



districtCOOLING2016

A CLIMATE SOLUTION

NOVEMBER 13-15 | JUMEIRAH BEACH HOTEL | DUBAI, UAE

*Preliminary districtCOOLING2016 Technical Program – 11/11/16
TIMES AND CONTENT ARE SUBJECT TO CHANGE*

Sunday, November 13	
8:00 – 19:00	Conference Registration – Shams Lobby Bar
10:00 – 16:00	Exhibitor Trade Show Set Up – Safinah 1 and 3
9:00 – 17:00	<p>Workshop: Best Practices in District Cooling System Design, Operation and Optimization – Meyana Theater</p> <p>A full day of dialogue-based learning and interactive discussion, taught by credentialed experts with decades of experience in district cooling system operation and optimization. Best practices and lessons learned will demonstrate the approaches, technologies and strategies to maximize value from district cooling infrastructure while addressing energy and water constraints in the Middle East climate.</p> <p>A special segment will focus on envisioning an “ideal system” of 25,000 TR with connected customer buildings. Exploration of innovative tools and approaches to optimize systems performance via critical design parameters, operational best practices and measurement/control at the central plant and connected buildings. To be presented by industry expert Juan Ontiveros, Associate Vice President for Utilities, Energy and Facilities Management, University of Texas Austin.</p> <p>Moderator: <i>Laxmi Rao, Director, IDEA</i></p>
17:00 – 18:30	Welcome Reception with Business Partner Exhibitors – Safinah 1 and 3
Monday, November 14	
7:00 – 17:00	Conference Registration – Shams Lobby Bar
7:30 – 8:30	Continental Breakfast with IDEA Business Partner Exhibitors – Safinah 1 and 3
Conference Opening Session <i>Location: Meyana Theatre</i>	
8:30 – 9:00	Opening Remarks – <i>Rob Thornton, President & CEO, IDEA</i> IDEA Chairman’s Address – <i>Tim Griffin, Chair, IDEA</i> Welcome Address – <i>Ahmad Bin Shafar, CEO, Empower; Conference General Chair</i>
Opening Plenary Panel Discussion: District Cooling in Cities, A Climate Solution <i>Location: Meyana Theatre</i>	
9:00 – 10:00	<p>Recognized industry leaders share insights on deployment, operations and business best practices of district cooling as an environmental strategy in support of the Paris Agreement (COP 21).</p> <p>Invited Panelists <i>Yasser Al Jaidah, CEO, Qatar Cool</i> <i>Ahmad Bin Shafar, CEO, Empower</i> <i>Anwar Hassan, Vice President Field Sales & Operations, Johnson Controls</i> <i>Jim Lodge, Vice President, NRG Energy</i> <i>Adib Moubadder, CEO, Emicool</i> <i>Juan Ontiveros, Assistant Vice President, Utilities, Energy & Facilities, University of Texas Austin</i></p> <p>Moderator: <i>Rob Thornton, IDEA</i></p>

Panel Discussion: Financing District Cooling Through The System Life Cycle <i>Location: Meyana Theatre</i>					
10:00– 11:00	<p>Large district energy systems involve complex business cases that define risk in order to compete in financial markets. Different financial strategies correspond to different life cycle stages from early stage development to maturity and market consolidation. Experienced industry panelists will discuss financial strategies for maximizing value, modernizing assets, and leveraging market opportunities.</p> <p>Panelists include: <i>Chiradeep Deb, Managing Director & Head of Corporate Finance, Mashreqbank</i> <i>Dennis Fotinos, Executive Chairman, Enwave Energy Corp, Toronto, Ontario</i> <i>Mohamed Salama, Managing Director, Head of Banking, UAE, Standard Chartered Bank</i> <i>Rizwan Shaikh, Managing Director, Head of Loan Origination & Structuring - Central East Europe, Middle East and Africa, Citibank</i> <i>Steve Swinson, CEO, Thermal Energy Corp, Houston, Texas</i></p> <p>Moderator: <i>Rob Thornton, IDEA</i></p>				
11:00 – 11:30	Refreshment Break with IDEA Business Partner Exhibitors – Safinah 1 and 3				
Regulations for District Cooling in the GCC Region <i>Location: Meyana Theatre</i>					
11:30 – 12:30	<p>District Cooling in the Middle East has developed a sizeable footprint with several million tons of capacity in place to serve the varied cooling needs of customers. The industry is growing rapidly while dealing with the challenges of managing resources, meeting climate objectives and creating customer value. This session will present the intent, structure and current status of new regulatory policy being developed in Dubai and across the Gulf Region</p> <p>Participants: <i>Mark Spurr, Principal, FVB Energy</i> <i>Graeme Sims, Dubai Regulatory & Supervisory Bureau for Water & Electricity</i></p> <p>Moderator: <i>Rob Thornton, IDEA</i></p>				
12:30 – 13:30	IDEA Networking Luncheon – Safinah 2 and 4 Address by: <i>Faisal Rashid, Energy Demand Side Director, Dubai Supreme Energy Council</i>				
13:30 – 14:15	Dessert & Coffee with Business Partner Exhibitors – Safinah 1 and 3				
Environmental Innovation <i>Moderator: Bob Smith, RMF Engineering</i> <i>Location: Meyana Theatre</i>	Design Considerations for District Cooling <i>Moderator: Mark Spurr, FVB Energy</i> <i>Location: Safinah 2 and 4</i>				
14:15 – 14:45	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;"> Clean Development Mechanism (CDM) in District Cooling 'Environmental Finance' – <i>Thomas Bosse, Dubai Carbon</i> </td> <td style="width: 50%; padding: 5px;"> Design Criteria for a High Efficiency District Cooling Plant - <i>Srinivasan Rangan, Carrier Corporation</i> </td> </tr> <tr> <td style="width: 50%; padding: 5px;"> Innovations in Storage: Horizontal Cooling Water Storage Tank in Frederiksberg Denmark – <i>Jens Peter Truelsen, Frederiksberg Forsyning</i> </td> <td style="width: 50%; padding: 5px;"> Refrigerant Update: The Next Transition Has Begun – <i>Thomas Gorman, Trane</i> </td> </tr> </table>	Clean Development Mechanism (CDM) in District Cooling 'Environmental Finance' – <i>Thomas Bosse, Dubai Carbon</i>	Design Criteria for a High Efficiency District Cooling Plant - <i>Srinivasan Rangan, Carrier Corporation</i>	Innovations in Storage: Horizontal Cooling Water Storage Tank in Frederiksberg Denmark – <i>Jens Peter Truelsen, Frederiksberg Forsyning</i>	Refrigerant Update: The Next Transition Has Begun – <i>Thomas Gorman, Trane</i>
Clean Development Mechanism (CDM) in District Cooling 'Environmental Finance' – <i>Thomas Bosse, Dubai Carbon</i>	Design Criteria for a High Efficiency District Cooling Plant - <i>Srinivasan Rangan, Carrier Corporation</i>				
Innovations in Storage: Horizontal Cooling Water Storage Tank in Frederiksberg Denmark – <i>Jens Peter Truelsen, Frederiksberg Forsyning</i>	Refrigerant Update: The Next Transition Has Begun – <i>Thomas Gorman, Trane</i>				
15:15 – 15:45	Refreshment Break with Business Partner Exhibitors – Safinah 1 and 3				

	District Cooling Applications Around the World <i>Moderator: Ehsan Dehbashi</i> <i>Location: Meyana Theater</i>	System Optimization and Creating Customer Value <i>Moderator: James Kassim, Power Gate Contracting</i> <i>Location: Safinah 2 and 4</i>		
15:45– 16:15	Water-Energy-Air Conditioning Nexus in Southern Arizona – <i>Henry Johnstone, GLHN Architects & Engineers</i>	Saving Energy and Keeping Cool in the Heat of Dubai – <i>Koen Bogers, Siemens</i>		
16:15 – 16:45	District Cooling Concepts Applied in China – <i>Bernt Andersson, Koma’ge Energy Group</i>	O&M Talent Management, Staff Training and Skills Development - <i>Gary Hicks , Delta District Cooling Services</i>		
	Expert Roundtables <i>Location: Safinah 2 and 4</i>			
16:45 – 17:25	<p>Attendees can circulate among several topic tables staffed by industry subject experts in an informal conversational setting aimed at promoting discussion, raising questions, sharing insights and continuing conversations on key topics.</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 50%;"> <p>Operations & Optimization <i>Juan Ontiveros, UT Austin</i> <i>James Kassim, Powergate Contracting Company</i> <i>Tariq Al Yasi, Empower</i> <i>Jim Lodge , NRG Energy</i></p> <p>Thermal Storage & Cooling Towers <i>Steve Benz, EVAPCO</i> <i>Bob Smith, RMF Engineering</i> <i>Micah Somarriba, DN Tanks</i> <i>Thomas Brady, Brady District Energy</i> <i>Jens Truelsen, Frederiksberg Forsyning</i></p> <p>Regulatory Issues <i>Mark Spurr, FVB Energy</i></p> </td> <td style="vertical-align: top; width: 50%;"> <p>Customer Building Optimization <i>Tim Griffin , RMF Engineering</i> <i>Henry Johnstone, GLHN Architects and Engineers</i></p> <p>Central Plants <i>Joe Brillhart, Johnson Controls</i> <i>Anwar Hassan, Johnson Controls</i> <i>Tom Gorman, Trane</i> <i>Srinivasan Rangan, Carrier Corporation</i> <i>Luca Paoella, Daikin Applied Europe</i></p> <p>Design & Engineering <i>George Berbari , DC Pro Engineering</i> <i>Fouad Younan , DC Pro Engineering</i></p> <p>Developing District Cooling <i>Steve Swinson , TECO</i> <i>Afaan Naqvi, Arup</i></p> </td> </tr> </table>		<p>Operations & Optimization <i>Juan Ontiveros, UT Austin</i> <i>James Kassim, Powergate Contracting Company</i> <i>Tariq Al Yasi, Empower</i> <i>Jim Lodge , NRG Energy</i></p> <p>Thermal Storage & Cooling Towers <i>Steve Benz, EVAPCO</i> <i>Bob Smith, RMF Engineering</i> <i>Micah Somarriba, DN Tanks</i> <i>Thomas Brady, Brady District Energy</i> <i>Jens Truelsen, Frederiksberg Forsyning</i></p> <p>Regulatory Issues <i>Mark Spurr, FVB Energy</i></p>	<p>Customer Building Optimization <i>Tim Griffin , RMF Engineering</i> <i>Henry Johnstone, GLHN Architects and Engineers</i></p> <p>Central Plants <i>Joe Brillhart, Johnson Controls</i> <i>Anwar Hassan, Johnson Controls</i> <i>Tom Gorman, Trane</i> <i>Srinivasan Rangan, Carrier Corporation</i> <i>Luca Paoella, Daikin Applied Europe</i></p> <p>Design & Engineering <i>George Berbari , DC Pro Engineering</i> <i>Fouad Younan , DC Pro Engineering</i></p> <p>Developing District Cooling <i>Steve Swinson , TECO</i> <i>Afaan Naqvi, Arup</i></p>
<p>Operations & Optimization <i>Juan Ontiveros, UT Austin</i> <i>James Kassim, Powergate Contracting Company</i> <i>Tariq Al Yasi, Empower</i> <i>Jim Lodge , NRG Energy</i></p> <p>Thermal Storage & Cooling Towers <i>Steve Benz, EVAPCO</i> <i>Bob Smith, RMF Engineering</i> <i>Micah Somarriba, DN Tanks</i> <i>Thomas Brady, Brady District Energy</i> <i>Jens Truelsen, Frederiksberg Forsyning</i></p> <p>Regulatory Issues <i>Mark Spurr, FVB Energy</i></p>	<p>Customer Building Optimization <i>Tim Griffin , RMF Engineering</i> <i>Henry Johnstone, GLHN Architects and Engineers</i></p> <p>Central Plants <i>Joe Brillhart, Johnson Controls</i> <i>Anwar Hassan, Johnson Controls</i> <i>Tom Gorman, Trane</i> <i>Srinivasan Rangan, Carrier Corporation</i> <i>Luca Paoella, Daikin Applied Europe</i></p> <p>Design & Engineering <i>George Berbari , DC Pro Engineering</i> <i>Fouad Younan , DC Pro Engineering</i></p> <p>Developing District Cooling <i>Steve Swinson , TECO</i> <i>Afaan Naqvi, Arup</i></p>			
17:25 – 18:25	Reception with Business Partner Exhibitors – Safinah 1 and 3			
19:00 – 21:00	Gala Dinner – Graciously Hosted by Empower – Al Multaqua Ballroom, Dubai World Trade Center <i>Bus departs at 18:30 from the Lobby of the Jumeirah Beach Conference Center</i>			
Tuesday, November 15				
7:00 – 17:00	Conference Registration – Shams Lobby Bar			
7:00 – 8:30	Continental Breakfast with IDEA Business Partner Exhibitors – Safinah 1 and 3			
	Energy Water Nexus <i>Moderator: Laxmi Rao, IDEA</i> <i>Location: Meyana Theatre</i>	Thermal Energy Storage <i>Moderator: Jim Lodge, NRG Energy</i> <i>Location: Safinah 2 and 4</i>		
8:30 – 9:00	Implementation of Make-up Water Blowdown Recycle for District Cooling Plants – <i>Mohamad Chehab, Empower Energy Solutions</i>	Chilled Water Thermal Energy Storage – <i>Micah Somarriba, DN Tanks</i>		

9:00 – 9:30	District Cooling Sustainable Design –George Berbari, DC Pro Engineering	Increase District Cooling Plant Capacity by Adding Ice Thermal Storage – Jelle Wagelmans, EVAPCO
9:30 – 10:00	Comparative Study of Various Cooling Tower Filtration Systems – Nouf Sultan, Empower	King Abdulaziz University: Chiller Plant Saving Water & Energy – Amar Farjo, Johnson Controls
10:00 – 10:30	Optimizing COP for Large Scale District Cooling in the Middle East Climate – Cases from Saudi Arabia and Dubai – Kenji Ueda, Mitsubishi Heavy Industries	King Abdulaziz University: Design Limitations Justify Use of Enhanced Ice Thermal Storage – Thomas Brady, Brady District Energy
10:30 – 11:00	Refreshment Break with Business Partner Exhibitors – Safinah 1 and 3	
	District Cooling Moderator: Henry Johnstone, GLHN Architects & Engineers Location: Meyana Theatre	Technology and Innovation Moderator: Afaan Naqvi, Arup Location: Safinah 2 and 4
11:00 – 11:30	District Cooling Project in Makkah – Jorgen Smedegaard, Ramboll	Development of Premium Efficiency Centrifugal Compressor Design Specific to Middle East DC Conditions – Luca Paoella, Daikin Applied Europe
11:30 – 12:00	Efficiency Improvement in Abdali, Jordan District Cooling System Using Direct Condensation – Guillermo Martinez, ARANER	Green Solutions Starting from Customers’ Door Step – Malalla Al Ali, Empower
12:00 – 12:30	Turning Penalties into Profits with Precision Control – Rob Trickett, Flow Control Industries	Onsite Biocide Generators Improves Cooling Water Microbial Control and Overall Treatment – Husam Al Smadi, Cooltech Water Treatment Company
	Panel Discussion: Key Issues in District Cooling Operations and Maintenance in the GCC Location: Meyana Theatre	
12:30 - 13:30	<p>This distinguished panel of industry leaders from across the GCC Region will share experiences, discuss trends and outline innovative approaches to system design, optimizing energy and water efficiency, business best practices, tools to ensure reliability, staff training protocols and delivery of exceptional customer service.</p> <p>Setting the Context for Key Issues in District Cooling Operations & Maintenance – James Kassim, Power Gate Contracting Company</p> <p>Distinguished Panelists: Abobaker Al Hadrami, Marafeq Abdulsalam Al Mobayed, Saudi Tabreed Nahar Al Mutawah, QatarCool Tariq Al Yasi, Empower Afif Harhara, Tabreed Muhammad Zafar, PAL Group</p> <p>Moderator: Laxmi Rao, IDEA</p>	
13:30 – 14:45	IDEA Networking Luncheon & Tour Orientation – Safinah 2 and 4	
14:45 – 17:00	<p>Technical Tours – Depart from front lobby</p> <p>Tour A: Empower’s Business Bay 2</p> <p>Tour B: Empower’s Command Control Center</p>	

