and our partners will reduce U.S. dependency on imported precious metals.

*Optimizing rapid, safe, and sustainable scale-up of LDES and EVs,
reducing lifecycle impacts of rare earth elements*

Key Personnel/Organizations



Vickie J. Lewis, VMX President/CEO is leveraging her circular recycling expertise and strong automotive industry relationships to launch a 2nd Life EV Battery business line. Mrs. Lewis has received numerous industry awards and serves on NextCycle Michigan's state advisory board. VMX VP **Dr. David Lewis** will play a pivotal role driving VMX's team to success. VMX Business Development Manager **Teena Bell**, MBA, is a global supply chain strategist with 20 years in extensive engineering, procurement, and manufacturing. VMX Facility Operation Managers include **Alaina Paquette**, with 5 years in quantitative sustainability research and automotive PM; **Heather Soerries**, with 8 years' experience in battery environmental health, safety, and regulatory compliance; and **Justin Zaleski**, with 10 years in powertrain engineering and automotive PM. VMX Development Consultant **Jasti Smythe** provides 10 years of technical and manufacturing system implementations.

Proposed Partners: Bedrock Detroit | CellBlock FCS | Detroit Economic Growth Corp. | Detroit Regional Partnership | Green Re-entry Innovation Program | Goodwill's Green Works | Invest Detroit | Michigan Department of Environment, Great Lakes, and Energy | Michigan Economic Development Corporation | Neighborhood Defense Service | Perlmutter & Idea Development LLC (P&ID) | TechTown Detroit | VentureWell

LOCATIONS: Proposed EV Battery Recycling/LDES Plant: Former automotive facility at 6401 W. Fort St., Detroit, MI 48209-2910 | VMX Corp HQ: 19315 Livernois Ave, Detroit, MI 48221-1717 | 866-480-1881

VMX Clients / Collaborators

