



CampusEnergy2021

BRIDGE TO THE FUTURE

Feb. 16-18 | CONNECTING VIRTUALLY

Draft Program: 2/1/2021

All Times Listed are Eastern Standard Time. PROGRAM SUBJECT TO CHANGE

Tuesday, February 16

(NOTE: All times in Eastern Standard Time/EST)

10:00 am – 10:15 am	Conference Opening		
10:15 am – 11:15 am	<p>Panel Discussion – District Energy: Bridge to the Future, Moderator – Rob Thornton, President & CEO, IDEA</p> <p>Invited panelists include:</p> <ul style="list-style-type: none"> • Lalit Agarwal, Director, Maintenance & Utility Services, University of Nebraska Lincoln • Robert (Bert) Bland, Associate VP, Energy & Sustainability, Cornell University • Ted Borer, Director, Energy Plants, Princeton University • Joan Kowal, Senior Director, Resilience & Utility Strategies, Emory University • Meghan Riesterer, Assistant Vice President, Campus Energy & Sustainability, Oberlin College & Conservatory 		
11:15 am – 11:45 am	<i>Exhibit Hall & Appointments</i>		
	<p>1A – Innovations in District Energy Moderator: <i>Henry Johnstone, GLHN Architects and Engineers</i></p>	<p>1B – Geothermal for the Built Environment Moderator: <i>Jeff Urlaub, MEP Associates</i></p>	<p>1C – Efficient District Cooling Moderator: <i>Meghan Riesterer, Oberlin College</i></p>
11:45 am – 12:45 pm	<p>Making Resiliency Projects Sustainable – Exploring Power Supply Options for a Proposed California Oceanwater Desalination Plant – <i>Nathan Ninemire, Burns & McDonnell; Marc Serna, South Coast Water District; Mark Donovan, GHD</i></p> <p>Mission Rock - Developing Sustainable Utilities in San Francisco – <i>Michael Ahern, Ever-Green Energy</i></p>	<p>Google’s Approach to Decarbonizing the Built Environment – <i>Asim Tahir, Google; Dr. Rob Best, Arup; Eric Solrain, Integral Group</i></p>	<p>UT Austin – Reducing Energy Consumption Even With 20% Campus Growth – <i>Juan Ontiveros, UT Austin; Ben Erpelding, Optimum Energy</i></p> <p>Variable Speed Drive for High-Load Chiller Operation – <i>Neelraj Sambasivam, Johnson Controls</i></p>

	2A – Lowering Carbon & Reducing Water Use with Heat Recovery Chillers Moderator: <i>Juan Ontiveros, UT Austin</i>		2B – Creative Financing Models Moderator: <i>Laxmi Rao, IDEA</i>			
1:00 pm – 2:00 pm	A Low Carbon, Low Water Campus Heat Recovery Chiller Strategy for Moderate Climates – Henry Johnstone, GLHN Architects and Engineers Three Applications of Heat Recovery Chillers supporting LTHW at UVA – Paul Zmick, University of Virginia		Perspectives on P3 from Years of Advisory Experience on Both Sides of the Fence – Mark Spurr and James Bohn, FVB Energy Inc. Expansion and Modernization of Existing Systems as an Economic Development Strategy – William Joyce, CHA Consulting			
2:00 pm – 2:30 pm	Virtual Exhibit Hall & Appointments					
	3A – Mission Critical Resilient CHP	3B – Sustainability	3C – Chilled Water System Operation and Optimization	3D – District Heating Best Practices	3E – Geothermal Systems	3F – Water Reuse and Resource Conservation
2:30 pm – 2:50 pm	Enhancing Mission Assurance through Energy Assurance – Kurt Koenig and Mark Miller, HDR	Achieving 80% Carbon Reduction at Simon Fraser University – Paul Holt and Ivana Safar, Corix Utilities		The George Washington University District Energy System – Rachel Gray and Dr. Saniya LeBlanc, The LeBlanc Lab – The George Washington University	After 40 Years, Time to Complete the 1979 University of Regina GeothURmal Project – Dr. Janis Dale, University of Regina	Cooling Tower Blowdown Recovery – Michael Bellardine and Roger Jasper, Worley; Patrick Freeman, US Water Services Inc
2:50 pm – 3:10 pm	CHP Saves Lives: A Case Study of CHP on a Toronto Hospital Campus – Steve Quinlan, CEM Engineering	Domino Effect – The Importance of Understanding the Big Picture When Sustainability Planning – Nathan Ninemire and Justin Grissom, Burns & McDonnell	Western University’s New Vision of District Energy to Mitigate Climate Change – Genevieve Lussier, Equinox Strategies Inc.; Evan Green, University of Western Ontario	University of Iowa Boiler Replacement – Russ Price and Jacob Price, PRVN Consultants; Ed Scherrer, The University of Iowa	Identifying Opportunities for Clean District Energy Campuses in New York City – David Jones, ICF	Sustainable Water Management Through Reclamation and Reuse – Bob Salvatelli, Sustainable Water
3:10 pm – 3:30 pm	Smith College’s Life with Our CHP Plant – Stephen Slocomb, Epsilon Associates	Clean Energy Master Plans on the Road to Decarbonization and Resiliency – Case Studies of SUNY ESF and SUNY Oneonta –	New Age Absorption Chillers – Amit Vatsa, BROAD USA Inc.	Adaption in Action – Leveraging Existing with New Technology and Process Improvement – Jessica Vulovic-Basic, University of Toronto;	Geothermal Deep Direct-Use (DDU) for Decarbonizing Heating and Cooling: Techno-Economic Analysis of Six Feasibility Using	Effect of Lowering Condenser Temperature on Chiller Efficiency – Vinicius Cruz, Johnson Controls Hitachi

		<i>Robert Neimeier, Ramboll</i>		<i>Andrew Pratt, Crossey Engineering Ltd</i>	Scenarios – Amanda Kolker, National Renewable Energy Laboratory; Koenraad Beckers, Heateon
3:30 pm – 4:15 pm	Meet the Experts 1 <i>Moderator: Rob Thornton, IDEA</i> Malcolm Harkness, Clearway Community Energy Paul Van Gelder, CHA Consulting Pat Guccione, Chem-Aqua			Meet the Experts 2 <i>Moderator: Tanya Kozel, IDEA</i> Sam Chatterton, Johnson Controls Nate Cesarz, Affiliated Engineers Serdar Tufekci, ENGIE	
4:30 pm – 5:00 pm	Virtual Exhibit Hall & Appointments				
5:00 pm – 5:30 pm	Virtual Happy Hour & Networking				

Wednesday, February 17 (NOTE: All times in Eastern Standard Time/EST)			
	4A – System Expansion & Modernization <i>Moderator: Lalit Agarwal, University of Nebraska, Lincoln</i>	4B – State Level Resiliency Policy <i>Moderator: Nina Axelson, Ever-Green Energy</i>	4C – Thermal Energy Storage <i>Moderator: John Andrepont, The Cool Solutions Company</i>
10:00 am – 11:00 am	Modernizing Utilities While Expanding a Campus – Jim Harris, Burns & McDonnell; Mike Sinack, University of Pittsburgh Cal Poly Electrical Master Planning in the Age of Utility Power Shutoffs and Natural Gas Bans – Krista Murphy, Affiliated Engineers Inc.	State Resiliency Policy Design – An Energy Resiliency Illustration – Neeharika Naik-Dhungel, U.S. EPA Zero Carbon Through District Electrification – Joshua Radoff, WSP-USA	Thermal Energy Storage – 10 Years Later – Steve Swinson, TECO The Evolution of District Energy – Michael Roppelt, GSS Integrated Energy
11:15 am – 12:15 pm	Panel Discussion – Powering Through the Pandemic, Moderator – Rob Thornton, President & CEO, IDEA Invited panelists include: <ul style="list-style-type: none"> Samuel Chatterton, Vice President, Product Technical Support and Operations, Global Chiller Products, Johnson Controls James Lodge, President, Clearway Community Energy David Musto, President & CEO, Thermo Systems Michael Schack, Group Director Operational Marketing, ENGIE Steve Swinson, President & CEO, TECO 		

12:15 pm – 12:45 pm	Virtual Exhibit Hall & Appointments					
	5A – System Expansion & Modernization	5B – Business Models & Increasing Cost Effectiveness	5C – Master Planning	5D – Campus Aesthetics & Community Energy	5E – Connected Plants, Controls, Monitoring	5F – Energy Storage
12:45 pm – 1:05 pm	Aligning Energy Performance with University Mission – Susan Castellan, Whiting-Turner Contracting Company; Casey Ross, BKM; Alexandra Harry, The Catholic University of America	Optimizing Lifecycle Costs of a Chilled Water System – Kristen Parkhurst and Mike Larson, DTE Energy	CalTech Utility Master Plan Update – Andrew Price, Affiliated Engineers; John Onderdonk, Caltech	How District Energy Transformed a College Campus by Enabling Social Space for Interaction and Reflection – Steven Buckler, RMF Engineering; Cathy Pinsky, George Mason University; Stephanie Wolfgang, Perkins & Will; Perry Mahle, Whiting-Turner	Innovations in Level Measurement Technology Improve Boiler Control and Reliability – Tom Wienke, Emerson Automation Solutions	Three TES Tank Case Studies at Universities – Guy Frankenfield, DN Tanks
1:05 pm – 1:25 pm	Respond, Rebuild & Direct – David Goetz, Burns & McDonnell; Da Dennis, Ashley Energy, LLC	Life Cycle Assessment of District Heating System - Application to European Systems – Camille Jeandaux, ENGIE	20 Years Using Hydraulic Modeling to Aid in Campus Expansion – John Lee, Burns & McDonnell; Rob Engle, Auburn University		Thermal Energy Corporation (TECO) – The Energy Behind What’s Next – Michael Manoucheri, TECO; Ben Erpelding, Optimum Energy	TES Couples Savings with Flexibility on NCSU Centennial Campus – Jonathan Eveleth, RMF Engineering; Bill Ferrell, North Carolina State Univ.
1:25 pm – 1:45 pm	CHP and Renewable Gas Alternatives – Dr. Bruce Hedman, Entropy Research; John Woolsey, Center for Sustainable Energy	Reversible piping network in DHC: An alternative to Increase Cost Effectiveness – Stephane Coucke, University of Liege;	Oberlin College Sustainable Infrastructure Program – Michael Ahern, Ever-Green Energy; Meghan Riesterer, Oberlin College	District Energy Brings Opportunity to the Lansing Community – Sean McFarling, Ever-Green Energy	New Onsite Legionella Test Enables Cooling Tower Monitoring in Minutes – Ashok Shetty, SUEZ Water Technologies & Solutions; Mark Coumans, Spartan Bioscience Inc.	Optimizing Capital Investments in the Pandemic and the New Normal – John Andrepont, The Cool Solutions Company

1:45 pm – 2:05 pm		Distribution Piping Systems – Capital Efficiency, Planning and Future Proofing – <i>Mostafa Elbehery, FVB Energy Inc</i>	University of Illinois at Chicago Utility Master Plan and Critical Power – <i>Kevin Voss and Jim Nonnenmann, PRVN Consultants, Inc.; Brad Simmons University of Illinois at Chicago</i>		Excel as a Human Machine Interface – <i>Robert Benz, Benz Air Engineering Co.</i>	Incorporating Energy Storage into District Energy Systems – <i>Andy Solberg, Jacobs</i>
2:15 pm – 3:00 pm	<i>Virtual Exhibit Hall & Appointment</i>					
3:15 pm – 4:00 pm	Meet the Experts 3 <i>Moderator: Jason Beal, IDEA</i> Serge Zinger, Thermo Systems Bernie Pfeifer, Solar Turbines Jesse Cabrera, Stanley Consultants			Meet the Experts 4 <i>Moderator: Scott Szycher, IDEA</i> Tom Parker, Burns & McDonnell James Monette, Nooter/Eriksen, Inc. Thiago Bacic, Radix Engineering and Software		
4:00 pm – 5:00 pm	Virtual Happy Hour and Networking					

Thursday, February 18

(NOTE: All times in Eastern Standard Time/EST)

10:00 am – 10:30 am	<i>Virtual Exhibit Hall & Appointments</i>					
	6A – Dynamic Decision Making Framework for District Energy Systems <i>Moderator: Bob Smith RMF Engineering</i>		6B – Decarbonizing Pathways <i>Moderator: Ted Borer, Princeton University</i>		6C – District Energy Solutions from Around the Globe <i>Moderator: Rob Thornton, IDEA</i>	
10:30 am – 11:30 am	Dynamic Decision-Making Framework for a District Energy System Manager – <i>Daniel Schuster, Schuster LLC</i>		District Energy Helps Cities Reach Net Zero Carbon – <i>Scott McBurney & Jackie Bliss, Vicinity</i> A Path to Neutrality Part II – Princeton University TIGER – From Design to Construction – <i>Justin Grissom, Burns & McDonnell; Ted Borer, Princeton University</i>		Putting Wastewater to Work – <i>Lynn Mueller, SHARC Energy</i> Fortum Tartu, Estonia - Strategic System Optimization Feasibility Study of Large Scale City Tri-Generation System – <i>Thomas Lund-Hansen and Janus Christiansen, Reliability Efficiency & Optimization LLC</i>	

11:45 am – 12:30 pm	YPG Presents – Campus Energy Videos A retrospective of District Energy Systems finest filmmaking! We'll share some of the great submissions we've received over the last 8 years for Campus Energy Video contest and our co-chairs will count down the best of the best.					
12:30 pm – 1:00 pm	Virtual Exhibit Hall & Appointments					
	7A – Getting to Carbon Neutrality	7B – Steam to Hot Water Conversion	7C – Future Fuels	7D – District Heating & Cooling	7E – COVID-19	7F – Cybersecurity, Controls and Optimization
1:00 pm – 1:20 pm	Northern Alberta Institute of Technology (NAIT) Master Energy Strategy – Kenneth Teeter, AECOM; Jim Sandercock and Robert Akkerman, Northern Alberta Institute of Technology	Benefits of Hot Water – Ben Dombrowski and David Bevins, Jacobs	Renewable Fuel for Campus Generation Systems – Jeff Gowdy, WastAway	Lake-Source District Cooling for Cities and Campuses – Brendan Hall, CHA Consulting	District Energy in an Emergency – How District Energy Supported the Rapid Deployment of a COVID Care Facility – Jeff Elsner and Mike Watkins, The RMH Group	Baked in Cybersecurity – Mark Fisher and Leo Tso, Thermo Systems
1:20 pm – 1:40 pm	Timelines for Getting Off Carbon – Jeff Urlau and Doug Hammerle, Salas O'Brien; Dano Weisbord, Smith Colleg	Now Comes the Hard Part of De-Carbonization! Electrified Campus Heating Systems – Nate Taylor, Affiliated Engineers, Inc.; Lynn Bailey, University of Denver	Deep Decarbonization of CHP Using Hydrogen as a Fuel – Michael Welch, Siemens		Infectious Disease Concerns in Cooling Towers and Their Resolution – Lex LaMotte, LaMotte Water Management	CyberSecurity of Institutional Energy Systems – Thomas McDonnell, Rockwell Automation
1:40 pm – 2:00 pm	Profiting on the Road to Zero Carbon – Daniel Ciarcia and Shashi Menon, EcoEngineers	District Heating Distribution Design to Meet University of California Davis Carbon Neutrality Goals – Joanna Pyun and Pius Kao, Affiliated Engineers; Kurt Wengler, UC Davis	Renewable Hydrogen – Joe Ferrari, Man Energy Solutions	District Heating & Cooling Supplied by Heat Pump Plant – Jens Ole Hansen, Ramboll		

<p>2:00 pm – 2:20 pm</p>	<p>Zero Emissions Campus Energy – What Does it Take to Achieve It? – Vladimir Mikler and Justin TK Chin, Integral Group</p>	<p>Site Supervision as a Game Changer for Successful Low Carbon District Energy System Implementation projects– Niels Vilstrup, Royal Danish Embassy in USA; John Rathbone, Rathco</p>		<p>Series Counterflow Water-cooled Chiller Applications – Greg Shirk, Johnson Controls</p>		<p>Energy Efficiency Study of the Cogeneration Plant– Priscila Vieira Gameiro, Radix Engineering & Software; Janine Helwig, George Washington University</p>
<p>2:30 pm – 3:00 pm</p>	<p>Closing Remarks and Raffle Winner Announcements</p>					
<p>3:00 pm – 4:30 pm</p>	<p style="text-align: center;">Campus Member Forum Meeting A forum for open dialogue among IDEA member college/university campus energy personnel only.</p>					
<p>4:00 pm – 5:00 pm</p>	<p>Virtual Happy Hour and Networking</p>					