

## Glass R&D Awards

Project Title	Partners and Locations	DOE Funding	Cost-Share
Energy-Efficient Glass Melting: The Next Generation Melter	Gas Technology Institute (Des Plaines, Ill.) Corning, Incorporated (Corning, N.Y.) PPG Industries (Pittsburgh, Pa.) Owens Corning (Granville, Ohio) Schott Glass Technologies (Duryea, Pa.) Johns Manville (Littleton, Colo.) CertainTeed Corporation (Blue Bell, Pa.) Fluent Inc. (Lebanon, N.H.) Praxair (Danbury, Conn.) A.C. Leadbetter and Son (Toledo, Ohio) Eclipse/Combustion Tec (Rockford, Ill.) New York State Energy Research and Development Authority (Albany, N.Y.)	\$3,833,000	\$2,168,000
High-Intensity Plasma Glass Melter	Plasmelt Glass Technologies, LLC (Boulder, Colo.) Johns Manville (Littleton, Colo.) Advanced Glassfiber Yarns (Aiken, S.C.)	\$1,076,664	\$461,428
Development and Demonstration of an Advanced Oxy-Fuel Fired Front-End System	Owens Corning (Granville, Ohio) Osram-Sylvania (Exeter, N.H.) Thomson Inc. (Circleville, Ohio) Eclipse/Combustion Tec (Rockford, Ill.) BOC Gases (Maumee, Ohio)	\$900,015	\$900,015

## Metal Casting R&D Awards

Project Title	Partners and Locations	DOE Funding	Cost-Share
Energy Saving Melting and Revert Reduction Technology (Energy SMARTT)	Advanced Technology Inst. (N. Charleston, S.C.) Univ. of Alabama (Birmingham, Ala.) Univ. of Iowa (Iowa City, Iowa ) Univ. of Missouri (Rolla, Mo.) CANMET Energy Tech Center (Ottawa, Canada) Case Western Reserve Univ. (Cleveland, Ohio) Eck Industries (Manitowoc, Wis.) Worcester Polytechnic Inst. (Worcester, Mass.) INEEL (Idaho Falls, Idaho) Ohio State Univ. (Columbus, Ohio) Colorado School of Mines (Golden, Colo.) Iowa State Univ. (Ames, Iowa) Lehigh Univ. (Bethlehem, Pa.) International Lead Zinc Research Organization (Research Triangle Park, N.C.) Edison Materials Tech. Center (Dayton, Ohio)	\$11,560,492	\$11,560,494  > 100 companies will contribute cost shares.
In-Situ, Real-Time Monitoring and Control of Mold Making and Filling Processes	Tennessee Technological Univ. (Cookeville, Tenn.) ORNL (Oak Ridge, Tenn.) Walford Technologies (Oak Ridge, Tenn.) 9 other partners	\$1,543,000	\$1,698,000

<b>Project Title</b>	<b>Partners and Locations</b>	<b>DOE Funding</b>	<b>Cost-Share</b>
Development of Computational Tools for the Assurance of High Strength and Fatigue Resistant Aluminum Castings	General Motors (Pontiac, Mich.) ORNL (Oak Ridge, Tenn.) Univ. of Wisconsin (Madison, Wis.) CompuTherm (Madison, Wis.) EKK Inc. (Walled Lake, Mich.) Worcester Polytechnic Inst. (Worcester, Mass.)	\$2,765,621	\$2,765,622
Advanced Scalable Clean Aluminum Melting Systems	Secat Inc. (Lexington, Ky.) ORNL (Oak Ridge, Tenn.) DOE Albany Research Center (Albany, Ore.) Univ. of Kentucky (Lexington, Ky.) E3M Inc. (N. Potomac, Md.) plus 9 other partners	\$1,875,000	\$2,175,000

### **Sensors & Automation R&D Awards**

<b>Project Title</b>	<b>Partners and Locations</b>	<b>DOE Funding</b>	<b>Cost-Share</b>
Wireless and Sensing Solutions Advancing Industrial Efficiency	Honeywell International (Minneapolis and Plymouth, Minn.) Univ. of Illinois (Urbana-Champaign, Ill.) Cavition Inc. (Champaign, Ill.) Axonn (New Orleans, La.) Ember Corp. (Boston, Mass.) EPRI (Palo Alto, Calif.) iAculum (Santa Cruz, Calif.)	\$5,168,713	\$5,168,714
Distributed Wireless Multisensor Technologies	GE Global Research (Niskayuna, N.Y.) Rensselaer Polytechnic Institute (Troy, N.Y.)	\$2,990,187	\$2,990,188
Eaton Wireless Sensor Network for Advanced Energy Management Solutions	Eaton Corp. (Milwaukee, Wis.) Red Wing Technologies (Minneapolis, Minn.) Adventium Laboratories (Minneapolis, Minn.)	\$3,000,000	\$3,057,567
Boiler and Furnace Efficiency Improvement with Low-Cost CO Sensor and Burner Control System	TIAX LLC (Cambridge, Mass.) COEN Company (Burlingame, Calif.)	\$2,868,475	\$2,868,475
Surface Quality Assured Steel Bar Project	OG Technologies (Ann Arbor, Mich.)	\$2,500,000	\$2,537,160

## Industrial Materials R&D Awards

Project Title	Partners and Locations	DOE Funding	Cost-Share
Materials for Industrial Heat Recovery Systems	Weyerhaeuser Company (King, Wash.) Secat Inc. (Lexington, Ky.) Oak Ridge National Laboratory (Oak Ridge, Tenn.) 12 additional industrial partners	\$3,160,000	\$1,977,000
Development of Functionally Graded Materials for Manufacturing Tools and Dies and Industrial Processing Equipment	Carpenter Powder Products (Bridgeville, Pa.) South Dakota School of Mines and Technology (Rapid City, S.D.) Pacific Northwest National Laboratory (Richland, Wash.) 4 additional industrial partners	\$2,425,000	\$1,425,000
Structurally Integrated Coatings for Wear and Corrosion	Caterpillar Inc. (Peoria, Ill.) Oak Ridge National Laboratory (Oak Ridge, Tenn.) 6 additional industry, university and National Laboratory partners	\$1,828,593	\$1,828,625
Multifunctional Metallic and Refractory Materials for Energy Efficiency Handling of Molten Metals	West Virginia University (Morgantown, W.Va.) University of Missouri – Rolla (Rolla, Mo.) Oak Ridge National Laboratory (Oak Ridge, Tenn.) International Lead Zinc Research Organization (Research Triangle Park, N.C.) Secat Inc. (Lexington, Ky.) Energy Industries of Ohio (Cleveland, Ohio) 19 additional industrial partners	\$2,909,925	\$2,772,863
Development of Materials Resistant to Metal Dusting Degradation	Materials Technology Institute (St. Louis, Mo.) Argonne National Laboratory (Argonne, Ill.) 11 additional industrial partners	\$450,000	\$602,500
Development of Bulk, Nanocrystalline Cemented Tungsten Carbide for Industrial Applications	The University of Utah (Salt Lake City, Utah) Kennametal Inc. (Rogers, Ariz.) Smith International Inc. (Houston, Texas) Idaho National Engineering and Environmental Laboratory (Idaho Falls, Idaho)	\$1,358,000	\$605,000
Advanced Integration of Multi-Scale Mechanics and Welding Process Simulation In Weld Integrity Assessment	Engineering Mechanics Corporation of Columbus (EMC <sup>2</sup> ) (Columbus, Ohio) Massachusetts Institute of Technology (Cambridge, Mass.) Northwestern University (Evanston, Ill.) Oak Ridge National Laboratory (Oak Ridge, Tenn.) 8 additional industrial partners	\$1,500,000	\$750,000

<b>Project Title</b>	<b>Partners and Locations</b>	<b>DOE Funding</b>	<b>Cost-Share</b>
Development and Implementation of Advanced Wear and Corrosion Resistant Systems through Laser Surface Alloying and Materials Simulation	The Applied Research Laboratory, Pennsylvania State University (State College, Pa.) Oak Ridge National Laboratory (Oak Ridge, Tenn.) 6 additional industrial partners	\$255,000	\$210,000
Prediction of Corrosion of Advanced Materials and Fabricated Components	OLI Systems (Morris Plains, N.J.) Southwest Research Institute (San Antonio, Texas) 6 additional industrial partners	\$2,089,747	\$1,114,732
Advanced Thermoelectric Materials for Efficient Waste Heat Recovery in Process Industries	PPG Industries Inc. (Pittsburgh, Pa.) Pacific Northwest National Laboratory (Richland, Wash.) 5 additional industrial and university partners	\$1,950,000	\$1,665,000
Low-Temperature Surface Carburizing of Stainless Steels	Swagelok Company (Solon, Ohio) Oak Ridge National Laboratory (Oak Ridge, Tenn.) 3 additional university and industrial partners	\$1,485,000	\$1,059,400
Advanced Research Proposal on Use of High-Strength/High-Alkaline-Resistant Fe-Phosphate (Hhfp) Glass Fibers as Concrete Reinforcement	Mo-Sci Corporation (Rolla, Mo.) University of Missouri – Rolla (Rolla, Mo.) Other industrial partners TBD	\$960,000	\$411,000

## Plant-wide Assessment Awards

Project Title	Partners and Locations	DOE Funding	Cost-Share
Plant-Wide Energy Assessment for Owens Corning Plant	Owens Corning (Santa Clara, Calif.) Prenova Inc. (Atlanta, Ga.)	\$100,000	\$371,000
Norco Chemical Plant Factor 4 Eco-Efficiency Innovation Lab	Shell Chemical (Norco, La.) Rocky Mountain Institute (Snowmass, Colo.)	\$100,000	\$220,000
Plant Wide Assessment of Ford Michigan Truck Plant Paint Shop	Ford Motor Company (Redford, Mich.) Energy Information Systems (Dayton, Ohio) E3M Inc. (N. Potomac, Md.)	\$100,000	\$102,000
Secure A Unique Strategy For Site Wide Energy Assessment	Solutia (Springfield, Mass.) Western Massachusetts Electric Co. (West Springfield, Mass.) IMS Engineering Inc. (Chapin, S.C.) University of Massachusetts (Amherst, Mass.)	\$100,000	\$191,000
Plant-Wide Assessments for Oldcastle Rock Mining and Asphalt Facilities	Oldcastle Materials Inc. (New Haven, Conn.; Delaware City, Ohio) Energy & Resource Solutions (Haverhill, Mass.) EIS (Dayton, Ohio)	\$100,000	\$100,000
Plant-Wide Assessment For Energy Efficiency Improvement, Reduction of Emissions and Increased Productivity in a Forging and Heat Treating Plant	SIFCO Forge Group (Cleveland, Ohio) EIS (Dayton, Ohio) E3M (N. Potomac, Md.) The Department of Development (Columbus, Ohio) Forging Industry Association (Cleveland, Ohio)	\$100,000	\$105,000
Plant-Wide Assessment of Cargill Dayton Corn Plant	Cargill (Dayton, Ohio) EIS (Dayton, Ohio) E3M (N. Potomac, Md.) Diagnostic Solutions (Knoxville, Tenn.) Ohio Office of Energy Efficiency (Columbus, Ohio)	\$100,000	\$100,000

<b>Project Title</b>	<b>Partners and Locations</b>	<b>DOE Funding</b>	<b>Cost-Share</b>
Powder River Coal Company Wyoming Plant-Wide Assessment	Peabody Energy (Gillette, Wyo.) Rockwell Automation (Milwaukee, Wis.)	\$91,910	\$91,910