

Mintz Levin Energy & Sustainability

Energy & Sustainability Connections Newsletter

Your Law Firm Link to Industry News

OCTOBER 2017

A Note from the Editors

This month's edition of *Energy & Sustainability Connections* brings the latest developments in energy investing, legal insights, company activity, and industry events straight to your inbox. October's **Leader in the News** is our client **NanoSteel**, whose recent launch of a new 3D-printable steel material has important implications for the future of additive manufacturing. In this month's **Legal Feature**, we highlight MassCEC's request for proposals seeking applications to the InnovateMass program for funding a robotics technology demonstration project. Learn the where, when, and how of NEWIN's 2017 Water Innovation Awards Night & Gala, as well as the NECEC's Annual Meeting and its 10th Annual Green Tie Gala, in the **Event Highlights** section. Finally, get caught up on the Department of Energy's new proposed rule on grid resiliency in the **Washington Update** section!

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.

You can subscribe to our Energy & Sustainability Matters blog here.

We would also like to remind our readers that you can always ask us anything at http://mintzedge.com/ask-anything/. We built the MintzEdge website as a resource for entrepreneurs and investors, and hope that all of you take advantage of the site and see how it can help you.

CONTENTS

Leader in the News - NanoSteel

Legal Feature – Massachusetts Clean Energy Center Accepting Funding Proposals for Innovative Robotics Solutions, Investment and M&A in the Sector Growing

- Event Highlights
- Washington Update
 - Tax Reform
 - Energy and Natural Resources Act & Other Legislation
 - Senate Cyber Technology & Energy Infrastructure Hearing



Thomas R. Burton, III



Sahir Surmeli

RELATED INDUSTRIES • Energy & Sustainability

RELATED BLOGS
Energy Sustainability Matters

- Subscribe to Mintz Levin mailing lists.
- Subscribe to the Energy Sustainability Matters blog.

RELATED WEBSITES

- DOE Proposed Rule on Grid Resiliency
- Recent M&A Activity
- Upcoming Events



Leader in the News

NanoSteel

This month, we are excited to feature our client NanoSteel (NanoSteel), a national leader in the design and application of nanostructured steel alloys. NanoSteel specializes in the design and commercialization of new advanced steel alloys with exceptional mechanical properties. For several years, NanoSteel has broken ground in the development of advanced high strength sheet steels for automotive lightweighting. It has recently earned major recognition for the launch of its new, 3D-printable steel material specifically designed for the laser powder bed fusion process, which promises to vastly improve energy efficiency in the steel manufacturing industry as a whole. This puts the company in a competitive position as additive manufacturing processes continue to gain traction and steel becomes an increasingly vital material in 3D printing efforts.

The key to the exceptional performance of NanoSteel's products is in its use of nanostructures.

By specially designing the alloy chemistry and leveraging the unique conditions found in the powder bed fusion printing process, such as a rapid cooling rate, **NanoSteel** produces metals containing grain sizes up to three orders of magnitude less than conventional steels, resulting in unique mechanical and physical properties. **NanoSteel** uses its patented alloys to form a "portfolio" with a broad range of properties, which can be tailored for the specific application as well as to the respective standard metal additive manufacturing process.

NanoSteel's newest material, BLDRmetal[™] L-40, is primed to fill a growing demand for steel in the additive manufacturing market. It is a case-hardenable steel alloy that exhibits an extraordinary combination of both high hardness and high toughness (or ductility). Other alloys can typically offer one of these traits, but not both. The material prints easily on standard commercial equipment and is designed to be used for parts including tools, dies, bearings, and gears. What is more, unlike other tool and die steels available, NanoSteel's BLDRmetal portfolio of materials do not contain cobalt, which was recently identified as a carcinogenic toxin.

NanoSteel's pioneering use of 3D-printable steels has important implications for the future of additive manufacturing, as the use of this tough, hard, and easy-to-print material can pave the way for manufacturing parts with more advanced geometries and desirable industrial capabilities. Moreover, the combination of 3D printing as a primary manufacturing method coupled with the development of advanced high strength sheet steels for automotive lightweighting translates into large-scale payoffs for energy efficiency. A commonly cited study by the US Department of Energy analyzing the energy utilization of additive manufacturing estimates that 3D printing can reduce energy costs by 50%, and cut material costs by 90%. **NanoSteel's** latest development and application of BLDRmetal L-40, in turn, promises to have ripple effects that improve production and energy efficiency in the steel manufacturing world and the industries that depend on it.

We are proud to highlight the innovative work of **NanoSteel** as they continue to lead the way in advanced materials design and shape the future of manufacturing!

RETURN TO TOP

Legal Feature

Massachusetts Clean Energy Center Accepting Funding Proposals for Innovative Robotics Solutions, Investment and M&A in the Sector Growing

This post by Tom Burton was originally featured on the Mintz Levin Energy & Sustainability Matters blog.

On September 27, the Massachusetts Clean Energy Center (MassCEC) released a Request for Proposals seeking applications to the InnovateMass program, which provides up to \$250,000 in grant funding for clean energy and water innovation technologies that demonstrate a strong potential for commercialization. In this cycle, MassCEC will also be funding a robotics technology demonstration project under the InnovateMass Robotics Carve-Out. Grants will be awarded to projects that (1) demonstrate innovations in a robot's energy supply and/or storage system, or (2) deploy robots for clean energy applications.

Building, maintaining, and scaling a sustainable and innovative robotics company requires accounting for a number of corporate and legal considerations unique to the start-up technology space. For those considering submitting a proposal under the InnovateMass Robotics Carve-Out, Mintz Levin's Robotics, UAV, and AI practice may offer some valuable insights. When establishing or expanding on a robotics venture, there are a number of vital decisions to be made each step of the way, such as: hiring a key developer, negotiating a critical license or government contract, developing a commercialization strategy, sourcing and negotiating with investors, or seeking exit. Mintz Levin's team of attorneys and technology specialists has helped groundbreaking robotics companies across the country successfully navigate these questions, and shares key lessons and invaluable resources for similar ventures on its interactive dynamic website, www.mintzedge.com.

As MassCEC's RFP reflects, the push for scalable innovation in energy, robotics, and artificial intelligence technology is greater than ever before. Along with a skyrocketing demand to commercialize these technologies, we are also seeing major growth in private investment and M&A transactions in the robotics space. For example: 2016 saw over \$19 billion paid to acquire 50 robotics companies — a huge leap from \$2.27 billion for 32 acquisitions in 2015; Last year also proved to be the "best year ever for funding robotics startup companies," with 128 companies attracting venture capital investments totaling \$1.95 billion (a 50% increase from 2015). Companies like Google and Softbank have a vested interest in harnessing and building upon the significant progress initiated by smaller, more targeted tech enterprises, and they're willing to pay for it — so it makes sense for robotics companies to strategize early for a potential exit transaction down the road. In his article for the *National Law Review*, Mintz Levin's Marc Mantell offers a deeper look into the essential elements of the most successful robotics company sales: securing the right legal, accounting, and financial teams; preparing a data room; assessing your intellectual property; carefully approaching deal structure; and protecting your confidential information. Check out Marc's full recommendations here.

RETURN TO TOP

Event Highlights

NECEC's 10th Annual Green Tie Gala

Mintz Levin is proud to have sponsored the Northeast Clean Energy Council's (NECEC) 10th Annual Green Tie Gala on Thursday, October 26 in Boston. Members of our Energy & Sustainability Practice, representing both Mintz Levin and ML Strategies, were among the 400+ attendees. At this event, NECEC recognized eight clean industry leaders with its special "Decade of Influence" Green Tie Gala Award, presented in celebration of NECEC's 10th anniversary. Our own Tom Burton was among the eight recipients. Each awardee was chosen for his or her work advancing the clean energy economy over the past decade. Congratulations again to these well deserving award winners!

- Tom Burton, Founder and Chair of Mintz Levin's Energy & Sustainability Practice
- Alicia Barton, President and CEO, New York State Energy Research and Development Authority

- Ian Bowles, Co-Founder and Managing Director, WindSail Capital Group
- Steve Cowell, President, E4TheFuture
- Tim Healy, former Chairman and Chief Executive Officer, EnerNOC
- Emily Reichert, CEO, Greentown Labs
- George P. Sakellaris, President and Chief Executive Officer, Ameresco
- Mitch Tyson, Tyson Associates, NECEC Board Chair

Click here to watch NECEC's video of the awardees discussing the decade of clean energy growth in the Northeast. For more event coverage, search #GTG17 on social media.



NEWIN's 2017 Water Innovation Awards Night & Gala

We are excited to sponsor the New England Water Innovation Network (NEWIN)'s 2017 Water Innovation Awards Night & Gala on December 5 in Boston. The annual event is a 150-person gala that showcases the human capital and talent in water innovation in the Northeast. We are proud to be a sponsor since the inception of this event, which is now in its second year. Mintz Levin serves as a Sustaining Member and Board Advisor to NEWIN, the US's largest water innovation cluster association. For more information and to register for the gala, click here. Congratulations in advance to this year's award winners!

NECEC's Annual Meeting

After a top-notch 10th Annual Green Tie Gala this month, we are looking forward to seeing the clean energy community again soon at NECEC's Annual Meeting on December 6 in our Boston office. The meeting will consist of a half day of panels and thoughtful discussion about where the industry is going and how NECEC can continue to help businesses start, scale, and succeed in the Northeast clean energy industry. For more information, click here.

RETURN TO TOP

Washington Update

Tax Reform

With the number of remaining 2017 legislative days dwindling, Capitol Hill remains fixed on tax reform as the next big push for the Republican majority, which is anxious for a significant legislative victory heading into the 2018 election cycle. President Trump, likewise, is focused on tax reform and is expected to play a significant role in pushing any tax legislation through Congress.

The House and Senate have now passed their Fiscal Year 2018 budget resolutions — including reconciliation instructions for tax reform that allow the Senate to move reform of the tax code with 51 votes instead of the typical 60-vote threshold. On October 26, the House approved the Senate budget resolution in a 216-212 vote, thus avoiding a conference process to reconcile differences between the two budget resolutions. Acceptance of the Senate budget would be a major concession by House Republicans who have promoted a deficit-neutral approach, while the Senate resolution allows for the addition of \$1.5 trillion to the federal deficit.

Once the budget resolution is approved, the House Ways and Means Committee is expected to hold a markup of tax reform legislation. We have previously been told to expect the House markup the week of November 6, but with the House looking to accept the Senate resolution, that timeline could be moved up to save time on the legislative calendar. The House is expected to move first in marking up a tax bill, with the Senate Finance Committee acting next.

The Administration and GOP leadership continue to state that their goal is passage of tax reform by the end of the year, but that is a very ambitious timeline, and many informed observers expect that the tax reform debate will spill over into early 2018. There is also some debate about whether we will see true reform of the tax code, or a tax cut with some minor tweaks to certain provisions.

Energy and Natural Resources Act & Other Legislation

The bipartisan Senate energy bill, the Energy and Natural Resources Act (ENRA), has not received floor time, despite skipping the committee process and being placed directly onto the Senate legislative calendar.

Recently introduced energy legislation includes:

- S. 1981, the Small Scale LNG Access Act, introduced by Sen. Cassidy (R-LA), which amends the Natural Gas Act to expedite approval of exports of small volumes of natural gas.
- S. 1972, a bill introduced by Sen. Thune (R-SD) aimed at improving the monitoring and reporting of propane stocks and days of supply to the administrator of the Energy Information Administration with regard to propane export volumes.
- S. 1876, the Reducing the Cost of Energy Storage Act, introduced by Sen. Wyden (D-OR), directing the Secretary of Energy to establish a program to advance energy storage deployment by reducing the cost of energy storage through research, development, and demonstration.
- S. 1875, the Flexible Grid Infrastructure Act, introduced by Sen. Wyden (D-OR), a bill to move the United States toward greater energy independence and security, to increase the flexibility, efficiency, and reliability of the electric grid, to increase the competitiveness of the United States economy, to protect consumers, and to improve the energy performance of the Federal Government, and other purposes.
- S. 1874, the Distributed Energy Demonstration Act, introduced by Sen. Wyden (D-OR), a bill directing the Secretary of Energy to establish certain demonstration grant programs relating to the demonstration of advanced distribution systems, smart water heaters, vehicle-to-grid integration, and granular retail electricity pricing, and for other purposes.
- H.R. 3970, the STRANDED Act, introduced by Rep. Schneider (D-IL), a bill to assist communities affected by stranded nuclear waste.
- H.R. 3958, the Securing Energy Infrastructure Act, introduced by Rep. Ruppersberger (D-MD), a bill to establish

a pilot program on securing energy infrastructure.

• H.R. 4063, the POWER Act, introduced by Rep. Soto (D-FL), requiring the Secretary of Energy to maintain a database of information on electricity outages.

Senate Cyber Technology & Energy Infrastructure Hearing

The Senate Energy and Natural Resources Committee held a hearing to examine "Cyber Technology and Energy Infrastructure" on October 26. The hearing received testimony on advanced cyber technologies that could be used to help protect electric grids and other energy infrastructure from cyberattacks.

DOE Proposed Rule on Grid Resiliency

The Department of Energy (DOE) has proposed that the Federal Energy Regulatory Commission (FERC) act address threats to US electrical grid resiliency by issuing a final rule requiring organized markets to develop and implement reforms that would fully price generation resources necessary to maintain the reliability and resiliency of the nation's grid. According to the DOE, the proposed rule would (1) ensure the diversity and reliability of generation supply, (2) boost the resilience of the grid against outages, and (3) maximize reserve resource capacity for times of unusually high demand, including severe weather events. The letter from Energy Secretary Perry to FERC can be found here, and the proposed rule can be found here.

RETURN TO TOP

Recent M&A Activity

- October 15, 2017: South Jersey Industries (NYSE: SJI) will acquire Elizabethtown Gas and Elkton Gas for \$1.7 billion.
- October 10, 2017: Williams Electric was acquired by Parsons for an undisclosed amount.
- October 10, 2017: Patriot Rentals was acquired by BlueFin, a GATE Energy Company, for an undisclosed amount.
- October 6, 2017: MS Energy Services was acquired by Patterson Uti Energy (NASDAQ: PTEN) for \$250 million.
- October 6, 2017: Atwood Oceanics was acquired by Ensco International (NYSE: ESV) in an all-stock deal.
- October 6, 2017: Reliance Industries reached a definitive agreement to sell its stake in ACP II Marcellus to BKV Chelsea, a subsidiary of Kalnin Ventures, for \$126 million.
- October 5, 2017: Hillview Water Company reached a definitive agreement to be acquired by California American Water, a subsidiary of American Water (NYSE: AWK) for an undisclosed amount.
- October 4, 2017: Align Midstream Partners was acquired by Enable Midstream Partners (NYSE: ENBL) for \$300 million.
- October 3, 2017: RW Earhart was acquired by Mansfield Energy for an undisclosed amount.
- October 3, 2017: Hy-Per Lube was acquired by Bar's Products for an undisclosed amount.
- September 26, 2017: Veteran's Oil was acquired by Apollo Oil for an undisclosed amount.

- September 25, 2017: Colfax Fluid Handling reached a definitive agreement to be acquired by CIRCOR International (NYSE: CIR) for \$710 million.
- September 20, 2017: Knapp Energy was acquired by Crystal Flash Energy for an undisclosed amount.
- September 20, 2017: Hudson was acquired by Chart Industries (NAS: GTLS) for \$410 million.
- September 18, 2017: Silver Spring Networks reached a definitive agreement to be acquired by Itron (NASDAQ: ITRI) for \$830 million.

*Sources: Pitchbook

Upcoming Events

28th Annual SRI Conference November 1-3, 2017 San Diego, CA More Info »

Committing to Climate Change November 2, 2017 Boston, MA More Info »

PV O&M USA 2017 November 2-3, 2017 San Jose, CA

More Info »

MIT Energy Hackathon November 3-5, 2017 Cambridge, MA

More Info »

WRISE Leadership Forum November 6-7, 2017 Albuquerque, NM

More Info »

MIT Water Summit 2017: Water-Food Nexus November 6-7, 2017 Cambridge, MA More Info »

Microgrid Conference 2017 November 6-8, 2017 Boston, MA Greenbuild International Conference and Expo November 8-10, 2017 Boston, MA More Info »

Blockchain in Energy & Industry Executive Summit November 9, 2017 Boston, MA More Info »

Demystifying Solar Risk Management: A Primer for Sponsors and Financiers November 9, 2017 Webinar

More Info »

Fair Trade and the Solar Case November 13, 2017 Baltimore, MD More Info »

NECA 2017 Power Markets Conference November 14, 2017 Marlborough, MA More Info »

2017 NYC Navigate Investor Corporate Customer Connect November 15, 2017 New York, NY More Info »

2017 C3E Women in Clean Energy Symposium November 15-16, 2017

More Info »

Energy Storage North America November 6-8, 2017 Pasadena, CA

More Info »

US Power & Renewables Summit 2017 – Greentech Media November 7-8, 2017 Austin, TX More Info »

2017 National Summit on RPS November 7-8, 2017 Arlington, Virginia

More Info »

AWEA Wind Energy Fall Symposium 2017 November 7-9, 2017 Albuquerque, NM

More Info »

2017 NEWIEE Annual Meeting and Fall Fête November 8, 2017 Boston, MA More Info »

Mass Innovation Nights 104 November 8, 2017 Waltham, MA More Info »

Novogradac 2017 Financing Renewable Energy Tax Credits Fall Conference November 8-9, 2017 Washington, DC

More Info »

Cambridge, MA More Info »

NEWIN Water Pitch Night – Developing World Applications – Boston November 16, 2017 Boston, MA More Info »

Energy Storage: Navigating the Market and White Spaces November 28, 2017 Boston, MA More Info »

wore mo »

ClimateTECH 2017 – New York Times November 29-30, 2017 San Francisco, CA More Info »

NEWIN 2017 Water Innovation of the Year Awards Night & Gala December 5, 2017 Boston, MA More Info »

NECEC's Annual Meeting December 6, 2017 Boston, MA (Mintz Levin) More Info »

Solar Power New York December 11-12, 2017 New York, NY More Info »

US Energy Storage Summit 2017 – Greentech Media December 12-13, 2017 San Francisco, CA More Info »

RETURN TO TOP

Contacts

Learn more about the Mintz Levin Energy & Sustainability group here.

Thomas R. Burton III Member Chair, Energy & Sustainability (Boston) Jeremy D. Glaser Member Corporate & Securities (San Diego) 858.314.1515 Leah J. Pollema Associate Corporate & Securities (San Diego) 858.314.1494

617.348.3097 TRBurton@mintz.com

Sahir Surmeli Member Co-chair, Energy & Sustainability (Boston) 617.348.3013 SSurmeli@mintz.com

Lisa Adams Member Intellectual Property (Boston) 617.348.3054 LAdams@mintz.com

Hannah Chapel Associate Corporate & Securities (Boston) 617.348.4868 HChapel@mintz.com

Ralph A. Child Member Environmental (Boston) 617.348.3021 RChild@mintz.com

Daniel I. DeWolf Member Co-chair, Venture Capital & Emerging Companies; Corporate & Securities (New York) 212.692.6223 DDeWolf@mintz.com

Paul H. Dickerson Of Counsel Corporate & Securities (Washington) 202.460.9286 PHDickerson@mintz.com

Joanne Dynak Project Analyst (Boston) 617.348.4415 JDynak@mintz.com

Meryl J. Epstein Member Corporate & Securities (Boston) 617.348.1635 MJEpstein@mintz.com

Gregory S. Fine Member Corporate & Securities (Boston) 617.348.3003 GSFine@mintz.com

Susan L. Foster, PhD Member Corporate & Securities (London) +44.20.7776.7330 SFoster@mintz.com

JDGlaser@mintz.com

Ian A. Hammel Member Bankruptcy, Restructuring & Commercial Law (Boston) 617.348.1724 IAHammel@mintz.com

Irwin M. Heller Member Corporate & Securities (Boston) 617.348.1654 IHeller@mintz.com

Kenneth E. Jenkins. PhD Member Intellectual Property (San Diego) 858.314.1082 KJenkins@mintz.com

Jonathan L. Kravetz Member Chair, Securities; Corporate & Securities (Boston) 617.348.1674 JLKravetz@mintz.com

Cynthia J. Larose Member Corporate & Securities (Boston) 617.348.1732 CJLarose@mintz.com

R.J. Lyman Member Corporate & Securities, Project Development & Finance (Boston) 617.348.1789 RLyman@mintz.com

Audrey C. Louison Member Chair, Project Development & Finance (Washington) 202.434.7380 ALouison@mintz.com

Eric W. Macaux Associate Corporate & Securities, Project Development & Finance, (Boston) 617.348.1677 EWMacaux@mintz.com

Jeffrey A. Moerdler Member Real Estate, Communications, Environmental (New York) 212.692.6700 JAMoerdler@mintz.com

Neal Martin

LJPollema@mintz.com

Jeffrey R. Porter Member Environmental (Boston) 617.348.1711 JPorter@mintz.com

Jennifer Sacco Smith Associate Real Estate (Boston) 617.348.1678 JSaccoSmith@mintz.com

Chuck A. Samuels Member Antitrust/Energy Efficiency (Washington) 202.434.7311 CASamuels@mintz.com

Gabriel Schnitzler Member Real Estate (San Francisco) 415.432.6004 GSchnitzler@mintz.com

Terri Shieh-Newton, PhD Member Intellectual Property (San Francisco) 415.432.6084 TShieh-Newton@mintz.com

Matthew T. Simpson Associate Corporate & Securities (Washington) 202.434.7436 MTSimpson@mintz.com

Paula J. Valencia-Galbraith Associate Corporate & Securities (Boston) 617.210.6854 PVGalbraith@mintz.com

Michael D. Van Loy, PhD Member Intellectual Property (San Diego) 858.314.1559 MDVanLoy@mintz.com

Katy E. Ward Contract Attorney Environmental (Boston) 617.348.1850 KEWard@mintz.com

William F. Weld Member Corporate & Securities Principal ML Strategies (Boston, New York, Washington) 617.348.4412 BWeld@mintz.com William C. Geary Member Intellectual Property (Boston) 617.348.3046 WGeary@mintz.com

Kristin A. Gerber Associate Corporate & Securities (Boston) 617.348.3043 KAGerber@mintz.com Senior Manager of Government Relations ML Strategies (Washington) 202.434.7458 RNMartin@mlstrategies.com

David L. O'Connor

Senior Vice President for Energy & Sustainability ML Strategies (Boston) 617.348.4418 DOConnor@mlstrategies.com Daniel E. Wilcox Associate Corporate & Securities (Boston) 617.348.3098 DEWilcox@mintz.com

www.mintz.com

Copyright © 2017 Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

This communication may be considered attorney advertising under the rules of some states. The information and materials contained herein have been provided as a service by the law firm of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.; however, the information and materials do not, and are not intended to, constitute legal advice. Neither transmission nor receipt of such information and materials will create an attorney-client relationship between the sender and receiver. The hiring of an attorney is an important decision that should not be based solely upon advertisements or solicitations. Users are advised not to take, or refrain from taking, any action based upon the information and materials contained herein without consulting legal counsel engaged for a particular matter. Furthermore, prior results do not guarantee a similar outcome.

6838-ENERGY