

Summary:

For the August 19th issue of NAATBatt's Advanced Battery Weekly, we highlight the ongoing sector activities.

NAATBatt's 2011 Annual Meeting and Conference, including the 1st Industry-Academic Advanced Battery Summit, will be held on September 7-8, 2011, in Louisville, Kentucky. Go to: <http://events.constantcontact.com/register/event?llr=5kjlyfdab&oeidk=a07e3yxwr9k4d31bff3> for more information and to register.

The through August 15, the U.S. Battery Index increased 11.9%, while the NAATBatt and Asia Battery Indices were flat. The S&P500 and Russell 2000 increased 7.6% and 10.4%, respectively.

The Department of Energy has awarded \$175 million in funding for 40 projects (including those from NAATBatt members Applied Materials and Dow-Kokam) focused on the development and deployment of next-generation battery and vehicle technologies. The largest portion of the awards, \$50 million, was directed to 12 projects involving advanced cells and design technology for advanced batteries. A full list of the awards is reproduced in this newsletter below.

Executive Director James Greenberger writes about the importance of new technology to the U.S. advanced battery industry and the DOE's apparently growing interest in silicon anodes. Read "**Here Come the Californians**" in the Executive Director's Notes portion of this newsletter below.

Key Highlights:

- The **Federal Court of Appeal in Canada** has affirmed the lower court's finding of **Phostech Lithium's** infringement of **Valence Technology's** carbothermal reduction Canadian patent. The injunction ordered by the trial court is reinstated and the company is entitled to reasonable compensation and costs for the trial and subsequent appeal.
- **Electrovaya** has signed a contract to provide a lithium-ion (li-ion) energy storage systems (ESS) of approximately 1.2 megawatt-hours (MWh) for demonstration purposes in support of renewable energy generation in **Ontario**. The program is a part of a company led \$7.6 million project supported by the **Government of Canada's Clean Energy Fund**.
- The **Oregon Department of Transportation (ODOT)** has selected **AeroVironment** to supply twenty-two charging stations along major transportation corridors and travel destinations in northwest **Oregon**. Site review and selection is commencing and construction is scheduled to be complete by December 2012.
- **ABB** and **General Motors** have teamed up to study how **Volt** batteries perform during power outages or times of peak energy demand. Three power companies are expected to sign agreements in the coming months to test the batteries.
- **Altair Nanotechnologies** has signed a contract with the **Hawai'i Natural Energy Institute of the University of Hawai'i at Manoa** to supply a one MW ESS for a test of solar energy integration. **Hawaiian Electric Company** plans to install the ESS at one of its electrical substations in central **Oahu** in early 2012.
- **Coda Automotive** has entered into a partnership with **China-based Great Wall Motor Company** to develop EVs for worldwide distribution. The company has applied for a \$500 million **U.S. Department of Energy** loan that would help fund a proposed battery plant in **Columbus, Ohio**.

- **Aptera Motors** announced that it would be returning all the deposits it had taken for its planned electric vehicles (EVs). **A123 Systems** is the battery supplier.
- **Communauto** (a car sharing service company) has 15 **Nissan Leafs** and is planning to add another 35 to its offerings in **Montreal** and **Quebec City**. The Communauto venture will use charging stations from **AddÉnergie** and **AéroVironment**.
- **Car Charging Group** will begin charging on an hourly basis for the fueling of EVs at its charging stations across the country. The company currently has 29 contracts signed with clients that have over 4,300 locations throughout the USA.
- About 100 charging points will be set up in strategic places around **Malta** by 2012. \$2.7 million has been secured under the co-financed **European Union “Life Plus”** program in an effort to accelerate EV adoption.
- Two charging stations were opened at a **Holiday Inn Express** in downtown **Albany, New York**. The stations were installed by **Plugin Stations Online**.
- **ePowerTrucks (U.K.-based)** has supplied **Drewmark Building Services** with an electric maintenance vehicle that can be fitted with a gritter and snow plough. The flat bed can carry a 1,000kg payload and tow up to 3,000kg.

A Few More Details:

The Federal Court of Appeal in Canada has affirmed the lower court's finding of Phostech Lithium's infringement of Valence Technology's carbothermal reduction Canadian patent, number 2,395,115 and found Valence's Patents 2,395,115 and 2,466,366 valid. The Canadian lawsuit was filed against Phostech Lithium on January 31, 2007. The company had received a favorable judgment by the Trial Court this past February. The injunction ordered by the trial court is reinstated and Valence is entitled to reasonable compensation and costs for the trial and subsequent appeal, as well as an election of either an accounting of profits or damages.

Source: Valence Technology

Electrovaya has signed a contract to provide a li-ion energy storage systems (ESS) of approximately 1.2 MWh for demonstration purposes in support of renewable energy generation in Ontario. The program is a part of a company led \$7.6 million project supported by the Government of Canada's Clean Energy Fund. Partners in the project include Natural Resources, Canada, Hydro One and others.

Source: Electrovaya

The Oregon Department of Transportation (ODOT) has selected AeroVironment to supply, operate and maintain twenty-two charging stations along major transportation corridors and travel destinations in northwest Oregon. Site review and selection is commencing and construction is scheduled to be complete by December 2012. Funding for the project came from a \$2 million U.S. Department of Transportation TIGER II (Transportation Investment Generating Economic Recovery) grant.

Source: AeroVironment

ABB and General Motors have teamed up to study how Volt batteries perform during power outages or times of peak energy demand. The first phase of the experiment is nearly complete as the lithium ion cells are readied for interconnection with a utility power grid. Three power companies are expected to sign agreements in the coming months to test the batteries. The ABB-GM battery experiment began in September and will continue into next year.

Source: News & Observer

Altair Nanotechnologies has signed a contract with the Hawai'i Natural Energy Institute (HNEI) of the University of Hawai'i at Manoa to supply a one MW ESS for a test of solar energy integration. The company will provide a system to be tested on Hawaiian Electric's electric system to smooth the voltage and load profile with the aid of dynamic voltage controls and fast charge/discharge abilities. Hawaiian Electric Company plans to install the energy storage system at one of its electrical substations in central Oahu in early 2012.

Source: Altair Nanotechnologies

Coda Automotive has entered into a partnership with China-based Great Wall Motor Company to develop EVs for worldwide distribution. The company has applied for a \$500 million U.S. Department of Energy loan that would help fund a proposed battery plant in Columbus, Ohio. The plant could employ more than 1,000 people.

Source: Detroit Free Press

Aptera Motors announced that it would be returning all the deposits it had taken for its planned 2e electric and 2h hybrid vehicles (as shown in **Exhibit 1**). The company has applied for a loan from the Advanced Technology Vehicles Manufacturing Loan Program from the Department of Energy, but it has yet to be approved. A123 Systems is the battery supplier.

Source: Fox News

Exhibit 1: The Electric Three-Wheeler



Source: APTERA Motors

Communauto has 15 Nissan Leafs and is planning to add another 35 to its offerings in Montreal and Quebec City. The car sharing service has almost 25,000 members in Quebec and is accepting applications from up to 150 members to be “Beta testers” of the EVs. The plan is to have one charging station per EV at selected Communauto lots in Montreal and Quebec. The stations will be provided by AddÉnergie and AéroVironment and are expected to be operation by early-2012.

Source: Montreal Gazette

Car Charging Group will begin charging on an hourly basis for the fueling of EVs at its charging stations across the country. The company has 29 contracts signed with clients that have over 4,300 locations throughout the country. The company’s partners have over 5.3 million parking spaces in their portfolios of properties that range from parking garages to multi family residential properties to commercial properties.

Source: Car Charging Group

About 100 charging points will be installed around Malta by 2012. \$2.7 million has been secured under the co-financed European Union “Life Plus” program in an effort to accelerate EV adoption. According to Transport Malta, no EVs have been sold in 2011. By 2020, Malta is targeting to have 5,000 on the road.

Source: Times of Malta

Two charging stations were opened at a Holiday Inn Express in downtown Albany. The EVs can be fully charged in two to four, or eight to ten hours depending on the setting and can be reserved through the hotel. The stations were installed by Plugin Stations Online

Source: Associated Press

ePowerTrucks (U.K.-based) has supplied Drewmark Building Services with an electric maintenance vehicle that can be fitted with a gritter and snow plough (as shown in **Exhibit 2**). The Alke truck has a range of up to 50 miles on a single charge and is fully road legal. The flat bed can carry a 1,000kg payload and tow up to 3,000kg.

Exhibit 2: eTruck Fitted with a Snow Plough



Source: ePowerTrucks

Exhibit 3: The 40 Projects That have Received \$175 Million in DOE Funding

Applicant	Location	DOE Award	Description
Advanced fuels and lubricants (Area of Interest 1A, 1B, and 1C)			
Alliance for Sustainable Energy, LLC – NREL	Golden, CO	\$1,506,164	This project will determine levels at which higher alcohols and other advanced oxygenated fuel components can be readily integrated into the existing fuel supply (i.e., drop-in replacement fuels).
Ford Motor Company	Dearborn, MI	\$1,500,000	This project will identify fuel properties that can be used to enable novel combustion strategies with low emissions of nitrogen oxides in an engine, and enhance existing models to capture the effect of additional key fuel properties on combustion.
Wisconsin Engine Research Consultants LLC	Madison, WI	\$1,500,000	This project will optimize fuel-based control of novel combustion strategies in light- and heavy-duty vehicles to enable diesel-like efficiencies with ultra-low engine-out emissions.
Massachusetts Institute of Technology	Cambridge, MA	\$1,497,531	This project will investigate the use of novel lubricant formulations that target differing lubrication requirements of the major engine subsystems (e.g., valve train vs. bearings).
Ford Motor Company	Dearborn, MI	\$1,200,000	This project will research, develop, and demonstrate polyalkylene glycol (PAG)-based engine oil technology which can reduce engine friction relative to conventional petroleum-based and synthetic oils.
Oak Ridge National Laboratory (dba UT-Battelle, LLC)	Oak Ridge, TN	\$1,200,000	This project will investigate the use of ionic liquids as a new class of multi-functional (anti-wear and friction modifier) lubricant additives to allow the use of lower-viscosity engine oils, to improve engine efficiency.
Massachusetts Institute of Technology	Cambridge, MA	\$962,497	This project will enable diesel-like efficiency and increased maximum power output in a gasoline engine by using a secondary fuel to suppress engine knock under high load.

Chrysler Group LLC	Auburn Hills, MI	\$10,000,000	This project will develop and demonstrate a cost effective, light-weight, multi-material vehicle incorporating technologies targeting 50% weight reduction.
Advanced cells and design technology for electric drive batteries (Area of Interest 4A, 4B, 4C, and 4D)			
The Pennsylvania State University	University Park, PA	\$5,000,000	This project will develop a high energy density lithium-sulfur cell technology that significantly reduces battery size, and improves performance and life.
Amprius, Inc.	Menlo Park, CA	\$4,998,336	This project will develop next generation, high-energy lithium ion cells leveraging silicon anodes, doubling the capacity of state of the art vehicle batteries.
Dow Kokam, LLC	Lee's Summit, MO	\$4,986,984	This project will develop and deliver low cost, large format cells with extremely high energy density, that meet performance, life, and safety requirements of electric drive vehicles.
Applied Materials Inc.	Santa Clara, CA	\$4,902,862	The project will design and assemble a low cost, high volume manufacturing module for fabricating high capacity metal alloy anodes in a continuous roll-to-roll configuration.
Seeo, Inc	Berkeley, CA	\$4,874,391	This project will develop high-energy cells using a lithium metal anode and a proprietary solid polymer electrolyte that significantly reduces battery cost and size, and improves life and safety.
Nanosys, Inc.	Palo Alto, CA	\$4,840,781	This project will develop next generation, high-energy lithium ion cells leveraging high voltage composite cathode materials and silicon based anodes doubling the capacity of state of the art vehicle batteries.
3M Company	St. Paul, MN	\$4,577,909	This project will develop a cell, with high energy density at low cost for Lithium-ion (Li-ion) batteries for automotive applications by integrating advanced chemistries and enabling technologies related to electrode preparation.
Miltec UV International, LLC	Stevensville, MD	\$4,405,935	This project will develop and demonstrate the use of Ultraviolet (UV) and Electron Beam (EB) curing technology to reduce the cost of manufacturing Lithium ion battery electrodes more than 50%.

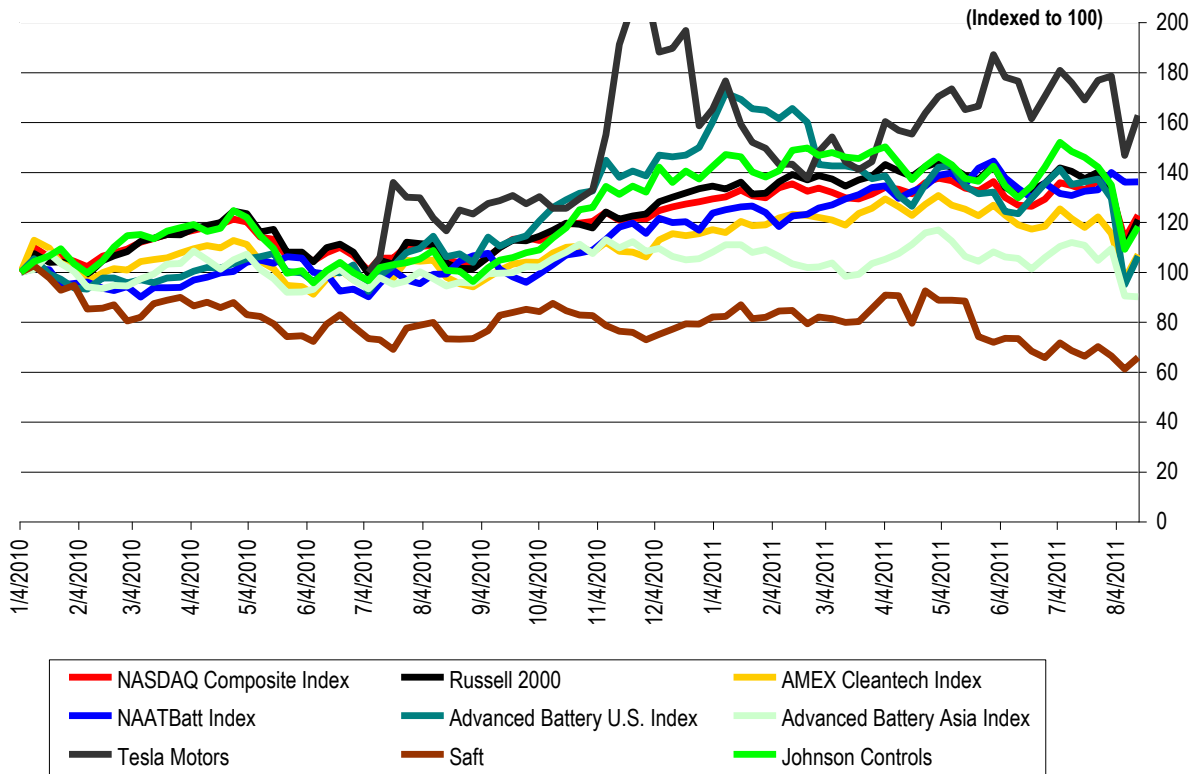
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Johnson Controls, Inc.	Milwaukee, WI	\$3,673,132	This project will develop and demonstrate a portfolio of advanced manufacturing process improvements to significantly reduce the manufacturing cost of large format Li-ion cells by 50%.
A123 Systems, Inc.	Watertown, MA	\$2,992,744	This project will develop and demonstrate dry process electrode fabrication to reduce cost of EV and PHEV's innovations in lithium ion battery production.
DENSO International America, Inc.	Southfield, MI	\$2,610,555	This project will develop and demonstrate an innovative battery thermal management system that will allow vehicle OEM's to reduce the size of PHEV & EV battery packs or increase the drive range.
Optodot Corporation	Watertown, MA	\$2,249,127	This project will conduct research and development to reduce the cost of manufacturing lithium ion batteries by 40% by incorporating new inactive components and by utilizing a simpler and faster battery assembly process.
Advanced power electronics and electric motor technology (Area of Interest 5A and 5B)			
General Motors LLC	Pontiac, MI	\$6,000,000	This project will develop high performance, low-cost power module and inverter switching technologies that lead to the design and fabrication of the next generation of power inverters.
General Electric	Niskayuna, NY	\$5,967,114	This project will develop high-performance motors with non-rare earth materials by concurrently engineering advanced motor designs, materials, thermal management, and motor controls.
Azure Dynamics, Incorporated	Woburn, MA	\$5,355,625	This project will develop an inverter with improved thermal performance with focus on materials and technology innovations to improve efficiency and reduce cost to enable vehicle electrification.
UQM Technologies, Inc.	Longmont, CO	\$3,024,592	This project will develop a non-rare-earth permanent magnet motor architecture that will enable the use of low energy magnet technology.
Solid State Thermoelectric Energy Conversion Devices (Area of Interest 6A)			
Amerigon Incorporated	Irwindale, CA	\$8,000,000	This project will improve passenger car fuel efficiency by 5% through the conversion of exhaust gas waste heat to electric power using a thermoelectric generator.

General Motors, LLC	Warren, MI	\$8,000,000	This project will develop a thermoelectric generator (TEG) system to convert waste heat to electric power, with the control systems necessary to utilize that power in a vehicle.
GMZ Energy, Inc	Waltham, MA	\$8,000,000	This project will demonstrate a robust thermoelectric exhaust waste heat recovery system that provides >5% fuel efficiency improvement for a light-duty vehicle.
Fleet Efficiency (Area of Interest 7A and 7B)			
Cooper Tire & Rubber Company	Findlay, OH	\$1,500,000	This project will develop and demonstrate a new class of fuel efficient tires, focused on the replacement market, using innovative materials technology and tire design concepts to improve overall fuel efficiency by 3%.
The Goodyear Tire & Rubber Company	Akron, OH	\$1,499,771	This project will develop and demonstrate an in-tire system for automatically maintaining a set pressure in a commercial truck tire.
PPG Industries, Inc. Monroeville Technical Center	Monroeville, PA	\$1,485,851	This project will research, develop, and validate a modified silica-based tire tread material to reduce tire rolling resistance and a barrier coating to provide extended tire pressure retention.
The Regents of the University of California, Riverside	Riverside, CA	\$1,210,237	This project will develop and demonstrate driver feedback technology that will improve fuel efficiency of passenger cars and commercial vehicles.
Eaton Corporation (Milwaukee, WI)	Milwaukee, WI	\$914,551	This project will develop a simple and inexpensive driver feedback and powertrain management technology to reduce driver-bias on commercial fleets and improve average fleet fuel economy by at least 2 percent.
Advanced Vehicle Testing and Evaluation (Area of Interest 8)			
Electric Transportation Engineering Corp.	Phoenix, AZ	\$26,420,018	This project will test and evaluate early production, and pre-production light-, medium-, and heavy-duty advanced technology vehicles using a variety of fuels, energy storage systems, and propulsion systems.

Source: Department of Energy

Exhibit 4: Indices Performance
(From January 4, 2010)

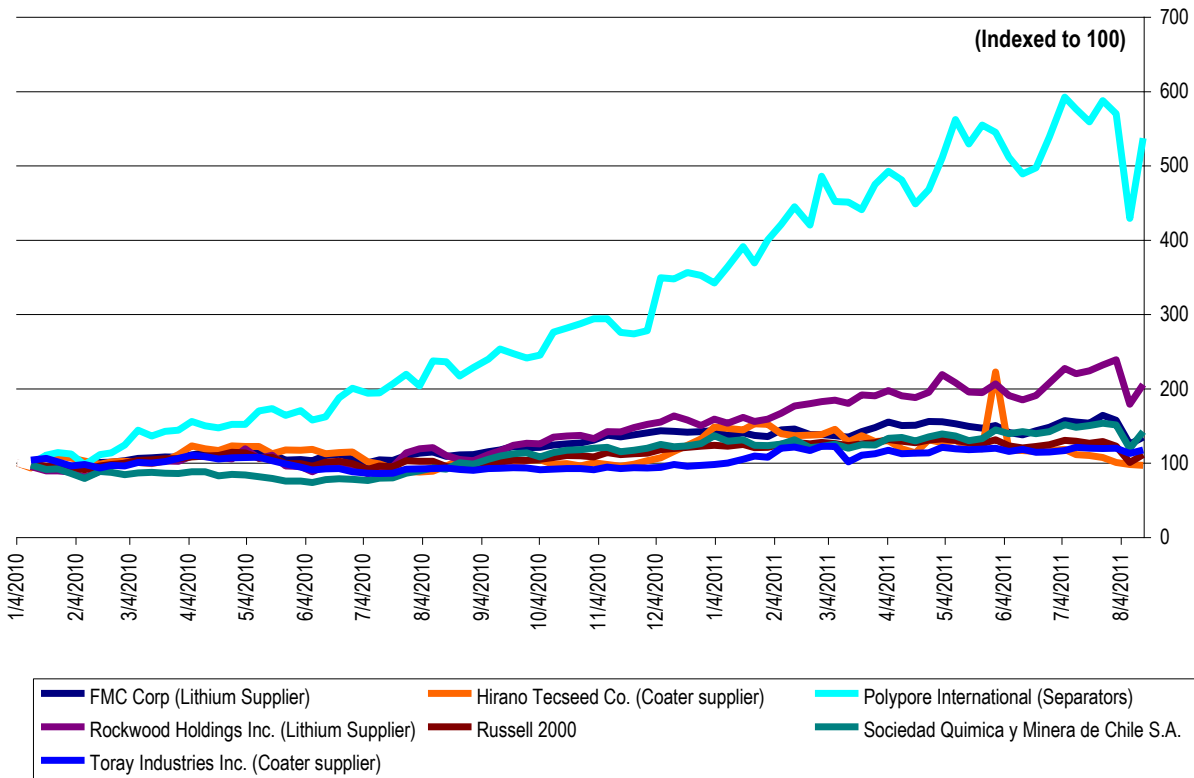


Index	Close on 8/15/2011	52-Wk High	% of 52-Wk High	Performance		
				LTM	YTD	Week
Dow	11,482.9	12,928.5	88.8%	11.5%	(1.6%)	6.2%
S&P 500	1,204.5	1,370.6	87.9%	11.8%	(5.3%)	7.6%
NASDAQ	2,555.2	2,887.8	88.5%	18.2%	(5.1%)	8.4%
Russell 2000	718.6	868.6	82.7%	18.4%	(10.0%)	10.4%
AMEX Cleantech Index	1,050.9	1,292.4	81.3%	9.8%	(8.5%)	10.2%

Source: Bloomberg and ThomsonOne

Note: The select NAATBatt Index is a market-value-weighted average and includes ALTI, BASF, COP, ENS and XIDE. The Advanced Battery U.S. Index is a market-value-weighted average and includes HEV, MGA, MXWL, UQM and VLNC. The Advanced Battery China Index is a market-value-weighted average and includes BYD, CBAK, GS Yuasa, LG Chem and Panasonic.

**Exhibit 5: Supplier Performance
(From January 4, 2010)**



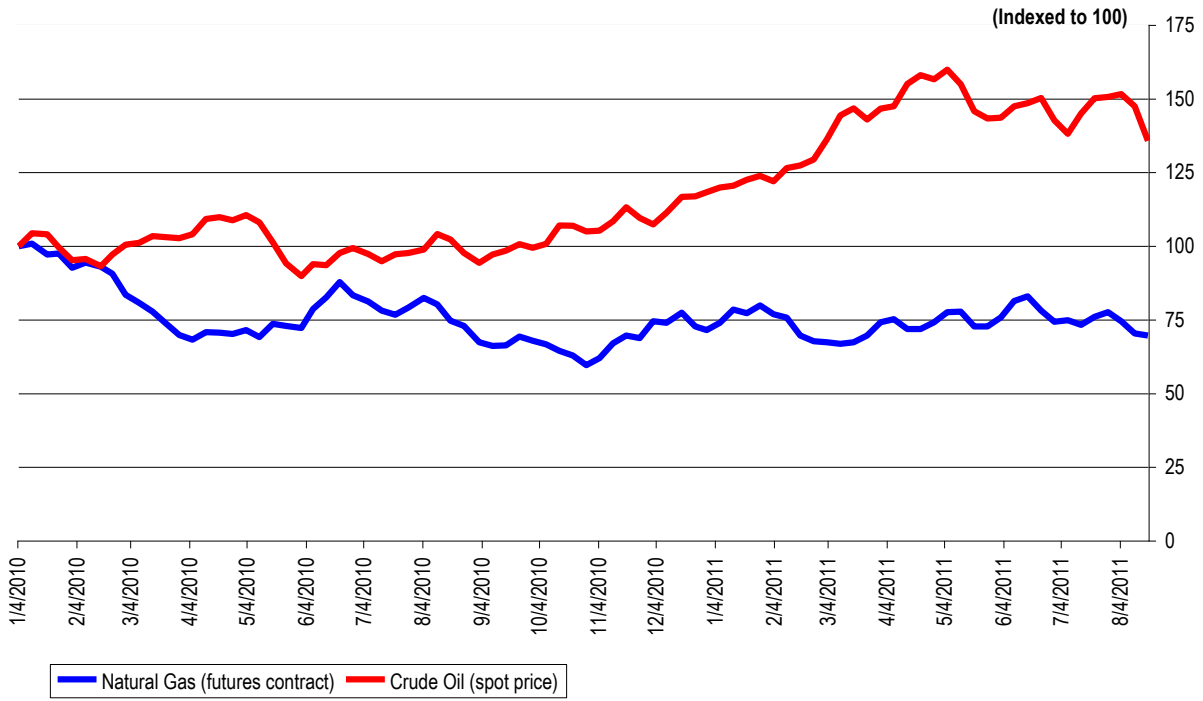
Source: Bloomberg

Exhibit 6: Commodity Prices

Commodity	Price on 8/15/2011	Price on 8/8/2011	Price on 7/15/2011	1 Week Change	1 Month Change
LME Copper (Cash, \$ per tonne)	8,823	9,038	9,606	(2.4%)	(8.1%)
LME Lead (cash, \$ per tonne)	2,353	2,345	2,649	0.4%	(11.2%)
LME Nickel (cash, \$ per tonne)	21,375	22,295	24,055	(4.1%)	(11.1%)

Source: LME

**Exhibit 7: Natural Gas and Crude Oil
(From January 4, 2010)**



Source: EIA

Executive Director's Notes



HERE COME THE CALIFORNIANS

On August 11, 2011, the U.S. Department of Energy (DOE) announced \$175 million in new vehicle efficiency technology grants. The largest portion of the awards, \$50 million, was directed to 12 projects relating to advanced cells and design technology for electric drive batteries.

Several of the new grants went to companies that received awards in 2009 as part of the \$2 billion Electric Drive Vehicle Battery and Component Manufacturing Initiative (DOE-FOA-26). But a number of awardees were new. Most striking was the concentration of awardees in California. Amprius, Applied Materials, Seeo and Nanosys collectively pulled in a little less than \$20 million of the \$50 million awarded nationwide. California-based companies received almost no part of the 2009 grants.

The shift westward in the DOE's attention reflects the DOE's increasing focus on next generation battery technologies. This focus is proper and welcome. If U.S.-based companies are going to play a leading role in the energy storage industry of the 21st Century, it will not be because of their prowess in mass producing existing products. It will be because of their ability to innovate new and better technology and, hopefully, to hold on to as much of the manufacturing of products incorporating that new technology as possible until U.S.-based innovation makes, in turn, that new technology obsolete.

So why the concentration of awards in California? With apologies to my West Coast colleagues, it is not because people in California are smarter or more innovative than people elsewhere. What seemed to drive many of the awards to California was that state's association with a particular element that may become increasingly important to advanced batteries: silicon.

Commentators have long mourned the absence of a Moore's Law in advanced battery technology. Progress in lithium-ion technology has been steady but incremental. The great leaps in battery power and energy capacity necessary for mass electrification of motor vehicles will have to come from commercialization of next generation technologies, such as lithium-sulfur, lithium-air and metal air batteries.

Of the next generation technologies, most experts seem to agree that the first to be commercialized will probably be those using silicon-based anodes in place of the carbon-based anodes used in today's lithium-ion batteries. Silicon-based anodes should be able to just about double the energy capacity per kilogram of today's lithium-ion cells. But silicon is a tough element to work with. It expands and contracts and fractures as it captures and discharges electrons, a characteristic that has poor implications for

battery cycle life. He who can solve the problem of the silicon anode, however, will be able to make a very powerful new battery.

Enter California, land of the semiconductor. It is perhaps not coincidental that of the four California awardees, three seem pretty clearly to be working on silicon anode technology and the fourth (SEEO) is led by a long-time semiconductor industry veteran.

I make no prediction as to the success of silicon anode technology. It is possible that the riddle of the silicon anode will never be solved or that their mass production will prove to be uneconomical. But I have written several times in this column that the battle for the global advanced battery industry is a boxing match, not a race. The key for American industry is to understand that we will lose in the early rounds but must stay in the fight long enough to land our left hook—innovation and superior technology.

We have some tough rounds ahead. 2011 and 2012 may bring bad news for many U.S. companies. Some degree of reorganization and consolidation in the industry is inevitable. So it is comforting to read the list of the most recent DOE battery grants. Because in that list you can glimpse, if just for a moment, our left arm.



James J. Greenberger
Executive Director

August 19, 2011



NAATBatt Membership Applications for 2011

2011 Membership Applications and Dues Structure

NAATBatt is accepting applications for membership for the 2011 calendar year. Membership dues for 2011 are \$10,000 for Corporate Members, \$10,000 for OEM Members, \$10,000 for Utility Members, \$5,000 for Associate Members, \$1,000 for Individual Members, and \$500 for Non-Profit/Government Members. Please click on <http://naatbatt.org/membership-inquiry/> and indicate that you are interested in a 2011 membership.

Why Join NAATBatt?

NAATBatt's mission is to grow the market for advanced electrochemical energy storage technology in North America. NAATBatt provides regular educational programming on topics of interest to the advanced battery community, a weekly newsletter chronicling developments in the North American advanced battery market, networking opportunities for industry participants and their customers, including our recently concluded conference on PEV's and the grid, and public policy initiatives, such as the recent NAATBatt-sponsored meeting with Chairman Jon Wellinghoff of FERC and production of written comments to FERC in support of distributed energy storage technology.

NAATBatt recently concluded the highly successful meeting and conference entitled "The Impact of PEV's on T&D Systems: Challenges and Solutions", in Louisville, Kentucky. The conference was the largest cross-industry event to date focused on the impact of plug-in electric vehicles on the grid. The conference outlined the improvements and upgrades that utilities must make to the grid in order for it to accommodate mass-market electric vehicles. The conference emphasized the critical role that grid-connected energy storage can play in promoting vehicle electrification in the United States. Emphasizing the necessary relationship between grid-connected storage and electric vehicles is one of NAATBatt's primary missions.

NAATBatt is a not-for-profit trade association qualified under Section 501(c)(6) of the Internal Revenue Code that is working for the benefit of the entire industry. **Every dollar spent on NAATBatt memberships and programs goes to recouping program costs and to supporting activities intended to benefit the entire advanced battery industry.** At a time when it seems that the only people making money on advanced lithium-ion technology are professional conference organizers, the advanced battery industry should take control of its own market and its own future. NAATBatt exists to market for the industry, not to the industry. But NAATBatt needs your support to do it. Please join us.

North American Industry Announcements and Calendar

**SEE
UPDATED
AGENDA!**

NAATBatt 2011 Annual Meeting and Conference: NAATBatt's 2011 Annual Meeting and Conference will be held on **September 7-8, 2011** in Louisville, Kentucky. The title of the program is "**New Markets, New Innovations: The Next 5 Years in Advanced Batteries.**" The program will take a hard look at near-term market opportunities for U.S. advanced battery manufacturers. The program will also discuss the possibility of and opportunities for second use of EV batteries. The annual meeting will also feature the **Industry-Academic Advanced Battery Summit** with presentations by some of the top university battery research programs in the United States. Attendees will learn who is working on what in advanced battery research programs in the United States. There is more going on than you think. Information about the 2011 conference is posted on the NAATBatt Web site at: www.naatbatt.org. Please join us in Louisville in September!

Presentations and Materials from the Workshop on Distributed Energy Storage Posted: Presentation materials, handbooks, attendee lists and working group discussion summaries from the recently concluded April 21 DOE/NAATBatt Workshop on Issues in Distributed Energy Storage have been posted on the NAATBatt Web site at: www.naatbatt.org. The materials are available for review to all Workshop registrants and to all NAATBatt members. If you have lost or never received your password to access these materials, please contact Jim Greenberger at jgreenberger@naatbatt.org.

Speaker Presentations from the NAATBatt 2010 Annual Meeting and Conference are Now Available! NAATBatt's 2010 Annual Meeting and Conference entitled "The Impact of PEV's on T&D Systems: Challenges and Solutions" was a great success. More than 40 industry experts presented and the conference on topics relating to how the grid was going to accommodate the new load that will be generated by plug-in electric vehicles. Copies of the speaker presentations are available on a secured portion of the conference Web site. Access to the Web site is free to NAATBatt members and conference attendees. Access to the presentations is now available to all other for the price of \$250. Please contact Jim Greenberger at jgreenberger@naatbatt.org for more information about accessing the presentations.

NAATBatt Membership Information. NAATBatt is taking applications for membership from well qualified industry participants and supporters. Membership in NAATBatt is a great way to keep abreast of developments in advanced technology batteries and to support the growth of a market for products that could change the world. Your support for NAATBatt programs, newsletters, and committees is essential to the success of our organization and our industry. To inquire about membership, please complete the following inquiry form: <http://naatbatt.org/membership-inquiry/>. NAATBatt will respond with additional information about membership.

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- **NAATBatt 2011 Annual Meeting and Conference: September 7-8, 2011** in Louisville, Kentucky Registration is now open for the 2011 Annual Meeting and Conference, which will include the 1st Industry-Academic Advanced Battery Summit. See the note above for more details, or click [here](#).

- **Battery Power 2011:** Battery Power 2011 will be held on **September 20-21, 2011** in Nashville, Tennessee. The show will highlight the latest capabilities, design issues, trends and market forecasts in batteries and battery-powered products and systems. The conference Web site can be viewed at: http://www.batterypoweronline.com/bppt-conf11/bp11_index.php.
- **4th International EV Battery Tech USA: Global Cost Reduction Initiative:** EV Battery Tech USA will be held on **September 21-22, 2011**, in Troy, Michigan. The leading automotive OEM's will attend the conference and discuss how to reduce the cost of EV batteries by specifically evaluating near-term advances in energy density, battery life extension, preventative methods for cell degradation and failure, battery safety improvement and testing. NAATBatt is a supporting organization of the conference and NAATBatt members are entitled to a 15% discount on registration. The conference Web site may be viewed at: <http://www.ev-battery-tech.com/>.
- **Developing Grid Storage Projects:** Infocast will produce the Developing Grid Storage Projects conference in Dallas, Texas on **October 5-6, 2011**. The conference will discuss the regulatory drivers and business models for grid storage projects in the United States. NAATBatt will be a supporting organization of the conference.
- **The Business of Plugging In:** The Center for Automotive Research will host The Business of Plugging In conference at the Hyatt Regency in Dearborn, Michigan on **October 11-13, 2011**. The conference will examine the challenges of moving EV's from early adoption to mass market acceptance and will feature a ride-and-drive event highlighting the newest EV's. More information can be found at: www.bpiconference.com.
- **EESAT 2011:** The biannual international Electrical Energy Storage Applications and Technologies conference (EESAT) will be held at the San Diego Marriott Hotel and Marina in San Diego, California on **October 16-19, 2011**. The conference will highlight specific electrical energy storage applications and technologies, especially as they relate to the electricity grid. More information about EESAT 2011 can be found at: <http://www.sandia.gov/eesat/index.html>.
- **The Battery Show:** The Battery Show conference and exposition will be held in Novi, Michigan on **October 25-27, 2011**. The Battery Show is North America's largest free to attend exhibition for advanced batteries. The exhibition showcases the latest battery technologies and solutions, ranging from electric vehicle applications to raw material suppliers. Its two-track business and technology conference examines battery market development and opportunities, including how technical advances are likely to impact performance, safety and cost. For more information on The Battery Show or to register, visit www.thebatteryshow.com.
- **Lithium Battery Power:** Knowledge Foundation will host the 7th Annual International Conference on Lithium Battery Power on **November 7-8, 2011** in Las Vegas, Nevada. The conference will examine advances in lithium-ion battery technology. The conference Web site can be accessed at: http://www.knowledgefoundation.com/viewevents.php?event_id=254&act=evt
- **7th Lithium Mobile Power Conference:** Knowledge Foundation will host the 7th Lithium Mobile Power Conference on **November 7-8, 2011** in Las Vegas, Nevada immediately following the battery safety conference. The conference will provide a general survey of the lithium-ion battery industry. The conference Web site can be accessed at: http://www.knowledgefoundation.com/viewevents.php?event_id=254&act=evt.

- **2nd Battery Safety Conference:** Knowledge Foundation will host the 2nd Battery Safety Conference on **November 9-10, 2011** in Las Vegas, Nevada. The conference will discuss safety incidents and product recalls regarding lithium-ion batteries. The conference Web site can be accessed at: http://www.knowledgefoundation.com/viewevents.php?event_id=253&act=evt
- **1st North American & Asian Lithium-Ion Technology Conference:** The North American & Asian Lithium-Ion Technology Conference will be held on **January 12, 2012** at the University of Nevada Las Vegas in Las Vegas, Nevada. The conference is co-sponsored by UNLV and an affiliate of the Lion Battery Industry Association of South China. More information about the conference can be found at: <http://lbiana.org/industry-events/>
- **International Electric Vehicle Symposium:** The Electric Drive Transportation Association will produce the 26th international Electric Vehicle Symposium and exposition (EVS26) on **May 6-9, 2012** in Los Angeles, California. Information about EVS26 can be found at www.EVS26.org.
- **IEEE PES Transmission and Distribution Conference and Exposition:** The IEEE PES Transmission and Distribution Conference will be held in Orlando, Florida on **May 7-10, 2012**. The conference will focus on innovation in power delivery systems, including storage systems. Information about the conference can be viewed at: <http://www.ieseet-d.org/>.



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