## Updated: October 2011 RECOVERY ACT AWARDS FOR ELECTRIC DRIVE VEHICLE BATTERY AND **COMPONENT MANUFACTURING INITIATIVE**

Applicant	DOE Award (Dollars in Millions)	Project Locations	Technology
	Cell, B	attery, and Materials	Manufacturing Facilities
Johnson Controls, Inc.	\$299.2	Holland, MI Lebanon, OR (Entek)	Production of nickel-cobalt-metal battery cells and packs, as well as production of battery separators (by partner Entek) for hybrid and electric vehicles.
A123 Systems, Inc.	\$249.1	Romulus, MI Brownstown, MI	Manufacturing of nano-iron phosphate cathode powder and electrode coatings; fabrication of battery cells and modules; and assembly of complete battery pack systems for hybrid and electric vehicles.
KD ABG MI, LLC (Dow Kokam)	\$161	Midland, MI	Production of manganese oxide cathode / graphite lithium-ion batteries for hybrid and electric vehicles.
Compact Power, Inc. (on behalf of LG Chem, Ltd.)	\$151.4	Holland, MI	Production of lithium-ion polymer battery cells for the GM Volt using a manganese-based cathode material and a proprietary separator.
EnerDel, Inc.	\$118.5	Indianapolis, IN	Production of lithium-ion cells and packs for hybrid and electric vehicles. Primary lithium chemistries include: manganese spinel cathode and lithium titanate anode for high power applications, as well as manganese spinel cathode and amorphous carbon for high energy applications.
General Motors Corporation	\$105.9	Brownstown, MI	Production of high-volume battery packs for the GM Volt. Cells will be from LG Chem, Ltd. and other cell providers to be named.
Saft America, Inc.	\$95.5	Jacksonville, FL	Production of lithium-ion cells, modules, and battery packs for industrial and agricultural vehicles and defense application markets. Primary lithium chemistries include nickel-cobalt-metal and iron phosphate.
Exide Technologies with Axion Power International	\$34.3	Bristol, TN Columbus, GA	Production of advanced lead-acid batteries, using lead-carbon electrodes for micro and mild hybrid applications.
East Penn Manufacturing Co.	\$32.5	Lyon Station, PA	Production of the UltraBattery (lead-acid battery with a carbon supercapacitor combination) for micro and mild hybrid applications.
	Advan	ced Battery Supplier	Manufacturing Facilities
Celgard, LLC, a subsidiary of Polypore	\$49.2	Charlotte, NC	Production of polymer separator material for lithiumion batteries.
Toda America, Inc.	\$35	Battle Creek, MI	Production of nickel-cobalt-metal cathode material for lithium-ion batteries.
Chemetall Foote Corp.	\$28.4	Silver Peak, NV Kings Mtn., NC	Production of battery-grade lithium carbonate and lithium hydroxide.
Honeywell International Inc.	\$27.3	Buffalo, NY Metropolis, IL	Production of electrolyte salt (lithium hexafluorophosphate (LiPF6)) for lithium-ion batteries.
BASF Catalysts, LLC	\$24.6	Elyria, OH	Production of nickel-cobalt-metal cathode material for lithium-ion batteries.
EnerG2, Inc.	\$21	Albany, OR	Production of high energy density nano-carbon for ultracapacitors.
Novolyte Technologies, Inc.	\$20.6	Zachary, LA	Production of electrolytes for lithium-ion batteries.
FutureFuel Chemical Company	\$12.6	Batesville, AR	Production of high-temperature graphitized precursor anode material for lithium-ion batteries.
Pyrotek, Inc.	\$11.3	Sanborn, NY	Production of carbon powder anode material for lithium-ion batteries.
H&T Waterbury DBA Bouffard Metal Goods	\$5	Waterbury, CT Holland, MI	Manufacturing of precision aluminum casings for cylindrical cells.

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	Advanced Lithium-Ion Battery Recycling Facilities			
TOXCO Incorporated	\$9.5	Lancaster, OH	Hydrothermal recycling of lithium-ion batteries.	
	Electri	ic Drive Component M	Manufacturing Facilities	
General Motors Corporation	\$105	White Marsh, MD Wixom, MI	Construction of U.S. manufacturing capabilities to produce the second-generation GM global rear-wheel electric drive system.	
Delphi Automotive Systems, LLC	\$89.3	Kokomo, IN	Expansion of manufacturing for existing electric drive power electronics components for both passenger and commercial vehicles.	
Allison Transmission, Inc.	\$62.8	Indianapolis, IN	Increasing U.S. capacity to manufacture hybrid systems for the commercial truck market.	
Ford Motor Company	\$62.7	Sterling Heights, MI	Producing a Ford electric drive transaxle with integrated power electronics in an existing Ford transmission facility.	
Remy, Inc.	\$60.2	Anderson, IN	Establishing a standardized platform of hybrid electric motors and controls.	
UQM Technologies, Inc.	\$45.1	Frederick, CO	Expanding established propulsion systems into a volume manufacturing environment.	
Magna E-Car Systems of America, Inc.	\$40	Muncie, IN Holly, MI	Increasing production capacity of advanced automotive electric drive system component manufacturing plants located in the U.S.	
Electric Drive Subcomponent Manufacturing Facilities				
KEMET Corporation	\$15.1	Simpsonville, SC	Production of DC bus capacitors including soft wound film and stacked film capacitors necessary for electric drive system power electronics.	
SBE, Inc.	\$9.1	Barre, VT	Outfitting of a high-volume manufacturing facility to build DC Bus Capacitors for the electric drive vehicle industry.	
Powerex, Inc.	\$8.1	Youngwood, PA	Creating an electric drive semiconductor development, qualification, and production center.	

## Updated: October 2011 RECOVERY ACT AWARDS FOR TRANSPORTATION ELECTRIFICATION

Applicant	DOE Award (Dollars in Millions)	Project Locations	Project Focus
		Advanced Vehicle	Electrification
Electric Transportation Engineering Corp. (ETEC) (known as Ecotality North America)	\$114.8	Headquarters: Phoenix, AZ Manufacturing: Michigan Deployment: Phoenix (AZ), Tucson (AZ), San Diego (CA), San Francisco (CA), Los Angeles (CA), Portland (OR), Eugene (OR), Salem (OR), Corvallis (OR), Seattle (WA), Nashville (TN), Knoxville (TN), Memphis (TN) and Chattanooga (TN), Washington D.C., Dallas (TX), Fort Worth (TX), and Houston (TX).	ECOtality is deploying more than 13,000 AC level 2 charging stations in residential, commercial, and public locations and 225 DC fast chargers in select cities. This infrastructure is being deployed in conjunction with 8,300 electric drive vehicles including the Nissan Leaf and the Chevy Volt. This project includes the collection of a comprehensive set of data from both charging stations and vehicles, enabling analysis to understand how consumers utilize electric-drive vehicles and charging infrastructure.
Chrysler, LLC	\$48	Manufacturing: Auburn Hills, MI Deployment: partner fleets	Develop, validate, and deploy more than 140 advanced plug-in hybrid electric pickups.
Coulomb Technologies	\$15	Manufacturing: San Jose, CA; Deployment: Boston, MA, Bellevue/Redmond, WA, Sacramento, CA, San Jose/San Francisco Bay Area, Los Angeles, CA, Austin, TX, Southern Michigan (including Grand Rapids, Lansing, Ann Arbor, Detroit), New York City, NY, Washington DC/Baltimore, Orlando/Tampa, FL	Coulomb is deploying 4,600 AC level 2 charging stations in residential and commercial locations. This infrastructure is being deployed in conjunction with 2,400 electric drive vehicles including the Chevy Volt and Ford Transit Connect EV. This project includes the collection and analysis of data from the charging stations.
South Coast Air Quality Management District (SCAQMD)	\$45.4	Headquarters: Diamond Bar, CA Deployment: 50 different utilities and fleets including EPRI in Palo Alto, CA	Develop a fully integrated, production plug-in hybrid system for Class 4-7 vehicles. Demonstrate a fleet of over 250 trucks and shuttle buses.
Navistar, Inc. (Truck)	\$39.2	Manufacturing: Elkhart County, IN; Deployment: Portland, Chicago, and Sacramento	Develop, validate, and deploy 950 advanced battery electric delivery trucks with a 100 mile range.

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Applicant	DOE Award (Dollars in Millions)	Project Locations	Project Focus
		Transportation Sect	or Electrification
Cascade Sierra Solutions	\$22.2	Headquarters: Coburg, OR; Deployment: 50 U.S. truck stop electrification sites	Deployment of truck stop electrification infrastructure at 50 sites along major U.S. Interstate corridors and provide 5,450 rebates for truck modification to idle reduction technologies.
A	dvanced Vehic	le Electrification + Tra	ansportation Sector Electrification
General Motors	\$30.5	Manufacturing: Michigan; Deployment: several utility partners' fleets	Develop, analyze, and demonstrate 155 Chevrolet Volt Extended Range Electric Vehicles (EREVs) in conjunction with electric utility partners.
Smith Electric Vehicles	\$32	Manufacturing: Kansas City, MO; Deployment: Several partners' fleets	Develop and deploy approximately 500 electric medium-duty trucks with a 100 mile range.
	Advand	ced Electric Drive Vel	nicle Education Program
West Virginia University (NAFTC)	\$6.9	Morgantown, WV State of South Carolina	Educational programs for: Graduate,     Undergraduate and Secondary Students;     Teachers; Technicians; Emergency Responders;     General Public     Partnering with: NAFTC Headquarters and members; West Virginia Department of Education; South Carolina Department of Education; Greater New Haven Clean Cities Coalition; Innovation Drive, Inc.; Advanced Vehicle Research Center; Auto Exposure LLC; Big Fish Advertising and Public Relations; MotorWeek; Sabre Engineering; Northeast Utilities
Purdue University	\$6.1	State of Indiana West Lafayette, IN	<ul> <li>Educational programs for: Graduate,         Undergraduate and Secondary Students;         Teachers; Technicians; General Public</li> <li>Partnering with: University of Notre Dame; Indiana University Purdue University at Indianapolis (IUPUI); Purdue University – Calumet; Indiana University – Northwest; Ivy Tech Community College</li> </ul>
Colorado State University	\$5	State of Colorado State of Georgia Fort Collins, CO Boulder, CO Atlanta, GA	<ul> <li>Educational programs for: Graduate,         Undergraduate and Secondary Students;         Teachers; Technicians; Emergency Responders;         General Public</li> <li>Partnering with: CSU; Georgia Institute of         Technology; Arapahoe Community College;         Douglas County School System; Nissan NA;         KShare; Ricardo; AM General; Motion Reality, Inc.</li> </ul>
Missouri University of Science and Technology	\$5	Rolla, MO Warrensburg, MO Linn, MO St. Louis, MO Kansas City, MO Lee's Summit, MO	<ul> <li>Educational programs for: Graduate,         Undergraduate and Secondary Students;         Teachers; Technicians; Mechanics; Emergency         Responders; General Public</li> <li>Partnering with: University of Central Missouri;         Linn State Technical College; St. Louis Science         Center; Smith Electric Vehicles U.S. Corporation         (SEV-US); Kokam America Inc.</li> </ul>

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Wayne State University	\$5	Detroit, MI Warren, MI	<ul> <li>Educational programs for: Graduate,         Undergraduate and Secondary Students;         Teachers; Technicians; Emergency Responders;         General Public</li> <li>Partnering with: NextEnergy; Macomb Community         College</li> </ul>
National Fire Protection Association	\$4.4	Quincy, MA	<ul> <li>Educational programs for: Emergency Responders</li> <li>Partnering with: Fire Protection Research Foundation; Automotive Alliance; NREL</li> </ul>
Michigan Technological University	\$2.98	Houghton, MI (Western Upper Peninsula of MI)	<ul> <li>Educational programs for: Graduate,         Undergraduate and Secondary Students; General         Public</li> <li>Partnering with: Argonne National Laboratory;         AVL; GM; Eaton; Horiba; MathWorks; Schweitzer         Engineering Laboratories; Woodward</li> </ul>
University of Michigan	\$2.5	Detroit, MI Ann Arbor, MI Dearborn, MI Flint, MI	<ul> <li>Educational programs for: Graduate,         Undergraduate and Secondary Students;         Teachers; General Public</li> <li>Partnering with: University of Michigan – Dearborn;         Kettering University; Ford; GM; Chrysler; Eaton         Corp; DTE Energy; Mentor Graphics; Ballard;         Quantum Technologies; A123 Systems</li> </ul>
J. Sargeant Reynolds Community College	\$0.72	Commonwealth of Virginia and Neighboring Mid- Atlantic States.	<ul> <li>Educational programs for: Secondary Students;         Technicians</li> <li>Partnering with: James Madison University;         Virginia Department of Education; Ford; GM;         Toyota; Firestone/Bridgestone</li> </ul>
City College of San Francisco	\$0.5	San Francisco , CA	<ul> <li>Educational programs for: Secondary Students; Service Personnel, Technicians</li> <li>Partnering with: Chabot College; Central Shops; Pat's Garage; Perfect Sky Inc.</li> </ul>