



IDEA2017 | Sustaining Our Success

108TH ANNUAL CONFERENCE & TRADE SHOW
 June 26-29 | Fairmont Scottsdale Princess | Scottsdale, AZ

*Preliminary IDEA2017 Program – 6/20/17
 TIMES ARE SUBJECT TO CHANGE*

Sunday, June 25

3:00 pm – 5:00 pm	Registration Open – Palomino North Foyer
11:00 am – 1:00 pm	IDEA Executive Committee Meeting – Bourbon 8
12:00 pm – 5:00 pm	Board Meeting and Luncheon – Dorado A-B (luncheon from 12:00 pm – 1:00 pm)

Monday, June 26

6:00 am – 3:00 pm	IDEA Annual Golf Tournament – TPC Scottsdale Stadium Course Taking place at a top notch PGA course, home of the Waste Management Greater Phoenix Open on the grounds of the Fairmont Scottsdale Princess, the event will commence with a quick breakfast at the golf course, followed by warmup/practice time before a shotgun start at 7:30am.	
7:00 am – 7:00 pm	Registration Open – Palomino North Foyer	
8:00 am – 3:30 pm	Exhibit Setup – Palomino	
7:45 am – 8:15 am	Workshop Breakfast – Princess H	
8:30 am – 4:00 pm	Workshop 1: Microgrids for Utilities, Communities and Cities – Princess FG This workshop will explore how district energy providers, campuses, hospitals and airports can build on district energy infrastructure such as that in Phoenix AZ and support their customers in offering resilient solutions via micro grids. Experts will discuss business development strategies, best practices and early stage screening of projects. Workshop attendees will be able to participate interactively and explore questions specific to their projects.	
8:30 am – 4:00 pm	Workshop 2: Governance Models and Success Strategies for Developing Thermal Grids – Princess I This workshop will focus on real-world case studies & proven strategies behind successful district energy development projects, drawing from international experience & best practices on assessment, development, financing and project execution. Topics will include economic, technical, political and social context for community energy planning, governance structures, district energy lifecycle and key success factors, stakeholder management and capacity building. The workshop will be based on a research project for the International Energy Agency Technology Collaboration Programme on District Heating and Cooling.	
4:15 pm – 5:15 pm	Forums – Open meetings for IDEA members to discuss current industry issues by specialty area. Business Development Forum – Princess H Microgrid Forum – Moor 1 District Cooling Forum – Dorado AB Operations Forum – Moor 2 Distribution Forum – Arabian B Principal Managers Forum – Moor 3	
5:30 pm – 7:00 pm	Exhibit Hall Ribbon Cutting & Opening Business Partners Welcome Reception – Palomino - <i>Sponsored by Thermo Systems & Trane</i>	
7:00 pm – 9:00 pm	Welcome Dinner at Copper Canyon – An evening to relax, reconnect, mingle and network on the Fairmont Scottsdale Princess property. <i>Sponsored by NRG</i>	

Tuesday, June 27

7:00 am – 7:00 pm	Registration Open – Palomino North Foyer
7:00 am – 8:00 am	Breakfast with Business Partner Exhibitors – Palomino - Sponsored by GLHN Architects & Engineers, Inc.
7:15 am – 7:45 am	Speaker Orientation Meeting – Moor 1
8:00 am – 4:00 pm	Spouse/Guest Program: Sedona Experience and Jeep Tour – Depart from Hotel Lobby Spouse/Guest attendees are invited to go on a Sedona Experience and Jeep Tour. The experience includes bus transportation and Jeep Tour, there is also time for Lunch (not included) and shopping at Tlaquepaque, a Spanish arts and crafts village.
8:00 am – 8:15 am	Conference Opening – Princess ABCDE Introductions – Robert Thornton, IDEA President & CEO Welcome to IDEA – Tim Griffin, IDEA Chair Welcome to Phoenix – Jim Lodge, Conference General Chair and Host, NRG Energy
8:15 am – 9:30 am	Global Leaders Plenary Panel Discussion: “Sustaining Our Success” – Princess ABCDE Industry leaders share a “look ahead” on the pace of change in the district energy industry, sharing insights on policies, business models and emerging trends related to more resilient and sustainable energy for cities, communities and campuses. Audience members will be invited to participate in real time polling survey questions. Invited panelists include: <ul style="list-style-type: none"> • Canada - Bruce Ander, President & CEO, Markham District Energy • China – Zhao Jiancheng, Chairman, China District Energy Association (tentative) • Germany/European Union - Werner Lutsch, Managing Director & CEO, AGFW; President, Euroheat & Power • Japan – Takashi “Bob” Nakashima, Vice President, LDC Development, Osaka Gas • Qatar - Yasser Salah Al Jaidah, Chief Executive Officer, Qatar Cool • Singapore – Lim Soon Heng, Director, Corporate Strategy, Singapore District Cooling Pte Ltd (tentative) • United Arab Emirates - Ahmad Bin Shafar, Chief Executive Officer, Empower Energy Solutions • United Kingdom - Michael King, Director, District Energy Development Ltd • United States - Jim Lodge, Vice President, Strategy & Business Development, NRG Energy
9:30 am – 10:30 am	<u>Keynote Address: Brian Deese</u> – Princess ABCDE Brian Deese was a Senior Advisor to President Obama and is currently a Senior Fellow at Harvard Kennedy School's Mosavar-Rahmani Center for Business and Government. During his IDEA2017 Keynote Address he will provide a non-partisan global outlook on energy, environment, sustainability and infrastructure investment with emphasis on how to navigate political uncertainty while adhering to tenets of Paris Climate Agreement. This address will try to answer the question, How do IDEA members achieve our desired future?
10:30 am – 11:15 am	Refreshment Break with IDEA Business Partners – Palomino - Sponsored by Affiliated Engineers, Inc. & MTU Onsite Energy

	1A –Systems Planning Growth & Renewal <i>Salon F</i> Moderator: Patti Wilson, Affiliated Engineers	1B – CHP Systems for Efficiency, Reliability and Resiliency <i>Salon G</i> Moderator: Tim Peer, BOND	1C – Urban District Cooling Systems <i>Salon H</i> Moderator: Michael Burns, Ever-Green Energy	1D –Energy Studies & Data for Sustainable Design <i>Salon I</i> Moderator: Meghan Riesterer, Oberlin College
11:15 am – 11:45 am	<u>Growth and CUP Renewal at Denver International Airport</u> – Jeffrey Easton, Burns & McDonnell; Haven Cassidy, Denver International Airport	<u>Sustaining CHP Performance in District Energy Applications</u> – Kevin Jensen, Solar Turbines	<u>The District Cooling System at the Kai Tak Development, Hong Kong</u> – Kwok Yin Lam, Hong Kong Electrical and Mechanical Services Department	<u>Low-carbon Energy Supply Study for the City of Cambridge, MA</u> – Dan Kelley, Ramboll
11:45 am – 12:15 pm	<u>System Growth and Advancement in Lincoln</u> – Michael Ahern, Ever-Green Energy; Dan Dixon, District Energy Corporation	<u>Integrating Cogeneration into a Historic Army Proving Ground</u> – Matt Nyquist, Concord Engineering	<u>The Architect of the Capitol: Chilled Water Efficiency Improvements Through Revitalization</u> – Nathan Cesarz, Affiliated Engineers Inc; Thomas Costello & Chris Potter, Architect of the Capitol	<u>Why Design with Old Data?</u> – Alexandra Calven, Arup
12:15 pm – 1:45 pm	IDEA Recognition and Awards Luncheon – Princess ABCDE - Sponsored by Carrier & RMF Engineering			
1:45 pm – 2:30 pm	Dessert and Coffee with Business Partner Exhibitors – Palomino - Sponsored by Jacobs & Ramboll Energy			
	2A – The Pittsburgh Story: Urban Microgrid Planning and Development <i>Salon F</i> Moderator: Henry Johnstone, GLHN	2B – CHP Systems Design & Implementation <i>Salon G</i> Moderator: Tom Parker, Burns & McDonnell	2C – Thermal System Design <i>Salon H</i> Moderator: Ehsan Dehbashi	2D – Business Models & Financing <i>Salon I</i> Moderator: Joseph Sullivan, Concord Engineering
2:30 pm – 3:00 pm	<u>University of Pittsburgh: Partnering for Microgrid Success</u> – Michael Rooney, University of Pittsburgh	<u>Lessons Learned From the Design, Construction and Implementation of CHP Projects Across the Country</u> – Kevin Fox, Jacobs Engineering Group	<u>Finding Energy Saving Opportunities on a Large Scale University Campus: How the University of Texas Strategically Selects Energy Optimization Projects</u> – Travis Isakson & Amanda Berens, University of Texas Austin; Ben Erpelding, Optimum Energy	<u>Is Electric Utility Ownership of CHP Good for Ratepayers and the Environment?</u> – Mark Spurr, FVB Energy
3:00 pm – 3:30 pm	<u>An Integrative Business Model for Net-Zero Energy Districts</u> – Matthew Jungclaus, Rocky Mountain Institute	<u>Modernization & Optimization of Existing CHP Facility</u> – Mark Baumgartner, Affiliated Engineers; Ray Isada, Cat Global Supply Network Division	<u>Chilled Water Energy Savings Study</u> – Garry Cole, Belimo Americas	<u>Oval Village DEU Private Public Partnership – A Success Story</u> – Alen Postolka, City of Richmond / Lulu Island Energy Company; Travis Hickford-Kulak, Corix Utilities
3:30 pm -4:15 pm	Refreshment Break with IDEA Business Partners – Palomino - Sponsored by BOND			

	3A – The Campus Aesthetic and Infrastructure Planning <i>Salon F</i> Moderator: Nate Cesarz, Affiliated Engineers	3B – Trends in CHP <i>Salon G</i> Moderator: Dalia El Tawy, Siemens	3C – New Energy Technologies & Innovation <i>Salon H</i> Moderator: John Andrepont, The Cool Solutions Company	3D – Business Models & Financing (contd.) <i>Salon I</i> Moderator: Tom Phelps, Stantec
4:15 pm – 4:45 pm	CHP Project Delivery Options – Tim Peer, BOND	The Power of Collaboration on CHP: Benefits of Utility Ownership of CHP as a Base Load Resource at Key Customer – Ken Duvall, Sterling Energy Group, LLC	Integrated Thermal Energy Storage (ITES): A New Approach to Energy Storage – William Kopko, Johnson Controls	Long-term Profitability Scenarios for a CHP-Based Microgrid – Carlos Gamarra, Houston Advanced Research Center
4:45 pm – 5:15 pm	Too Big to Hide- District Energy & CHP Infrastructure in Sensitive Campus Locations – Jane Weinzapfel, Leers Weinzapfel Associates	CHP Packaged Systems: A Growing Trend – Neeharika Naik Dhungel, U. S. EPA	Resiliency, Reliability and Risk Management – Leveraging New Energy Technologies – Al DiGuilio, Douglas Millar & Daniel Weeden, Edison Energy	An Update on Financial Incentives for Energy Efficiency, CHP and District Energy Projects – Rod Schwass, Jacobs Engineering
5:15 pm – 6:45 pm	Reception with Business Partners in the Exhibit Hall – Palomino - <i>Sponsored by Burns & McDonnell & Solar Turbines</i>			
6:45 pm	Open evening – Enjoy an open night to explore Scottsdale or experience the resort on your own			

Wednesday, June 28

7:00 am – 5:00 pm	Registration Open – Palomino North Foyer			
7:00 am – 8:00 am	Breakfast with Business Partner Exhibitors – Palomino - <i>Sponsored by Vanderweil Engineers</i>			
7:15 am – 7:45 am	Speaker Orientation Meeting – Moor 1 (All presenters for the day must attend this briefing)			
	4A – District Energy & Water Strategies for Sustainable Operation <i>Salon F</i> Moderator: Juan Ontiveros, University of Texas at Austin	4B – Developments in District Energy <i>Salon G</i> Moderator: Pat Davin, Veolia	4C – Design Considerations <i>Salon H</i> Moderator: Mike Dempsey, Burns & McDonnell	4D – Storage as a Solution <i>Salon I</i> Moderator: Guy Frankenfield, DN Tanks
8:00 am – 8:30 am	Methods for Total Water Conservation – Seth Kraal, Jacobs Engineering Group Inc.	Benefits of Trigenation for University Campuses and Data-Centers – Case Studies – Dalia El Tawy, Siemens Energy	Effects of Water Absorption and Retention in Thermal Insulation – Steve Badger, Pittsburgh Corning	Energy Storage: A Need for the Grid (and Microgrids), An Opportunity for District Energy – John Andrepont, The Cool Solutions Company
8:30 am – 9:00 am	Innovative Strategy for Clean Energy & Sustainable Water Reuse – Suresh Jambunathan, Veolia	Steam is More Efficient than Most People Think – Patrick Lach, Maxi-Therm Inc.; Jacek Grob, Boilersource	CHP Project Design – Don't Overlook the Details – Steve Willins, Kinect Energy	Maximizing ROI & Resiliency with PV and Energy Storage – Daniel Ingold, Jacobs Engineering Group

9:00 am – 9:30 am	<u>Water and Energy Conservation with Ozone Treatment of Cooling Towers</u> – Lex LaMotte, LaMotte Water Management	<u>District Energy and Water Source Heat Pumps</u> – Michael Marr, Veolia North America	<u>The Study on the Effect of Each District Heating Substation Return Temperature on the Electricity Production Opportunity Cost</u> – JongJun Lee, Korea District Heating Corporation	<u>Abating Pollutants at Rubber Tire Factories: Waste to Power</u> – Anshuman Pandey, OPRA Turbines
9:30 am – 10:00 am	<u>Saving Water and Operating Costs at NREL's HPC Data Center</u> – Tom Carter, Johnson Controls; David Sickinger, National Renewable Energy Laboratory	<u>Changing Perceptions: Why You Should Consider Geothermal Technology For Your Energy Needs</u> – Mike Walters, MEP Associates; David Yanni, GI Energy	<u>The Challenges of Constructing and Operating a Multi-Phase Chilled Water Plant Under a City Street</u> – Gary Cheek, NRG Energy	<u>Delivering on Sustainability Commitments: A Portfolio Approach</u> – Matt Haakenstad, Kinect Energy
10:00 am – 10:45 am	Refreshment Break with IDEA Business Partners – Palomino - Sponsored by Rentech Boiler Systems, Inc.			
	5A – Symposium: Energy – Water District Cooling Nexus for Arid Regions <i>Salon F</i> Moderator: Henry Johnstone, GLHN	5B – Thermal Distribution Networks: Innovations & Best Practices <i>Salon G</i> Moderator: Richard Damecour, FVB Energy	5C – Local & Global Systems <i>Salon H</i> Moderator: Ben Dombrowski, Jacobs	5D – Metering , Measurement & Controls <i>Salon I</i> Moderator: Ray DuBose
10:45 am – 11:15 am	This session will explore factors that must be considered when designing and operating district cooling systems in arid regions. In-depth presentations will cover the linkages that exists between water-in-energy, energy-in-water, & energy-water-in-cooling systems while evaluating technology options such as thermal energy storage and treated sewage effluent for optimal water utilization.	<u>Re-Envisioning Heating at UVA: Converting from Steam to Hot Water</u> – Ben Dombrowski, Jacobs Engineering Group Inc	<u>Capitalizing on the Economic and Environmental Benefits of Energy Storage</u> – Dan Wishnick, Siemens	<u>DP Flow Measurement In-situ Validation and Wet Steam Monitoring</u> – Kim Lewis, DP Diagnostics
11:15 am – 11:45 am		<u>"Bigger is not Better" Selecting the Most Efficient Heat Exchanger</u> – Henrik Rietz, SWEP	<u>District Cooling Marches on in Colombia</u> – Andres Velasquez, BT-Consultores; Yohana Alzamora, distritvm	<u>Implementing ISA101 Case Study: High Availability, High Resolution, High Performance, HMI Upgrade</u> – Neil Brooks, RoviSys
11:45 am – 12:15 pm		<u>District Heating System Expansion with Reinforced Crosslinked Polyethylene (PEX-R) Piping</u> – Abby Dacho, Kerr Wood Leidal	<u>Energy Efficiency at Paper Mills: Combined Heat and Power in Italy</u> – Anshuman Pandey, OPRA Turbines	<u>Chiller Optimization Via Tube Fouling Prevention & Emerging Technologies</u> – Michael Crocker, Innovas Technologies
12:15 pm – 1:45 pm	IDEA Annual Business Meeting and Recognition Luncheon – Princess ABCDE – Sponsored by Siemens			
1:45 pm – 2:30 pm	Dessert and Coffee Networking Break with IDEA Business Partners – Palomino (Prizes and Raffles Awarded) – Sponsored by EVAPCO			
2:45 pm – 5:30 pm	Exhibit Hall Tear Down			

	6A – Connecting Data with Decisions <i>Salon F</i> Moderator: Joe Witchger, HGA Architects & Engineers	6B – Deriving Value from Biomass <i>Salon G</i> Moderator: Nina Axelson, Ever-Green Energy	6C – Microgrids <i>Salon H</i> Moderator: Mark Demana, RMF Engineering	6D – Optimizing CHP and District Energy Systems <i>Salon I</i> Moderator: Eric Silk, Thermo Systems
2:30 pm – 3:00 pm	Downtown Tucson 2050 - Beyond the Site Line of a Standard City Plan – Henry Johnstone, GLHN Architects & Engineers; Courtney Crosson, University of Arizona College of Architecture Landscape Architecture	Integrating Biomass with District Energy Based on Flexible Fuel Solutions – Kerry Flick, Valmet Technologies Oy	Microgrid Comes to Montclair State University – Frank DiCola, DCO Energy	Optimizing District Energy Systems with CHP and Microgrid Controls – Scott Higgins, Schneider Electric
3:00 pm – 3:30 pm	District Energy and the Industrial IoT: Benefits of a Connected System – Adam Strynadka, DeviceLynk	The Biomass Solution – Sasha Mackler, Enviva	Hybrid Microgrids with Reciprocating Engine Generator Sets – Christian Mueller, Rolls-Royce Power Systems	Bringing Water Treatment In House - Monitoring and Control Strategies and Improved Results – Michael Fehr, Fehr Solutions
3:30 pm – 4:00 pm	Refreshment Break – Foyer			
	7A – Models for Energy Savings <i>Salon F</i> Moderator: Richard Rappa, CHA	7B – Renewable Fuels for Thermal Energy <i>Salon G</i> Moderator: Robert Smith, RMF Engineering	7C – Renewable & Emergency Power Solutions <i>Salon H</i> Moderator: Rod Schwass, Jacobs	7D – Water Treatment <i>Salon</i> Moderator: Bob Salvatelli, Sustainable Water
4:00 pm – 4:30 pm	Alternative Financing Solutions for Infrastructure Projects – Andy Pahwa, Bernhard Energy	Renewable Fuels for District Heating Applications – David Eoff, Preferred Utilities	UMass Amherst Solar Photovoltaic Generation Protection and Control Design – Kevin Fuller, CHA; Ray Jackson, UMass Amherst	Differential Pressure Control – Bart Decker, IMI Hydronics
4:30 pm – 5:00 pm	Suggestion for New Heat Tariff Assessment of District Heating System by Exergy – Junghwan Moon, Samsung C&T	Use of Biodiesel and Biodiesel Co-Products as Renewable Fuels for Power/Thermal Generation Facilities – Jon Scharingson, Renewable Energy Group	Centralized Emergency Power Generation: Common for Most Utilities, Why Not Emergency Power?– Mark Demana, RMF Engineering; Aurel Selezeanu, Duke University	Conversion from Traditional Biocide to MIOX On-Site Generation at NRG Phoenix Chilled Water Plant – Michael Fehr, Fehr Solutions
6:00 pm – 7:00 pm	Chair's Cocktail Reception (Business Attire) – East Foyer A-D			
7:00 pm – 9:30 pm	Annual Chair's Recognition and Awards Banquet (Business Attire) – Princess ABCDE - Sponsored by Johnson Controls			

Thursday, June 29

7:30 am – 9:00 am	Breakfast Briefing with Pre-Tour Overview Presentations – Princess ABC
9:15 am – 1:00 pm	Technical Tours – NRG Energy Center, Phoenix and Arizona State University Energy Center, Tempe