Energy Technology



Energy Technology Connections Newsletter: Your Law Firm Link to Industry News

MARCH 2015

Our March edition of *Energy Technology Connections* brings you recent industry highlights, the latest news from Capitol Hill, and a list of upcoming energy industry events. In our Leaders in the News section, we congratulate our client NBD Nanotechnologies for winning a \$750,000 National Science Foundation SBIR Phase II Award for Commercialization of Enhanced Condensation Coating Technology. This month's Innovator Profile highlights the work of our partners at XL Hybrids, who recently completed a highly specialized New Markets Tax Credit deal. In Event Highlights, we offer a preview of the upcoming Impact Capitalism Summit being held in Chicago on April 21 and 22. Finally, our Washington Update provides up-to-date information on energy-related legislative and regulatory activity for the new year in the nation's capital.

For links to industry grant opportunities and stories from the business, policy, and research sectors of the energy and clean technology industry, please see our Energy Navigator.

Leaders in the News

A big shout out to our good friends at NBD Nanotechnologies, who were recently awarded a \$750,000 grant for their project on "Surface Coatings for Enhanced Efficiency of Industrial Condensers" from the National Science Foundation. The two-year grant, which was awarded under the SBIR II program, will support the company's enhanced power-plant condensation coating technology program through pilot testing with validation by third parties. According to the press release for the grant, "NBD's innovation presents a leapfrogging technology for the Water-Energy Nexus that addresses the key commercial bottlenecks of durability, scalability and performance that have stymied previous efforts to improve condenser efficiency through coating technologies." We couldn't have said it better ourselves! The advanced studies made possible by this NSF SBIR Phase II grant will enable NBD to pursue further validation of its coating technology and prepare NBD to commercialize and successfully enter the primary steam condenser market. Congratulations, Miguel, Deckard, Perry, Bong, Sara, Jonathan, Andrew and Kevin!

NBD Nanotechnologies is a venture-backed advanced coatings and custom materials company dedicated to environmentally supported water acquisition, preservation, and management. NBD, which stands for Namib Beetle Design, develops durable, functional surface coatings inspired by how the Namibian Desert beetle harvests its own drinking water from moisture in the fog. NBD R&D includes the development of novel coatings that enhance condensation heat transfer, a critical phenomenon in many industrial applications, power generation facilities, and thermal desalination plants. Based in Boston's emerging water technology cluster, NBD participates in the Massachusetts cleantech ecosystem at Greentown Labs, where it collaborates with industry and research partners to improve the efficiency of power generation facilities.

We are proud to be active participants in the New England water technology cluster. To get a look inside this water tech cluster, make sure to check out the Symposium on Water Innovation in Massachusetts (SWIM) coming up on May 20th – visit the New England Water Innovation Network's site for more info here.

Innovator Profile

In this month's Innovator Profile, we'd like to congratulate our friends at XL Hybrids for recently completing a highly specialized New Markets Tax Credit (NMTC) financing deal. The deal allows XL Hybrids to expand their unique adaptive hybrid vehicle operation and bring economic stimulus to a low-income community in Quincy, Illinois, where a new XL Hybrids facility will be located. As some of our readers may know, the New Markets Tax Credit program is a financing initiative available at the federal and state level that provides tax credit incentives to investors who make equity investments in projects located in and serving low-income communities. The sizable tax credit is equal to 39% of the investment, paid out over the course of seven years.

In this case, we worked with the XL Hybrids team to pursue a highly complex 'stacked-structure' deal, which enabled them to attract multiple investors and take advantage of both the federal and Illinois NMTC programs. To get the deal done, the XL Hybrids and Mintz Levin teams designed a sophisticated investment structure involving over a dozen entities, five different loans, six separate tax equity investments, and countless other sub-components, all the while ensuring that the investments aligned with the public-benefit purposes of the New Markets programs. It was a truly innovative deal, well worthy of the hybrid-conversion innovation that XL Hybrids pursues on a daily basis.

We are also proud of our team of attorneys here at Mintz Levin that helped navigate this complicated deal. Tapping into many fields of expertise within the firm, our team combined familiarity with eco-friendly energy companies, project finance experience, tax equity know-how, and debt finance proficiency to complete the deal, not to mention a prolific document-preparation and agreement-drafting effort. We are proud to have worked with XL Hybrids on this deal and thrilled that it was completed in such a successful fashion.

Event Highlights

Our team is excited about the upcoming Impact Capitalism Summit in Chicago, which Big Path Capital is hosting on April 21 and 22. Following in the footsteps of last year's rousing meeting, the 2015 summit will feature a variety of industry leaders with panel discussions on specific asset classes, including private equity, public equity, private debt, public debt and direct deals. This year, more than 300 asset managers, family offices, and fund managers representing over \$150 billion in investable assets will explore the current state and trends of these dynamic sectors.

Several fund presentations from private and public managers will offer overviews of different impact- and return-oriented business approaches, complemented by a number of in-depth, topical panel discussions. And as always, the conference will provide ample opportunity for learning and business development, as attendees will be able to set up individualized breakout sessions with presenters, LPs, strategic partners, and fellow conference-goers. Mintz Levin will be in attendance, so we hope to see some of you there!

Washington Update

February was an action-packed month for energy debate in the nation's capital, as the legislative and executive branches took up myriad contentious energy initiatives. First and foremost of these has been, of course, legislation approving the Keystone XL Pipeline (S. 1), which Congressional Republicans sent to President Obama on February 24. As previously indicated by the administration, President Obama vetoed the bill without delay or pageantry later that same day. In his message to the Senate, the President wrote that the legislation earned his veto because it "conflicted with established executive branch procedures and cut short consideration of issues that could bear on our national interest." He did promise, on March 2, to finalize a decision on the pipeline before the end of his White House tenure. The veto, just the third issued by the President in his time in office, survived a Senate override vote on March 4th, which fell short of the two-thirds requirement by a count of 62 to 37.

Elsewhere in Congress, legislators were busy making preparations for other important energy pushes. Early in February, Senators Rob Portman (R-Ohio) and Jeanne Shaheen (D-New Hampshire) pledged to introduce a new version of their energy efficiency legislation. Their broad efficiency package would include much of the same language used in last session's bill. Separately, House Democrats re-launched the Safe Climate Caucus on February 9. After the caucus lost its chairman last year with Representative Henry Waxman's (D-CA) retirement, Representative Alan Lowenthal (D-CA) will now chair the group. Representative Lowenthal is a member of the House Natural Resources Committee and the Sustainable Energy and Environment Coalition. Representatives Chris Van Hollen (D-MD) and Scott Peters (D-CA) joined the announcement, which Representative Van Hollen used to announce that he would soon reintroduce his cap and dividend legislation, the Healthy Climate Security Act.

Several other bills have been introduced so far in the young session: Senator John Barrasso (R-WY) introduced the Natural Gas Gathering Enhancement Act (S. 411) on February 9. The measure would expedite the permitting of natural gas gathering pipelines by hastening the issuance of rights of way and reducing environmental analyses. Next, Senators Dianne Feinstein (D-CA) and Barbara Boxer (D-CA) introduced legislation (S. 414) to provide for conservation, enhanced recreation opportunities, and renewable energy development in the California Desert Conservation Area. Senator Lamar Alexander (R-TN) introduced legislation (S. 454) on February 11 to amend the Department of Energy High-End Computing Revitalization Act of 2004 to improve the high-end computing research and development program of the Department of Energy, while Representative Randy Hultgren (R-IL) introduced a companion bill in the House. Senator James Inhofe (R-OK) introduced legislation (S. 490) on

February 12 to give power to states to develop fossil fuel and renewable energy resources on federal lands, after Representative Diane Black (R-TN) had introduced companion legislation (H.R. 866) in the House two days prior. Senator Lisa Murkowski (R-AK) introduced legislation (S. 494) the same day to authorize the exploration, leasing, development, production, and economically feasible and prudent transportation of oil and gas in and from the Coastal Plain to Alaska. Senator Murkowski's bill comes on the heels of the Obama administration's late-January announcement that it would designate a sizable portion of the Alaskan coastline as off-limits from all future oil and gas leasing due to the "substantial environmental, social, and ecological concerns in the Arctic." The announcement came as part of the Department of Interior's Five-Year Outer Continental Shelf (OCS) Oil and Gas Leasing Program for 2017-2022, which also notably included the first offshore lease offering for drilling off the southeast coast of the United States in Virginia, the Carolinas, and Georgia.

In other administration news, Deputy Office of Management and Budget Director Brian Deese announced at the Department of Energy's ARPA-E Energy Innovation Summit on February 10 that the administration had set a goal to leverage \$2 billion from universities, philanthropies, and investors to tackle the "valley of death" many nascent technologies face between the basic research and commercialization stages. The University of California Board of Regents has committed to invest \$1 billion in endowment funds to the Clean Energy Investment Initiative, and the Schmidt Family Foundation, the Hewlett Foundation, and Wells Fargo have given the Obama administration additional commitments. The administration will continue to solicit commitments until a summit on the topic this spring, at which point it hopes to have reached the \$2 billion goal. Deese also said that lower oil and gas prices are positive for the American economy, but that they do not replace the need for policies such as tightened fuel economy standards.

Much attention has also been paid recently to the Environmental Protection Agency's Clean Power Plan (CPP). Federal Energy Regulatory Commission Chair Cheryl LaFleur said on February 18 that commission staff significantly engaged with the Environmental Protection Agency on the Clean Power Plan. She also said that while the commission plays an inter-agency role in reviewing the rule, the majority of its responsibility comes during implementation. A day after her comments, the Federal Energy Regulatory Commission began a series of workshops on the proposed CPP. Environmental Council of the States Executive Director and General Counsel Alexandra Dunn said that state environmental officials are not yet working on plans to meet their rate targets because of uncertainty over what will be in the final rule. States and utilities said that a regulatory safety valve is vital to the agency's plan. A safety valve would allow states and utilities additional time or flexibility to ensure electric reliability. The agency included a similar safety valve in its mercury and air toxics standards for power plants, but it was included after the rule was completed, potentially making it less effective than it could have been. The commission held a second workshop on February 25, with more to follow in March.

Energy Navigator

Please visit and bookmark our Energy Navigator to easily view all of the latest headlines from the most trusted publications reporting on developments in the energy and clean technology industries. It is housed on our blog, *Energy Technology Matters*.

Upcoming Events

Energy Forward: Driving Advanced Energy Growth

March 11-12, 2015 Washington, DC

More Info »

Cleantech Forum San Francisco

March 16-18, 2015 San Francisco, CA

More Info »

Cleantech Open Northeast Boston Kickoff Party

March 19, 2015 Boston, MA More Info » New England Women in Energy and the Environment (NEWIEE) Awards Gala April 16, 2015 Boston, MA

More Info »

Impact Capitalism Summit 2015

April 21-25, 2015 Chicago, IL More Info »

Financing Renewable Energy Conference April 23-24, 2015 Las Vegas, NV

More Info »

The Wall Street Green Summit XIV

March 23, 2015 New York, NY

More Info »

Solar Power Finance & Investment 2015

March 23-26, 2015 San Diego, CA

More Info »

Israel Dealmakers Summit

March 24–25, 2015 New York, NY

More Info »

Fifth Annual EnergySMART Conference

March 24–26, 2015 Philadelphia, PA

More Info »

Cleantech Open Northeast New York Kickoff Party

March 25, 2015 Brooklyn, NY

More Info »

ECO:nomics 2015, presented by the *Wall Street Journal*

March 25-27, 2015 Santa Barbara, CA

More Info »

4th Annual Boston Cleanweb Hackathon

April 10-12, 2015 Boston, MA

More Info »

The Future of Energy Summit 2015, presented by *Bloomberg New Energy Finance*

April 13-15, 2015 New York, NY

More Info »

Solar Summit 2015

April 14-16, 2015 Phoenix, AZ

More Info »

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22nd Annual New England Energy Conference and Exposition

May 12-13, 2015 Groton, CT

More Info »

2015 Energy Efficiency Global Forum

May 12-13, 2015 Washington, DC

More Info »

Distributed Solar East

May 12-14, 2015 Washington, DC

More Info »

Symposium on Water Innovation in Massachusetts

May 20, 2015 Boston, MA

More Info »

Grid Edge Live 2015

June 23-25, 2015 San Diego, CA

More Info »

REFF Wall Street

June 24-25, 2015 New York City, NY

More Info »

Impact Capitalism Summit New England 2015

July 15-16, 2015 Nantucket, MA More Info »

Energy Storage North America

October 13-15, 2015 San Diego, CA

More Info »

Verge 2015

October 26-29, 2015 San Jose, CA

More Info »

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