

**FINDING OF NO SIGNIFICANT IMPACT  
DEPARTMENT OF ENERGY LOAN AND GRANT TO A123 SYSTEMS, INC., FOR  
VERTICALLY INTEGRATED MASS PRODUCTION OF AUTOMOTIVE-CLASS  
LITHIUM-ION BATTERIES NEAR DETROIT, MICHIGAN**

**AGENCY:** U.S. Department of Energy, Advanced Technology Vehicles Manufacturing Loan Program

**ACTION:** Finding of No Significant Impact

**SUMMARY:** The U.S. Department of Energy (DOE) conducted an environmental assessment (EA) that analyzed the potential environmental impacts associated with the A123 Systems, Inc., battery manufacturing operations for hybrid electric vehicles and plug-in hybrid electric vehicles. DOE, through its Advanced Technology Vehicles Manufacturing Loan Program, proposes to provide a Federal loan pursuant to Section 136 of the Energy Independence and Security Act of 2007 (EISA), and a grant from the National Energy Technology Laboratory under the American Recovery and Reinvestment Act (ARRA) (Funding Opportunity DE-FOA 0000026, *Recovery Act – Electric Drive Vehicle Battery and Component Manufacturing Initiative*) to A123 to support the proposed battery manufacturing Project. The purpose and need for agency action is to comply with DOE's mandate under Section 136 of the EISA and Funding Opportunity DE-FOA 0000026 of ARRA by selecting eligible projects that meet the goals of these Acts. DOE is using the NEPA process to assist in determining whether to issue a loan and grant to A123 to support the proposed A123 Project.

The goal of the A123 Project is to produce lithium-ion batteries for approximately 500,000 electric vehicles per year in manufacturing facilities located at three sites in the Detroit, Michigan, metropolitan area -- Livonia, Romulus, and Brownstown Township. Assuming that the batteries would be evenly dispersed between hybrid electric vehicles and plug-in hybrid electric vehicles over a 20 year period, the average annual gasoline consumption for vehicles equipped with lithium-ion batteries manufactured by the A123 facilities would be 239 gallons per year. When compared with 500,000 conventional vehicles produced annually over a 20 year period, the lithium-ion batteries produced by A123's facilities would save approximately 2.5 billion gallons of gasoline from vehicular consumption.

The Livonia site consists of an existing 291,000-square-foot multi-level building being retrofitted to include a research and development facility with office space, and low-volume Cell Assembly and Module and Pack Blocks.

The Brownstown Complex consists of five existing buildings on the South Campus of the Brownstown Business Center, an industrial park in Brownstown, Michigan. A123 would reequip three of those buildings to accommodate high-volume Cell Assembly and Module and Pack Block operations totaling approximately 1,723,000 square feet.

The Romulus Complex, which includes two existing buildings in Van Buren Township, is comprised of five existing buildings. A123 would reequip all or parts of the existing buildings,

totaling approximately 1,076,060 square feet. The only new building A123 would construct for the lithium-ion battery manufacturing project would be a separate 300,000 square-foot building on vacant land in a previously disturbed area adjacent to two of the existing buildings in Romulus. The building would be built to suit A123 operational parameters and A123 would equip the new facility. Although there would be no clearing or ground-disturbing activities at the other Romulus sites or at the Livonia and Brownstown sites, each existing building at these sites would require some interior modifications, and the installation of prefabricated ancillary exterior structures (e.g. tankage and pollution control equipment).

Discussion and analysis related to the potential impacts of construction and operation of the proposed A123 Project is contained in the Final EA (DOE/EA-1690), which is incorporated here by reference. DOE examined potential impacts on the following resources and found none to be significant: land use; visual resources; air quality; noise; geology and soils; water resources; biological resources; cultural resources; socioeconomics and environmental justice; utilities; transportation; waste management; public and occupational health and safety, including intentionally destructive acts; and cumulative effects, including global climate change.

In accordance with applicable regulations and policies, DOE sent a notification letter regarding the Department's determination to prepare an EA to the Southeast Michigan Council of Governments (Michigan's Single Point of Contact), the Cities of Livonia and Romulus, and Brownstown Township, on July 27, 2009. The letter described the Proposed Action and stated that a draft EA would be sent to the state for review. On March 26, 2010, DOE sent the draft EA to the Southeast Michigan Council of Governments, the Cities of Livonia and Romulus, and Brownstown and Van Buren Townships and invited their comments on the draft. The draft EA was also posted on the DOE Advanced Technology Vehicles Manufacturing Loan Program website. DOE received no comments on the draft EA.

**DETERMINATION:** On the basis of the Final EA, DOE has determined that providing a Federal loan and grant to A123 for battery manufacturing operations for hybrid electric vehicles and plug-in hybrid electric vehicles will not have a significant effect on the human environment. The preparation of an environmental impact statement is therefore not required, and DOE is issuing this Finding of No Significant Impact.


Copies of the Final EA are available at the DOE Advanced Technology Vehicles Manufacturing Loan Program website at [www.atvmlan.energy.gov](http://www.atvmlan.energy.gov) or from

Matthew C. McMillen  
Director, Environmental Compliance  
Loan Programs Office  
U.S. Department of Energy  
1000 Independence Ave, SW, CF1.3  
Washington, DC 20585  
Matthew.McMillen@hq.doe.gov

Additional information on the DOE NEPA process is available from:

Office of NEPA Policy and Compliance  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585  
202-586-4600 or 1-800-472-2756

Issued in Washington, DC on the 30<sup>th</sup> day of April in the year 2010.

  
\_\_\_\_\_  
Jonathan Silver, Executive Director, Loan Programs Office