



IDEA 2015

Inspiring the Next Generation

106th Annual Conference & Trade Show | Boston, MA | June 28 – July 1

Friday, June 26

12:00 pm – 2:00 pm	IDEA Executive Committee Meeting – <i>Boston Common, Sheraton</i>
1:00 pm – 5:00 pm	IDEA Board of Directors Luncheon + Meeting – <i>Public Garden, Sheraton</i>
5:00 pm	Open evening to explore Boston

Saturday, June 27

9:00 am – 3:00 pm	Registration Open – <i>Pre-Function Hall A</i>
11:30 am – 6:45 pm	IDEA Annual Golf Tournament – Luncheon + Awards Reception – <i>Stow Acres Golf Club, Stow, MA</i> <i>Sponsored by ChemTreat</i>
10:00 am – 5:00 pm	WORKSHOP: Campus + City: Symbiotic Sustainability, Resiliency and Reality Check – <i>Room 302</i>
12:00 pm – 1:00 pm	Luncheon – For Saturday workshop participants
6:00 pm – 7:00 pm	Post Workshop Pub Event – An opportunity to unwind and connect with peers at the Lansdowne Pub

Sunday, June 28

8:00 am – 7:00 pm	Registration Open – <i>Pre-Function Hall A</i>
8:00 am – 9:00 am	Breakfast – For Sunday workshop participants – <i>Room 304</i>
9:00 am – 4:00 pm	WORKSHOP: District Energy + CHP: Community Energy Policies and Tools for System Development and Deployment – <i>Room 302</i>
10:30 am – 12:00 pm	Welcome to Boston for Spouses + Guests: Meet and Greet – <i>Beacon Hill Suite, 29th Floor, Sheraton Hotel</i>
12:15 pm – 1:00 pm	Luncheon – For Sunday workshop participants – <i>Room 302</i>
1:30 pm – 3:30 pm	Spouse/Guest and Optional Registrant Event: Boston Duck Tour – An entertaining guided tour of downtown Boston. Departs from Sheraton Lobby.
4:00 pm – 5:30 pm	IDEA Forums – Open meetings for IDEA members to discuss current industry issues and trends by specialty area. <ul style="list-style-type: none"> • Business Development – <i>Room 304</i> • Distribution + Mutual Assistance for District Energy (MADE) Program – <i>Room 302</i> • District Cooling – <i>Room 305</i> • Principal Managers – <i>Room 303</i> • Talent Management – <i>Room 301 (this is a new IDEA Forum focused on HR)</i> <i>Please note that the Canadian Forum will meet on Tuesday morning from 7:00 am – 7:45 am</i>
4:00 pm – 5:30 pm	Meeting: United Nations Environment Program (UNEP) District Energy in Cities Initiative – <i>Room 313</i>
5:30 pm – 7:00 pm	Exhibit Hall Grand Opening + Ribbon Cutting: Welcome Reception with Business Partner Exhibitors – <i>Exhibit Hall A</i> <i>Sponsored by GE Power & Water & Veolia North America</i>
7:00 pm – 9:30 pm	Dinner – John F. Kennedy Library + Museum – An evening to relax, reconnect, mingle and network. Buses depart from the Hynes Convention Center lower level Boylston Street entrance. <i>Sponsored by Burns & McDonnell</i>

Monday, June 29

7:00 am – 6:30 pm	Registration Open – Pre-Function Hall A
7:00 am – 8:00 am	Breakfast with Business Partner Exhibitors – Exhibit Hall A <i>Sponsored by CDM Smith & Thermo Systems</i>
7:15 am – 7:45 am	Speaker + Moderator Orientation Meeting – Room 308
8:00 am – 5:00 pm	Special Workshop for Urban Sustainability Directors Network (USDN) – Invitation only – Room 313
8:00 am – 8:15 am	Opening Remarks and Introductions – Robert Thornton, IDEA President & CEO Welcome to IDEA: "Inspiring the Next Generation" – Ken Smith, IDEA Chair Location: Ballroom B
8:15 am – 9:15 am	<p>Panel Discussion #1: District Energy in Cities – Ballroom B</p> <p>Insightful city planners and sustainability directors are seeking proven solutions that reduce greenhouse gas emissions, optimize local resources, enhance economic resiliency and strengthen critical energy infrastructure. This panel brings urban sustainability leaders together with global industry leaders to discuss emerging drivers for deployment and expansion of district energy in cities, such as cutting greenhouse gas emissions, addressing climate adaptation, enhancing business continuity and economic resiliency.</p> <ul style="list-style-type: none"> • Austin Blackmon – Chief of Environment, Energy and Open Space, City of Boston • Nicola Butterworth – Policy Officer, Heat Networks, Department of Energy & Climate Change, UK Government, London • Grant Ervin – Sustainability Manager, City of Pittsburgh • Shannon Lawrence – Director of Global Initiatives, C40 Cities Climate Leadership Group, London • Susanne Rasmussen – Director of Environmental & Transportation Planning, City of Cambridge • Lily Riahi – Advisor, Sustainable Energy in Cities, United Nations Environmental Program, District Energy in Cities Initiative, Paris, France • Tim Taylor – Senior Advisor, Energy Efficiency and Conservation Authority, City of Christchurch, New Zealand
9:15 am – 10:15 am	<p>Panel Discussion #2: Paradigm Shift – Utility of The Future – Ballroom B</p> <p>Traditional utilities are in the midst of a profound paradigm shift, moving to new business models with more distributed generation assets which better integrate thermal energy and storage, renewables, microgrids and prosumer interactivity. The panel will discuss how utilities, regulators and industry are adapting to accelerate deployment of cleaner, more resilient energy infrastructure for cities.</p> <ul style="list-style-type: none"> • Bill DiCroce – President & COO, Municipal and Commercial Business Lines, Veolia North America • Judith Judson – Commissioner, Massachusetts Department of Energy Resources • Betty Ann Kane – Chairman, Public Service Commission of the District of Columbia • Werner Lutsch – CEO & Managing Director, AGFW • Gus Sanoulis – Vice President, Con Edison Steam • Ken Smith – President & CEO, Ever-Green Energy • Sung-hei Kim – CEO, Korea District Heating Corporation
10:15 am – 11:00 am	Refreshment Break with Business Partner Exhibitors – Exhibit Hall A Presenters will be available by their Poster Presentations to answer questions <i>Sponsored by BOND & Carrier Corporation</i>
11:00 am – 11:50 am	<p>Panel Discussion #3: Mobilizing Industry Growth and Investment – Ballroom B</p> <p>Re-inventing and renewing more resilient urban energy infrastructure will require capital investment, both public and private. Well-designed district energy systems generate value for investors, communities and consumers. What are appropriate strategies to unleash capital and accelerate deployment? How is risk apportioned and/or mitigated? What are the respective roles of public and private funding? And what is the scale of the opportunity in North America and globally?</p> <ul style="list-style-type: none"> • Carlyle Coutinho – Senior Vice President, Finance and Chief Financial Officer, Enwave • Michael King – Strategic Adviser, District Energy Development • Thomas Lefebvre – Managing Director, I Squared Capital • Mark Spurr – Principal, FVB Energy

12:00 pm – 1:15 pm	IDEA Special Presentation and Awards Luncheon – Ballroom A United Nations Environment Program District Energy in Cities Initiative - North American Launch US EPA CHP Energy Star Awards Presentation <i>Sponsored by RMF Engineering, Inc. & Waldron Engineering & Construction, Inc.</i>		
1:15 pm – 2:00 pm	Dessert and Coffee with Business Partner Exhibitors – Exhibit Hall A <i>Sponsored by Chem-Aqua, EVAPCO, Inc. & Express Integrated Technologies</i>		
	1A – Profiling the Next Wave of CHP & District Energy in the Northeast Moderator: Tom Bourgeois, US DOE Northeast CHP TAP <i>Room 302</i>	1B – District Cooling Moderator: Steve Tredinnick, Burns & McDonnell <i>Room 304</i>	1C – Biofuels Moderator: Michael Burns, Ever-Green Energy <i>Room 306</i>
2:00 pm – 2:30 pm	UMass Amherst Energy Master Plan – <i>Ray Jackson, UMass Amherst; Andrew Price, Competitive Energy Services; Andy Jones, RMF Engineering</i>	Market and Performance Limitations to Consider When Planning for District Cooling Applications – <i>Seth Kraal, Jacobs Engineering</i>	General Mills Waste to Energy Case Study – <i>Joseph Brown, CHA Tech Services; Rich Rappa, CHA Companies</i>
2:30 pm – 3:00 pm	Combustion Turbine Selection and Optimization: Harvard University Blackstone CHP Expansion – <i>Douglas Schmidt, Harvard Engineering & Utilities; Tom Parker, Burns & McDonnell</i>	District Cooling Marches on in Dubai: The Emirates Tower Case Study – <i>Tariq Al Yasi & Samer Koudeir, Empower</i>	University of Iowa Uses Home Grown Fuel – <i>Benjamin Fish, University of Iowa</i>
3:00 pm – 3:30 pm	Threading a Needle at MIT: CUP Expansion and Boiler & Deaerator Upgrade – <i>Seth Kinderman, MIT; Jesse Conklin & Chris Fogg, BOND; Bob Smith, RMF Engineering</i>	Sea Water Cooling for the Barangaroo District Cooling System in Sydney, Australia – <i>Sleiman Shakkour, FVB Energy</i>	Biomass Hot Water District Heating for Small Communities without Natural Gas: The Grand Marais Story – <i>Mark Spurr, FVB Energy</i>
3:30 pm – 4:00 pm	Refreshment Break with Business Partner Exhibitors – Exhibit Hall A Presenters will be available by their Poster Presentations to answer questions <i>Sponsored by Affiliated Engineers, Inc. & Ramboll Inc.</i>		
	2A – Part One: Financing & Incentives Moderator: Jon Sorenson, JFS Energy Advisors <i>Room 302</i>	2B – Thermal Distribution System Best Practices Moderator: Richard Damecour, FVB Energy <i>Room 304</i>	2C – Market Transformation: Tools & Technologies Moderator: Pernille Overbye, Ramboll <i>Room 306</i>
4:00 pm – 4:30 pm	An Update on Financial Incentives for Energy Efficiency, CHP and District Energy Projects – <i>Rod Schwass, Jacobs Engineering</i>	Underground Piping Systems: Lessons Learned from Best Practices in New England – <i>Chris Decker & John Harmon, BOND; Elizabeth Nolder & Stephen Pollard, RMF Engineering</i>	Manage Big Utility Data for Your Tenants with SourceOne and Emsys – <i>Chris Barros & Jim Panico, SourceOne and Veolia North America</i>
4:30 pm – 5:00 pm	Cogeneration and Arbitrage at Amherst College – <i>Aaron Hayden, Amherst College; Andrew Price & Keith Sampson, Competitive Energy Services</i>	Case Studies for Brazed Plate Heat Exchangers: A Gasket Free Option – <i>Pär Björkman, SWEP</i>	3D Documentation with the "Speed of Light" – <i>James Smith, Burns & McDonnell</i>

5:00 pm – 5:30 pm	2A – Part Two: CHP System Support Moderator: Jon Sorenson, JFS Energy Advisors Room 302 Overview of MADE: How to Bounce Back from a Major System Interruption – <i>Rich Boscarino, Con Edison</i>	Longer Lasting Manual Actuators in Steam and Water Distribution Valves – <i>Clay Hightower, Rotork Controls</i>	Vacuum Heating Integration with District Energy Systems – <i>Igor Zhadanovsky, Applied Engineering Consulting</i>
5:30 pm – 7:00 pm	Reception with Business Partner Exhibitors – Exhibit Hall A Special MOU Signing Ceremony: KDHC and IDEA – Exhibit Hall A <i>Sponsored by MATEP & Trane</i>		
7:00 pm	Open Evening to Explore Boston – Dinner on your own		
Tuesday, June 30			
7:00 am – 4:30 pm	Registration Open – Pre-Function Hall A		
7:00 am – 7:45 am	Canadian Forum – Room 307		
7:00 am – 8:00 am	Breakfast with Business Partner Exhibitors – Exhibit Hall A <i>Sponsored by ESD Global & FVB Energy Inc.</i>		
7:15 am – 7:45 am	Speaker + Moderator Orientation Meeting – Room 308		
	3A – Community Energy Planning, Assessment & Feasibility Moderator: Patti Wilson, Affiliated Engineers Room 302	3B – Making the Most of CHP & District Energy: Design Considerations Moderator: Roderick Schwass, Jacobs Engineering Room 304	3C – Modeling & Retro-Commissioning for System Optimization & Efficiency Moderator: Steven Brown, Environmental Systems Design Room 306
8:00 am – 8:30 am	Considerations for a District Energy System Based on a Municipal Solid Waste Case Study: North Loop District Energy System – <i>Ehsan Dehbashi & Joe Witchger, HGA Architects and Engineers</i>	Turbine or Engine? That is the Question – <i>Kurt Koenig, Burns & McDonnell</i>	Hydraulic Modeling Driving the Business Case of the Boston-Cambridge CHP System – <i>Thomas Lund-Hansen, Reliability Efficiency & Optimization; Kevin Hagerty, Veolia North America</i>
8:30 am – 9:00 am	Assessing District Energy Feasibility for the San Francisco Giants – <i>Fran Weld, San Francisco Giants; Afaan Naqvi, Arup</i>	Case Study: Experimental and Numerical Assessment of District Heating Supply for an Apartment Complex – <i>Yong Hoon Im & Jae Yong Lee, Korea Institute of Energy Research</i>	Central Plant Retro-Commissioning at Boston Logan International Airport – <i>Abbe Bjorklund, Sebesta</i>
9:00 am – 9:30 am	Brownfields: Infrastructure Opportunities – <i>Michael Ahern, Ever-Green Energy</i>	Backpressure Steam Power Generation in District Energy and CHP: Energy Efficiency Considerations – <i>Joshua Tolbert, Practical Steam</i>	Optimization Through Perfect Plant Design – <i>Eric Toback, Optimum Energy</i>
9:30 am – 10:00 am	Bridgeport, Connecticut: Community Energy Thermal Network Using Fuel Cells and Waste-to-Energy – <i>Dan Donovan, NuPower</i>	Primary Heating/Cooling Plant Strategies and How to Maximize Energy and Financial Savings – <i>Mehdi Jalayerian, Environmental Systems Design</i>	Driving to Optimum Efficiency – <i>Kevin Hagerty, Veolia North America; Peter Glover & Jeremy Schein, SourceOne</i>

10:00 am – 10:30 am	Refreshment Break with Business Partner Exhibitors – Exhibit Hall A Presenters will be available by their Poster Presentations to answer questions <i>Sponsored by ICETEC & Jacobs Engineering Group Inc.</i>		
11:30 am – 4:00 pm	Bites of Boston Walking Food Tour. <i>Departs from Sheraton Lobby.</i>		
	4A – Microgrids & Resiliency Moderator: Terence Waldron, Waldron Engineering <i>Room 302</i>	4B – Water & Sustainability Moderator: Willa Kuh, Affiliated Engineers <i>Room 304</i>	4C – Energy Storage & Innovation Moderator: Tim Peer, CHA Consulting <i>Room 306</i>
10:30 am – 11:00 am	Microgrid Hardening, Expansion and Maintenance: A Sustainable Approach to Resiliency – <i>Michael Thornton, Vanderweil Power Group; John Bradley, New York University</i>	Use of Reclaimed Wastewater in District Cooling and Power Generation – <i>Gary Engstrom, U.S. Water</i>	In-Depth Feasibility Studies of Aquifer Thermal Energy Storage at VA Hospitals in Columbus and Chillicothe, Ohio – <i>Mark Spurr, FVB Energy; Mark Worthington, Underground Energy</i>
11:00 am – 11:30 am	Doomsday Prepping at the University of Iowa – <i>Benjamin Fish, University of Iowa</i>	Optimizing Capital Efficiency for Water Infrastructure Renewal – <i>John Marciszewski, Echologics</i>	Economics of District Energy for HVAC in Multi-Family Housing – <i>Gary Wilkinson, Veolia North America; David Bell, Progressive Architecture Engineering</i>
11:30 am – 12:00 pm	Using the Microgrid Model to Help Meet the Needs of a Medical School Campus – <i>Matthew Stelmach, UMass Medical School; Ryan Bolduc Eugene Lambert & Chris Roland, Wunderlich-Malec</i>	Reclaiming Water in Pender County, North Carolina – <i>Jonathan Lanciani, Sustainable Water</i>	Challenges of Integrating CHP into High Rise Office Towers – <i>Michael Dempsey, Burns & McDonnell; Dwain Botelho, NRG Energy</i>
12:00 pm – 1:30 pm	IDEA Annual Business Meeting and Recognition Luncheon –Ballroom A		
1:30 pm – 2:15 pm	Dessert and Coffee with Business Partner Exhibitors — Prizes and raffles awarded – <i>Exhibit Hall A</i> <i>Sponsored by NRG Energy & Vanderweil Power Group</i>		
2:30 pm – 5:30 pm	Exhibit Hall Tear Down – Exhibit Hall A		
	5A – Urban, Industrial, Utility & Residential CHP and District Energy Projects Moderator: Tim Burkhalter, Burns & McDonnell <i>Room 302</i>	5B – Energy Master Planning & Innovation Moderator: Nate Cesarz, Affiliated Engineers <i>Room 304</i>	5C – Policy, Permits & Regulation Moderator: Tim Griffin, RMF Engineering <i>Room 306</i>
2:15 pm – 2:45 pm	Taking Advantage of a District Energy System to Expand Development Potential – <i>Armand Agasian & Paulina Marinkovic, Con Edison</i>	Implementing District Energy's 4th Generation: A Case Study in Minneapolis – <i>Michael Ahern, Ever-Green Energy</i>	Emissions From Integrated Renewable-CHP Systems – <i>Neeharika Naik-Dhungel, US EPA, CHP Partnership Program</i>
2:45 pm – 3:15 pm	Construction Considerations for a CHP Facility Conversion in a Clustered Urban Setting – <i>Jay Ehrfurth, The Boldt Company</i>	Expanding Our Network through Education: Saint Paul EcoDistrict Case Study – <i>Nina Axelson, Ever-Green Energy</i>	Air Permitting Case Study: Harvard's CHP Expansion – <i>A.J. Jablonowski, Epsilon Associates; Michael Macrae, Harvard Engineering & Utilities</i>

3:15 pm – 3:45 pm	Algonquin Power Installs New CHP in Only 8 Months & Achieves 82% Annual CHP Efficiency – <i>Christopher Hastings, Vanderweil Power Group</i>	Evolution of a Deep Lake Water Cooling System – <i>Ray Monteiro, Enwave Energy</i>	City of LA Improves Resiliency of 4th Largest Wastewater Facility with Renewable CHP – <i>Jeff Duncan, Vanderweil Power Group</i>
3:45 pm – 4:00 pm	Refreshment Break – Boylston Hallway <i>Sponsored by U.S. Department of Energy, Combined Heat and Power Deployment Program</i>		
	6A – Industrial CHP Moderator: Ehsan Dehbashi, HGA Architects & Engineers <i>Room 302</i>	6B – Symposium: Workforce Management, Recruiting, Training + Retention Moderator: Cathy Hart, Ever-Green Energy & David Musto, Thermo Systems <i>Room 304</i>	6C – Symposium: Policy & Legislation – Implications for District Energy Moderator: Derek Jacobs, Segal <i>Room 306</i>
4:00 pm – 4:30 pm	European Case Studies of Operating Gas Turbines for Industrial Cogeneration – <i>Ahmet Yontem, OPRA Turbines</i>	<ul style="list-style-type: none"> • Workforce Recruitment & Training Program – <i>Juan Ontiveros, UT Austin</i> • Apprenticeship Program and Testing – <i>Tom Nyquist, Princeton University</i> • Operator Training Program – <i>Steve Swinson, TECO</i> • Operations & Maintenance Training: Keys to Successful Startup and Commissioning – <i>Jack Kelly, Jacobs Engineering</i> • Discussion and Q&A 	<ul style="list-style-type: none"> • ASHRAE Building Efficiency Standards Update: Implications for District Energy – <i>Brandon Oyer, Enwave Seattle; Mark Spurr, FVB Energy</i> • EPA Clean Power Plan 111(d) Compliance Pathways – <i>Gibson Peters, Energy Strategies</i> • EPA Clean Power Plan: Implications for District Energy – <i>Mark Spurr, FVB Energy</i>
4:30 pm – 5:00 pm	Combined Heat and Power: A Total Energy Solution for Mining and Minerals, Separation Chemical Process Plants – <i>Chris Brooks & Garen Demirchian, Vanderweil Power Group</i>		
6:00 pm – 6:30 pm	Chair's Cocktail Reception – Business Attire – Constitution Foyer, Sheraton Hotel		
6:30 pm – 10:00 pm	Annual Chair's Recognition and Awards Banquet – Business Attire – Constitution, Sheraton Hotel <i>Wine Sponsored by Solar Turbines</i>		
Wednesday, July 1			
8:00 am – 9:00 am	Breakfast with Pre-Tour Overview Presentations – Republic, Sheraton Hotel		
9:15 am – 12:45 pm	Technical Tours – Depart from the Sheraton Hotel Lobby <ul style="list-style-type: none"> • TOUR A – MATEP & Harvard • TOUR B – Kendall Station & Biogen • TOUR C – Harvard & Kendall Station • TOUR D – Biogen & MATEP <i>Tours Sponsored by Epsilon Associates, Inc.</i>		