



Technology Demonstrations

May 3, 2011 – 2 p.m.

Buses loading at the Henry Ford Museum iMax Theater

General Motors Global Battery Systems Lab, 30003 Van Dyke Ave., Warren, MI 48092

The General Motors Global Battery Systems Lab opened in June 2009. This 'state of the art' facility is the largest automotive battery laboratory in the United States. It is the cornerstone of GMs effort to develop and test the electric drivetrains for products like the Chevy Volt, and other hybrid, battery-electric and hydrogen fuel cell vehicles.

The lab has two main sections: one for evaluating battery cells from various suppliers, and one for evaluating the performance of battery packs--cells packaged with electronics and systems for cooling and heating the cells to keep them at an optimal temperature range.

The Global Battery lab tour will allow attendees to see up close, the engineering and technical skills needed to compete as the electrification of the vehicle goes mainstream.

Global Engine Manufacturing Alliance, 5800 N. Ann Arbor Rd., Dundee, MI 48131

The Global Engine Manufacturing Alliance (GEMA), located in Dundee, Mich., was formed as a joint venture between Mitsubishi Motors Corporation, Hyundai Motor Company and DaimlerChrysler Corporation. In April 2003, with an investment of \$803 million, the ground was broken for the new plant and the doors were opened for production in 2004. The North Plant was launched in October 2005, followed by the South Plant in November 2006. In December 2009, Chrysler Group announced a \$179 million investment to launch manufacturing of an advanced technology, fuel-efficient 1.4-liter engine for the North American market, collaboration between Chrysler Group and Fiat powertrain groups. In October 2010, the company announced an additional \$150 million investment to expand capacity and prepare the plant for production of future engines. Production of 1.4-liter engine, which debuted in the all-new 2012 Fiat 500, began in November 2010. Attendees will observe how GEMA's facilities use a unique business model with World Class Manufacturing principles and innovative operating patterns to achieve world class efficiencies.



Ford Rouge Factory Tour

This tour is a self-guided five-part experience that includes:

Legacy Theatre - Learn about the triumphs and tragedies surrounding the Rouge, much of it told through rare, never-before-seen historic footage.

Art of Manufacturing Theatre - A multi-sensory theater experience including a 360-degree look at how automobiles are made!

Observation Deck Tour - View the world's largest living roof from our 80-foot-high Observation Deck.

Assembly Plant Walking Tour - See where the new Ford F-150s are assembled in a new lean and flexible manufacturing plant. Visitors will have the opportunity to view the final assembly process from an elevated walkway.

Legacy Gallery - View five historic vehicles made at the Rouge including the 20,000,000th Ford, hop in a new F-150, and visit our Factory Store.

Ford Michigan Assembly Plant, 38303 Michigan Ave, Wayne, MI 48184

Home to the all-new global Ford Focus, Ford Motor Company's retooled Michigan Assembly Plant in Wayne, Michigan is the world's first plant to build not only fuel-efficient gas-powered vehicles, but three production versions of electrified vehicles – battery electric, hybrid and plug-in hybrid vehicles. Bright, modern and green – like the car it is building – the refurbished Michigan Assembly Plant is the company's new benchmark for flexible manufacturing. The changes at the plant allow the company to run multiple models down the same production line without requiring considerable downtime for changeover of tooling in order to meet shifting consumer preferences. Michigan Assembly also boasts Michigan's largest solar power generation system and several electric vehicle charging stations. This tour will give attendees an insight into the framework of new and innovative operating practices developed by Ford and the United Auto Workers to produce the new Focus and other vehicles with industry-leading quality and efficiency.

A123 Systems Lithium Ion Automotive Battery Production Facility, 39000 7 Mile Rd, Livonia, MI 48152

The A123 Systems Livonia facility is one of the largest lithium ion automotive battery production plants in North America. The factory is designed to enable the complete production process, including research and development, manufacturing of high-value components, cell fabrication, module fabrication and the final assembly.

The Driving Change conference tour will focus on the labor intensive module fabrication and final assembly operations. These two processes present opportunity to see how advanced battery manufacturing may differ—or be similar—to other more traditional automotive manufacturing activities.