



IDEA2018

Local Solutions,
Global Impact

109TH ANNUAL CONFERENCE & TRADE SHOW
June 11-14 | Vancouver Convention Centre | Vancouver, BC

Preliminary Program
TIMES ARE SUBJECT TO CHANGE

Sunday, June 10	
11:00 am – 1:00 pm	IDEA Executive Committee Meeting – East Meeting Room 7
12:00 pm – 5:00 pm	IDEA Board Luncheon and Meeting – East Meeting Room 8 & 15
3:00 pm – 5:00 pm	Registration Open – East Convention Level Lobby
Monday, June 11	
6:30 am – 3:00 pm	IDEA Annual Golf Tournament – Furry Creek Golf and Country Club Depart from Pinnacle Hotel Lobby at 6:30 am for breakfast and shotgun start. <i>Sponsored by Thermo Systems</i>
7:00 am – 7:00 pm	Registration Open – East Convention Level Lobby
8:00 am - 4:00 pm	Exhibit & Poster Setup – East Exhibit Hall B
7:00 am – 8:00 am	Workshop Breakfast – East Ballroom C Continental breakfast for all registered workshop attendees.
8:00 am – 4:30 pm	Workshop 1 – Pathways & Success Strategies for Developing Sustainable Thermal Grids – East Ballroom A
8:00 am – 4:30 pm	Workshop 2 – District Energy for Warmer Climates: District Cooling, CHP & Microgrids for Cities, Communities & Campuses – East Ballroom B
4:30 pm – 5:30 pm	Forums – Open meetings for IDEA members to discuss current industry issues by specialty area. Business Development Forum – East Meeting Room 8 & 15 Microgrid Forum – East Meeting Room 18 District Cooling Forum – East Meeting Room 19 & 20 Operations Forum – East Meeting Room 17 Distribution Forum – East Meeting Room 11 & 12 Principal Managers Forum – East Meeting Room 9
5:30 pm – 7:00 pm	Exhibit Hall Ribbon Cutting & Business Partners Welcome Reception – East Exhibit Hall B <i>Sponsored by Burns & McDonnell, Carrier & Siemens</i> Poster Exhibits Presenters will be available by their posters to answer questions. Poster presentations and presenters are listed at the end of the program, they are also included in the conference mobile app.
7:00 pm – 9:30 pm	Welcome Dinner Cruise – Tour beautiful Vancouver Harbour and beyond aboard the Magic Spirit Yacht. Yacht departs at 7:30 pm. <i>Sponsored by Corix & Creative Energy</i>

Tuesday, June 12

7:00 am – 7:00 pm	Registration Open – <i>East Convention Level Lobby</i>
7:00 am – 8:00 am	Breakfast with Business Partner Exhibitors – <i>East Exhibit Hall B</i> <i>Sponsored by Affiliated Engineers</i>
7:15 am – 7:45 am	Speaker Orientation Meeting – <i>East Meeting Room 10</i> Speakers (except plenary panel) scheduled to present on Tuesday must attend. Coffee and Breakfast will be served.
8:45 am – 4:00pm	Spouse/Guest Program – Guided Tour Mini-Coach Explore Vancouver Depart from Pinnacle Hotel lobby for full day tour plus luncheon included.
8:00 am – 8:15 am	Conference Opening – <i>East Exhibit Hall A</i> Introductions – <i>Robert Thornton, IDEA President & CEO</i> Welcome to IDEA – <i>Chris Lyons, IDEA Chair</i> Welcome to Vancouver – <i>Paul Holt, Conference Technical Chair and Host, University of British Columbia (UBC)</i>
8:15 am – 9:20 am	Global Industry Leaders Plenary Panel #1: "Local Solutions" – <i>East Exhibit Hall A</i> Global industry leaders share perspectives on innovative best practices; emerging technologies, integration of thermal and electricity; growth strategies and deployment of district energy systems serving cities, communities and campuses. Distinguished panelists include: <ul style="list-style-type: none"> • Jonathan Graham, Policy Adviser, Association for Decentralized Energy, London, United Kingdom • Joan Kowal, Senior Director, Energy Strategy & Utilities, Emory University, Atlanta, GA, USA • Travis Hickford-Kulak, General Manager, Energy Services Canada, Corix Utilities, Vancouver, BC, Canada • Birger Lauersen, Manager International Affairs, Danish District Heating Association, Copenhagen, Denmark • Jim Lodge, Vice President, Strategy and Business Development, NRG Energy, Phoenix, AZ, USA • Kieran McConnell, Director of Engineering & Innovation, Creative Energy, Vancouver, BC, Canada • John Peri, President & CEO, Enwave Energy Corporation, Toronto, ON, Canada • Udo Wichert, Managing Director, STEAG Fernwärme GmbH, Essen, Germany and Past President, AGFW, Frankfurt, Germany
9:20 am – 9:25 am	Industry Update and Message
9:25 am – 10:30 am	Global Industry Leaders Plenary Panel #2: "Global Impact" – <i>East Exhibit Hall A</i> Global industry leaders explore evolution underway in the energy industry; share insights on policies and regulations; discuss industry consolidation and market trends; and forecast how partnering and de-carbonizing district energy supports a more robust future. Distinguished panelists include: <ul style="list-style-type: none"> • Trent Berry, Principal, Reshape Strategies, Vancouver, BC, Canada • Ahmad Bin Shafar, Chief Executive Officer, Empower, Dubai, United Arab Emirates • Werner Lutsch, Managing Director, AGFW, Frankfurt, Germany and President, Euroheat & Power, Brussels, Belgium • Chris Lyons, Manager of Marketing and Product Management, Solar Turbines, San Diego, CA USA • Celia Martinez, Head of Latin America and Caribbean, UN District Energy in Cities Initiative, Paris, France • Michael Schack, Director, Networks and Cogeneration, Engie, Paris, France • Paul Voss, Managing Director, Euroheat & Power, Brussels, Belgium

10:30 am – 11:15 am	Refreshment Break with Business Partner Exhibitors – East Exhibit Hall B <i>Sponsored by BOND</i> Poster Exhibits Presenters will be available by their posters to answer questions. Poster presentations and presenters are listed at the end of the program, they are also included in the conference mobile app.			
	1A – Resilient & Sustainable District Energy <i>East Ballroom A</i> Moderator: Bob Smith, RMF Engineering	1B – Risk & Contract Management <i>East Ballroom B</i> Moderator: Karl Marietta, FVB Energy	1C – CHP & DES <i>East Ballroom C</i> Moderator: Tim Peer, BOND	1D – District Energy System Controls & Optimization <i>East Meeting Rooms 1-3</i> Moderator: Eric Silk, Thermo Systems
11:15 am – 11:45 am	The Energy Generation Revolution – Michael Schack, Engie	Contract Strategies: Risk Management on Large Utilities Projects – Roger Copeland, Jacobs Engineering Group	ENMAX Downtown District Energy Centre CHP – Aaron McCartie, Associated Engineering; Jason Grabinsky, ENMAX	District Cooling Plant Optimization – Tariq Al Yasi, Empower Energy Solutions
11:45 am – 12:15 pm	Resiliency Using Geothermal System to Serve Detention Facility – Dan Dixon, District Energy Corporation	Effluent Heat Independent Thermal Energy Contract – Will Cleveland, Reshape Infrastructure Strategies; Lillian Zaremba, Metro Vancouver	Integrating a New Energy Center at New Jersey's Largest Urban Hospital – Matt Kinback, Concord Engineering Group	Keeping Up with Demand: Pilot Project Results for Chilled Water Optimization in NYC Healthcare & City Buildings – Jeff Creighton, FlowEnergy
12:15 pm – 1:45 pm	IDEA Recognition and Awards Luncheon – East Exhibit Hall A Welcome Remarks – Conference General Co-Chairs <i>Sponsored by Enwave</i>			
1:45 pm – 2:30 pm	Dessert and Coffee with Business Partner Exhibitors – East Exhibit Hall B <i>Sponsored by Rentech Boilers</i> Poster Exhibits Presenters will be available by their posters to answer questions. Poster presentations and presenters are listed at the end of the program, they are also included in the conference mobile app.			
	2A – Innovative District Cooling In Asia Pacific & Latin America <i>East Ballroom A</i> Moderator: Henry Johnstone, GLHN Architects & Engineers	2B – Asset Monetization <i>East Ballroom B</i> Moderator: Suresh Jambunathan, Veolia	2C – Trigeneration <i>East Ballroom C</i> Moderator: Johnathan Coleman, Solar Turbines	2D – Environmental Benefits of District Energy <i>East Meeting Rooms 1-3</i> Moderator: Jon Schwartz, Burns & McDonnell
2:30 pm – 3:00 pm	District Cooling and More: Innovation in Singapore – Jimmy Khoo, Singapore District Cooling	Stay Ahead by Deploying an Asset Monetization Program – Serdar Tufekci, Ohio State Energy Partners	Case Study: Meeting Cooling Needs Using Thermal Energy from CHP System – Bradley Cochrane, York University; Edy Chiarotto, Johnson Controls	Converting UC Davis Campus Steam to Carbon-Neutral Heating Water System – Joshua Morejohn, University of California Davis; Colin Moyer & Michael Bove, Affiliated Engineers

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3:00 pm – 3:30 pm	District Energy Strategy in Colombia – Cristina Mariaca, Ministry of Environment and Sustainable Development, Colombia	Due Diligence Review of District Energy Assets for Acquisition, Lessons Learned – Mark Spurr & Karl Marietta, FVB Energy	Enhancing Energy Efficiency in Dairies – Anshuman Pandey, OPRA Turbines	Centralizing, Upgrading & Optimizing Chilled Water on Existing Campus – Colin Moyer, Affiliated Engineers; Michael Morehead, Genentech, Global Engineering
3:30 pm – 4:15 pm	Refreshment Break with Business Partner Exhibitors – East Exhibit Hall B Sponsored by Chem-Aqua			
	Poster Exhibits Presenters will be available by their posters to answer questions. Poster presentations and presenters are listed at the end of the program, they are also included in the conference mobile app.			
	3A – Resilient & Sustainable District Energy East Ballroom A Moderator: Patti Wilson, Affiliated Engineers	3B – Policy & Legal Frameworks East Ballroom B Moderator: Andrew Kemp, Federation of Canadian Municipalities	3C – Thermal Energy Storage Solutions East Ballroom C Moderator: John Andrepont, The Cool Solutions Company	3D – Cooling Technologies & Water Strategies for District Energy East Meeting Rooms 1-3 Moderator: Roger Copeland, Jacobs
4:15 pm – 4:45 pm	Resiliency for a Level 1 Trauma Center – Rory Peters, Ever-Green Energy	Municipal DE Systems: Managing Issues Through Legal Documentation – Rina Thakar, Civic Legal LLP; Kevin Roberts, Lulu Island Energy Company	Simplifying the Selection of Thermal Energy Storage for District Cooling – Steven Benz, EVAPCO	Myth Busters: Absorption Cooling Technology – Rajesh Dixit, Johnson Controls
4:45 pm – 5:15 pm	Energy Systems for Island Resilience in Guam – Calum Thompson & Avinash Srivastava, AECOM	New CHP & Microgrid Business Models Driven By a Changing Energy Market – Bill Castor, Siemens Energy	Thermal Storage Impact on CHP Performance – Michael Roppelt, GSS Integrated Energy	Challenge: Can a District Heating System Cut City Water Use by 80%? – David Chiovoloni, Vanderweil; Gordon Judd, NRG Energy Center San Francisco
5:15 pm – 6:45 pm	Reception with Business Partner Exhibitors – East Exhibit Hall B Sponsored by Onicon, Solar Turbines & Trane			
	APUEA Special International VIP Reception – East Exhibit Hall B Sponsored by Reshape Strategies			
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6:45 pm	Open Evening – Enjoy an open evening to explore Vancouver and experience the city on your own.			

Wednesday, June 13

7:00 am – 5:00 pm	Registration Open – East Convention Level Lobby
7:00 am – 8:00 am	Breakfast with Business Partner Exhibitors – East Exhibit Hall B Sponsored by Kerr Wood Leidal Associates

7:00 am – 8:00 am	Asia Pacific Urban Energy Association (APUEA) General Meeting – Meeting Room 8 APUEA will be hosting their first General Meeting in conjunction with the IDEA2018 conference. All interested conference attendees are welcome to attend. Coffee and breakfast will be served.			
7:15 am – 7:45 am	Speaker Orientation Meeting – East Meeting Room 10 All speakers scheduled to present on Wednesday must attend. Coffee and Breakfast will be served.			
	4A – De-Carbonizing District Energy <i>East Ballroom A</i> <i>Moderator: Dan Dixon, District Energy Corporation</i>	4B – Low Carbon/ Low Temperature Thermal Energy Networks <i>East Ballroom B</i> <i>Moderator: Richard Damecour, FVB Energy</i>	4C – District Energy & Low Carbon Energy Sharing <i>East Ballroom C</i> <i>Moderator: Ayman Fahmy, Kerr Wood Leidal Associates</i>	4D – Strategies for DE Design, Implementation & Operations <i>East Meeting Rooms 1-3</i> <i>Moderator: Keegan Balcom, Reshape Strategies</i>
8:00 am – 8:30 am	Determining the Feasibility of Decarbonizing a District Energy System – Tomasz Smetny-Sowa & Don Grant, Public Services Procurement Canada	The Role of Thermal Networks for Low-Carbon Resilient Communities – Fernando Carou, City of Toronto	Edmonton's Example: District Energy Sharing System in Blatchford – Christian Felske, City of Edmonton; Ruben Arellano, Associated Engineering	Green Heating Solutions by Recovering Waste Heat – Terry Deng, Johnson Controls
8:30 am – 9:00 am	Surrey's Low-Carbon District Energy Strategy – Jason Owen, City of Surrey	The Implementation of Low Temperature District Energy Systems Using Geexchange Technology – Stuart Yanow, Geotility	Westhills District Energy Sharing System, How Does Performance Meet Design Expectations – William Vaughan, WV Engineering	Energy Transfer Station (ETS) Design Principles – Ben Chan, The AME Consulting Group
9:00 am – 9:30 am	Biomass Supply Chain for District Heating: How to Avoid Supply Chain Failure – Pat Liew, Ecostrat	Designing a Transitional Net Zero Carbon Thermal Network – Cameron Thomson, Arup	District Energy With Building Energy Sharing, A Case Study in Innovation – Jeff Weston, Thermenex; Kevan Cornes, City of Coquitlam	Strategies for Successful Early Phase District Energy Development – Travis Hickford-Kulak, Corix; David Trigg, FVB Energy
9:30 am – 10:00 am	Next Generation District Energy Systems – Vladimir Mikler, Integral Group	Energy & City Building: The Future of District Energy in Canada's National Capital Region – Nicholas Kuhl, Sarah Lumley & JoAnn Peachey, Queen's University	Marine Gateway: A Low Carbon Energy System for Vancouver – Andrew Byrnes, Pinchin	Contract Operations & Maintenance: Is it Right for You? – Suresh Jambunathan, Veolia
10:00 am – 10:45 am	Refreshment Break with Business Partner Exhibitors – East Exhibit Hall B <i>Sponsored by FVB Energy</i>			
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	5A – The University of British Columbia District Energy Story <i>East Ballroom A</i> <i>Moderator: Paul Holt, UBC</i>	5B – System Expansion, Renewal & Transformation <i>East Ballroom B</i> <i>Moderator: Joseph Marra, ENGIE</i>	5C – Microgrid with CHP, DE & Storage Solutions <i>East Ballroom C</i> <i>Moderator: Jeff Duncan, Vanderweil Engineers</i>	5D – Data, Digital Infrastructure & Tools for Buildings & DE Assets <i>East Meeting Rooms 1-3</i> <i>Moderator: Blake Ellis, Burns & McDonnell</i>
10:45 am – 11:15 am	A Symposium on The UBC Transition: The Evolution of Low Carbon District Energy and Innovative Solutions at University of British Columbia – <i>Jeff Giffin, Aaron Mogeran, Jim Torcov, Joshua Wauthy & David Woodson, University of British Columbia</i>	DE 4.0 – Expansion of the False Creek Neighbourhood Energy Utility – <i>Chris Baber, City of Vancouver</i>	The Flexible Way to Leverage Microgrids Within a District Energy System – <i>Chris Dunlap, Schneider Electric</i>	District Zero – A Decision-Making Tool for Net-Zero Communities – <i>Peter Ellis, Big Ladder Software</i>
11:15 am – 11:45 am		Renewal Through Transformation: District Energy via DBOOM at Ford – <i>Mike Walters, MEP Associates; Michael Larson, DTE Energy Services</i>	Microgrids, Technology Selection – <i>William (John) Joyce, CHA Consulting</i>	Efficiency Characterization of Central Heating/ Cooling Plants and District Energy Systems – <i>Weiming Shen, National Research Council Canada</i>
11:45 am – 12:15 pm		University of Victoria District Energy System Rejuvenation and Expansion – <i>Sean Casey, FVB Energy</i>	Canada's First Utility-Scale Energy Storage System Islands Remote Town During Outages – <i>Brian Levite, S&C Electric Company</i>	Forecasting & Data Management Tools For Utilities Assets Scheduling – <i>Juan Ruiz, KBC Advanced Technologies</i>
12:15 pm – 1:45 pm	IDEA Annual Business Meeting and Recognition Luncheon – East Exhibit Hall A <i>Sponsored by Johnson Controls</i>			
1:45 pm – 2:30 pm	Dessert and Coffee with Business Partner Exhibitors — Exhibit Hall B Raffle prizes to be awarded, must be present to win. <i>Sponsored by EVAPCO & Jacobs</i>			
	Poster Exhibits Presenters will be available by their posters to answer questions. Poster presentations and presenters are listed at the end of the program, they are also included in the conference mobile app.			
2:45 pm – 5:30 pm	Exhibit Hall Tear Down — Exhibit Hall B			

	6A – Symposium on LEED & District Energy East Ballroom A Moderator: Ruben Arellano, Associated Engineering	6B – Public/Private Partnerships for District Energy East Ballroom B Moderator: Gordon Judd, NRG	6C – Microgrid System Design Controls & Optimization East Ballroom C Moderator: Chris Farr, Jacobs	6D – Data, Digital Infrastructure & Tools for Buildings & DE Assets East Meeting Rooms 1-3 Moderator: Juan Ontiveros, UT Austin
2:30 pm – 3:00 pm	Understanding the Impacts on US & Canadian Case Studies – Tim Griffin & Chris Richardson, RMF Engineering; Jennifer Sanguinetti, University of British Columbia	Oval Village DEU Private Public Partnership: A Success Story, What's Next? – Travis Hickford-Kulak, Corix Utilities; Alen Postolka, City of Richmond/Lulu Island Energy Co.	Control System Solutions for Hybrid CHP implementation for Isolated Micro-Grid – Serge Zinger, Thermo Systems; Jeremy Smith, Waldron Engineering	The Next Evolution: Connected Buildings – Peter Sharer, Leon Hawkins & Matt Gates, Trane
3:00 pm – 3:30 pm		Burnaby Mountain District Energy Utility – Travis Hickford-Kulak, Corix Utilities	Evaluating Modular Microgrid Solutions for Remote Communities, Campuses & Critical Infrastructure – Alif Gilani, Siemens	Modern Connected Systems & Digital Infrastructure – Adam Strynadka, Industrial Software Solutions
3:30 pm – 4:00 pm	Refreshment Break – East Convention Lobby and South Foyer			
	7A – Ownership Models for Biomass District Heating East Ballroom A Moderator: Rick McCallum, Corix Utilities	7B – New Approaches to Business Models & Financing East Ballroom B Moderator: Richard Rappa, CHA Consulting	7C – Piping Design East Ballroom C Moderator: Niels Vilstrup, Danish Embassy in the U.S.	7D – Innovations & Customer Focus East Meeting Rooms 1-3 Moderator: Matt Haakenstad, Kinect Energy Group
4:00 pm – 4:30 pm	District Heating with Modern Wood Energy in the American West – Andrew Haden, Wisewood Energy	International District Energy, New Approaches with Application to the US – Nick Balster, DK Energy US	Targeted DPS Design for Cities, System Expansion, and Modernization – Kristin Wild, Kerr Wood Leidal Associates	Refrigerants for District Energy Applications – Viet Le, Jacobs Engineering Group
4:30 pm – 5:00 pm	Six Years of Success for Canada's First Private Biomass District Heating System – David Dubois, Fink Machine	Innovative Public Private Partnerships – Baird Brown, eco(n)law	How to Install A District Energy Piping System Efficiently To Ensure a Longer Service Life – Scott Jonsen, isoplus Piping Systems	A Review on the Consumers' Benefits of District Heating Systems – Dr. Seul-Ye Lim, Korea District Heating Corporation
6:00 pm – 7:00 pm	Chair's Cocktail Reception (Business Attire) – Harbourfront Ballroom & Foyer at The Pinnacle Hotel			
7:00 pm – 9:30 pm	Annual Chair's Recognition and Awards Banquet (Business Attire) – Harbourfront Ballroom at The Pinnacle Hotel <i>Sponsored by ENGIE & NRG Energy</i>			

Thursday, June 14

7:30 am – 9:00 am	Breakfast Briefing with Pre-Tour Overview Presentations – Harbourfront Ballroom at The Pinnacle Hotel
9:15 am – 1:00 pm	Technical Tours Tour participants will have the opportunity to visit Corix's TEC East and West Plants, University of British Columbia's Campus Energy Centre (CEC), University of British Columbia's BRDF, Alexandra District Energy Utility, Creative Energy Steam Plant and Telus Garden. Pre-registration is required to attend the Technical Tours.

Poster Exhibits

Poster #1	Air-Source Heat Pumps for Low-Carbon Heating and Cooling – Kevin Roberts, Lulu Island Energy Company; Ayman Fahmy, Kerr Wood Leidal Associates
Poster #2	Evaluating Corrosion Under Insulation (CUI) in Corrosion-Prone Environments – Dayna Martin & Evan Stone, Johns Manville
Poster #3	Model-based Non-destructive Corrosion Detection – Francis Schlosser, Draper
Poster #4	Hydraulic Modeling Offline & Real-Time, A Critical Component for Best-In-Class Design & Efficiency – Thomas Lund-Hansen, Reliability Efficiency & Optimization
Poster #5	Factory Installed Meters Reduce Installation Cost for NYC Sub-metering – Rob Neumann, Onicon Inc.
Poster #6	Chilled Water Thermal Energy Storage: Providing Value Even in the Great White North – John Andrepont, The Cool Solutions Company
Poster #7	Load Management Systems – Critical Equipment for Successful CHP Projects – Saqib Khattak, CHA Consulting
Poster #8	Saturated Steam Mass Metering – Jaz Virk, TekTrol
Poster #9	Planning for the Future: The First Cyber-Secure Utility Microgrid at Ameren – Teddy Chettiar, S&C Electric
Poster #10	Central Plant Energy Management At The University of Arizona – Henry Johnstone, GLHN Architects & Engineers