This Brochure Was Supported With Funding From:

**Community Energy Project Grants (CEPG)**

www.michigan.gov/dleg/0.16077-154-25675-190905--.00.html

**Michigan Department of Energy, Labor and Economic Growth, Energy Office**

State Energy Program

Grant Nu.: PLA - 09 - 27

Additional support for the conversion of a Prius into a PHEV vehicle, as well as hiring a student assistant, made possible by Western Michigan University

**Plug-In Hybrid Electric Vehicle (PHEV)**

Western Michigan University

College of Engineering and Applied Sciences

www.wmich.edu/mfe/energy/phev.php

A123 L5 Conversion Plug-in Module, 5 kWh Battery, 5.5 Hr. Charge Time (Max), 180 Lbs., Est. 100 MPG within electric driving range of 30-40 miles.

Installation: December 16, 2008

Contractor: A123 Hymotion

Faculty: John Patten

Student: Nathan Christensen

Financial Support: John Patten (WMU), Community Project Energy Grants, Western Michigan University, College of Engineering and Applied Science

Toyota Prius: $25,000

A123 Hymotion Conversion: $10,000

Total Cost: $35,000

A recharging station has been constructed in the west parking deck at the College of Engineering and Applied Science.

Red "X" indicates the location of the PHEV charging station.

Website:

www.wmich.edu/mfe/energy/phev.php

Data Information Page:

www.ceas.wmich.edu/PHEVData/PHEV/
The converted Prius has been in use since December 18, 2008. Research is currently underway to compare its energy use with the Wind Turbine’s energy generation.

John Patten was the faculty member responsible for the overall project.

john.patten@wmich.edu

Phone: (269) 276-3246

The Prius was purchased by Dr. John Patten. The additional funds received helped cover the $10,000 conversion cost.

Currently, a Kill-A-Watt Meter, Shark Meter (shown below), and utility power meter are being used to monitor the recharging of the PHEV.

The Prius has a 100,000 mile battery warranty. The PHEV A123 Hymotion conversion equipment has a warranty for three years.

Others involved with the project include student Nathan Christensen, website support by Karlis Kaugars, and physical plant/maintenance renovation services.