

Energy Planning for Resilient Communities – Best Practices

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Speakers



Dr. Alexander Zhivov is a Senior Research Engineer at the US Army Engineer Research and Development Center Construction Engineering Research Laboratory. He holds a Ph.D. degree in mechanical engineering and an MBA degree. His current projects support the Army in the areas of energy master planning, energy efficiency of new construction and major building renovation, renewable energy technologies, modernized central energy plants, energy audits, etc. Dr. Zhivov is a Project Co-manager for the IEA EBC Program Annex 73 "Towards Net Zero Energy Resilient Public Communities"



Mr. Rüdiger Lohse, holds an industrial engineer degree and leads the department of Energy Services at the regional energy agency KEA in Karlsruhe, Germany. He also is managing director of the Contracting Competence Center BW. He has been awarded for the most innovative ESCO business models in 2010 by the European Commission. His specific expertise is energy efficiency and renewable energies in buildings and communities and the business and financing models for their implementation. Together with Dr. Zhivov he leads IEA Annex 73.



Mr. Anders Dyrelund is one of Ramboll's leading energy consultants. His experience is drawn from both the private sector, through consultancy assignments for Ramboll and from the public sector, through the positions he has held in the Danish Energy Agency. One of the areas in which he has specialized is the solution of techno-economic and organizational problems of district heating and cooling in cities and the interaction with the power system and buildings to create virtual electricity storages. He furthermore has been involved in the planning, implementation and operation of energy plants, primarily district heating based on CHP and renewable energy. Anders Dyrelund has since 1979 gained extensive experience within least-cost energy planning for sustainable urban development in Denmark and from international projects in more than 25 countries.



Dr. Stephan Richter graduated 2000 in Physics and Geography. After finishing his PhD in Physics and a Post-Doc period at the Max-Planck-Institute for Plasma Physics (Research on Nuclear Fusion) he joined the GEF Ingenieur AG as project manager for energy master planning projects in 2004. He became an authorized officer in 2006 and since then he managed several master planning projects and heating system optimization projects in Germany, Europe and for the US Army in many countries. In addition to that he was responsible for more than 15 research projects funded by the Germany government in the fields of energy master planning, heating systems and energy efficiency and he managed several large engineering and design projects for district heating pipes. Beside GEF Stephan hold lectures e.g. at the University of Leipzig in the field of energy economics.



Mr. Bob Smith is a Vice President of RMF Engineering, Inc. During his 33 years of continuous service at RMF, Bob has focused on the development and improvement of central heating, cooling, and power systems. He has served as IDEA Chairman and traveled to Europe, China, and the Middle East as IDEA's representative to exchange information on best practices to maximize efficiency and lower greenhouse gases. His main mission at RMF is to review emerging new technologies such as renewable fuels, green power production, and energy conservation and identify practical applications for commercial use.



Mr. Jean Laganieri spent 20 years as a product manager at George Fisher Urecon Ltd. and gained extensive experience in optimization and design of pre-insulated piping system. Jean represents Logstor European piping company in North America. District energy is a passion for him and he is constantly seeking for new ideas to improve the system installation and operation. He participates in the development of systems in Canada and US capable of meeting technical and budgetary challenging targets. Mr. Jean Laganieri graduated from Ecole Polytechnique Engineering University of Montreal in 1986.



Dr. Robert F. Jeffers is a Principal Member of the Technical Staff at Sandia National Laboratories, where he has contributed as a systems scientist since 2013. Robert has applied techniques such as system dynamics, interactive visualization, agent-based modeling, and spatial network modeling to diverse problems concerning the intersection between human, natural, and engineered systems - particularly energy and commodity systems. He is the technical representative for Sandia's Urban Resilience Initiative, which seeks to apply Sandia's infrastructure modeling and expertise to city-scale resilience problems. Recently, this initiative completed a project with stakeholders from New Orleans, LA that aligned grid modernization investment suggestions with community resilience goals using performance-based resilience metrics.



Mr. Dan Dixon is supervisor of projects for the Lincoln Electric System (LES) in Lincoln, Neb. In this role, he serves as project manager responsible for overseeing the business and plant operations of District Energy Corp. For more than a decade, he has served LES as a project engineer managing capital projects and providing engineering support for three gas turbine power plants. Dixon holds a Bachelor of Science degree in mechanical engineering from the University of Nebraska-Lincoln and is a registered professional mechanical engineer in the state of Nebraska.



Ms. Nicole Olsacher (DI FH) is a university-educated Economic Engineer and has been working in the field of renewable energies since 2007. Ms. Olsacher is an expert on solar thermal systems for heating and cooling and responsible for coordination of national and international projects, market development and development cooperation in Emerging countries. She has built up and is managing the department of marketing and communications. Nicole Olsacher has also been working on alternative financing models for solar thermal systems.



Mr. Thomas Phelps, PE is a principal at Stantec, where he is responsible for development and delivery of district energy and cogeneration projects, especially in campus environments. He has served as project manager for central utilities upgrades at the University of Calgary since 2006. Phelps has 43 years' experience in consulting engineering, including 25 years with Stantec and three years working in alternative energy research and development. Tom is active in ASHRAE and IDEA.



Mr. Brad Luyster, is the Director of Business Development at IPERC. He has spent most his 30 years in the electric industry. His business experience spans a diverse range of professional development from selling electric products to managing large business units leading manufacturing, integration services, and automations solutions in the Utility and Commercial/ Industrial markets. Brad worked for ABB, as their VP of Smart Grid and Microgrids Business, where he developed and created the ABB Smart Grid Center of Excellence and Microgrid Regional Execution Center for North America. These two business units were created to develop solutions using innovative technologies that allow utility, heavy industry and large commercial customers to redefine how they generate, distribute and consume energy. Brad has an undergraduate degree in Marketing from the University of Akron and a Master of Business Administration from The Ashland University.



Mr. Daniel Fingleton is the Energy Storage Program Manager for Solar Turbines, working in the Strategic Growth and Special Projects group. Prior to this, he worked in the Customer Services Business Development Group, and as a field service representative working on platforms in the North Sea. Prior to joining Solar Turbines, Mr. Fingleton operated the microgrid in the Guinness factory, Ireland. Mr. Fingleton has a Bachelor degree in Electrical Engineering from University College Dublin, Ireland and an MBA from University of California, San Diego.



Mr. Richard Brody is Director of Sales and Marketing for Energy Storage at Lockheed Martin Energy. Richard joined the company in July 2015, and has many years of global executive-level business development and sales leadership experience in energy storage and distributed generation. Prior to Lockheed Martin, Richard was vice president of Business Development and Sales at Primus Power, a flow battery company. Before that, Richard led business development at two other energy storage technology companies, SustainX and PowerGenix. In nearly a decade at United Technologies Corporation (UTC), Richard served first as president of UTC's Moscow office, then as vice president of International Business Development at UTC Power. Richard has a B.A. from Columbia University and an M.A./Ph.D. from the University of Michigan.



Mr. Mark Worthington is a hydrogeologist with 30 years of diverse environmental, geotechnical and geothermal consulting and project management experience. He is President of the Underground Energy, LLC. Mark's fields of expertise include design of Earth-coupled systems for heating and cooling buildings, aquifer hydraulic and geochemical analyses, groundwater supply development, geophysics, assessment and remediation of contaminants in the environment, environmental permitting and due diligence. Mark earned his Master of Science degree in Hydrology and Water Resources from the University of Arizona.



Mr. Jerry Zekert is a Chief of the U.S. Army Corps of Engineers Military Master Planning Program. He guides the Army's Master Planning Community of Practice in the professional practice and implementation of comprehensive sustainable, energy effective base planning by championing a broad professional planning development and training program, leading a worldwide community of planners that provide base planning services to installations and serving as the primary Army advisor on base planning. He is the Director, of the DoD Master Planning Institute, a broad award-winning DoD wide professional master planning continuing education program, that has raised the professional practice throughout DoD. Jerry is a graduate of Virginia Tech in 1980 with a Bachelor of Architecture and a Bachelor of Science in Civil Engineering degrees with minor in urban planning. He is an active member of the American Planning Association and its Federal Planning Division, and has served as its Chair.



Mr. Schuett leads Affiliated Engineer's Incorporated's (AEI) national Energy and Utility Infrastructure practice, assisting large, multi-building campus clients across the U.S. with utility master planning for energy resiliency, energy conservation, alternative energy use, and carbon reduction strategies. His expertise lies in integrating supply and demand side energy solutions for total campus energy reduction strategies. He has outstanding leadership and communication skills for master planning utility scale solutions for a variety of supply options including combined heat and power, thermal hot water, chilled water, thermal energy storage, biomass, biogas, landfill gas, solar, wind, geothermal, etc. He is a graduate of the Milwaukee School of Engineering.



Mr. Juan Ontiveros is the Associate Vice President for Utilities, Energy and Facilities Management at UT Austin. In this role he is responsible for the energy plants, the distribution of the produced energy to the campus along with managing purchased utilities like domestic water, sewer, storm sewer, and natural gas and the maintenance and operation of the facilities in 20 million plus square foot campus. Prior to the promotion he was employed as the Executive Director of Utilities and Energy Management at the university for 18 years in charge of the systems that produce 100% of the electrical, steam and chilled water for the campus. His focus in the last 30 years has been in facility maintenance, plant operations, utility master planning, construction and utility rate negotiations. Juan holds a B.S. and an M.S. in mechanical engineering and is a Licensed Professional Engineer in Texas.



Mr. Edward "Ted" Borer is the energy plant manager for Princeton University and is actively involved in campus energy and carbon emissions reduction efforts. He has 33 years of experience in the power industry, starting in the nuclear industry in the early 80's. He is a registered Professional Engineer, and holds bachelor's and master's degrees in Mechanical Engineering as well as the CEM, CEP, and LEED-AP certifications. He has leadership roles in the International District Energy Association and New Jersey Higher Education Partnership for Sustainability. He is a founding member of the Microgrid Resources Coalition.



Mr. Christopher Potter is the Director of Utilities and Power Plant Operations at the Architect of the Capitol in Washington, D.C. and is responsible for the management of the district energy system serving the buildings on and around Capitol Hill. Chris has been with the AOC since 2005. Prior to that, he worked at the General Services Administration district energy system also in Washington DC. Chris has a Master's degree in Public Administration from American University, a Master's degree in Engineering Management from Catholic University, and a Bachelor's degree in Mechanical Engineering from the University of

Maryland.



Mr. Gregg Coffin is the Director of Energy Management at the University of Missouri (MU) overseeing the district energy system which provides the Columbia, Missouri campus with highly reliable, cost efficient and sustainable utility services. The campus district energy system includes a 66 MW combined heat and power micro-grid providing electricity, steam, chilled water, potable water, and compressed air utilities. Additional services include: building automation, HVAC commissioning, energy conservation, and insulation services. MU's district energy system was recognized by the International District Energy Association as the 2017 System of the Year for its excellence in service.



Ms. Sarah Zalieski currently serves as a Senior Advisor for the U.S. Department of Energy's Energy Efficiency & Renewable Energy Office where she leads commercial zero energy work and a portfolio of standardized, interoperable building and energy analysis tools. In previous roles at DOE, Sarah led local government clean energy innovation programs including the development of DOE's Community Energy Strategic Planning Guide, a step-by-step process for creating a robust strategic energy plan for cities and counties. Before joining the DOE in June of 2010, Sarah worked for the City of Baltimore where she helped establish their Office of Sustainability. Sarah received a BS in Industrial and Labor Relations from Cornell University and both a Masters of Environmental Management and a Masters of Public Policy from Duke University.



Mr. Peter Korzeniewski is the Business Development Manager for Grundfos' Commercial Building Services Business Unit. In Peter's nine years at Grundfos he has worked in Sales Management and as a technical trainer focusing on pumps and fluid handling systems for commercial buildings. Prior to Grundfos, Peter spent eight years as a manufacturer's representative calling on mechanical engineers and contractors designing and selling HVAC systems, booster pumps, and other fluid handling equipment.



Dr. Case is a Program Manager at the Construction Engineering Research Laboratory (CERL), US Army Engineer Research and Development Center (ERDC). As a Program Manager, he led the Net Zero Planner Tool program that has been deployed within the USACE to assist Defense installations in conducting resilience, energy, water, waste, and storm water planning. Dr. Case earned his Ph.D. in Mechanical Engineering from the University of Illinois in 1994 and Bachelor of Science in Mechanical Engineering from Cornell University in 1980.



Mr. David Tine is the Business and New Product Development Manager for HSB's Energy New Products Group. He is responsible for the development of risk transfer products and services that focus on operational performance for energy efficiency, distributed generation, resiliency, and emerging energy technologies. He has over 15 years of experience in energy efficiency, HVAC, building controls, and sustainability. Prior to HSB, David worked for Trane and an energy efficiency consulting firm focusing on ESPC, PACE, distributed generation, and new technologies. David received both his BS and MBA from the University of Connecticut's School of Business. David is also a LEED-AP with a specialty in Building Design + Construction and is currently pursuing his Chartered Property Casualty Underwriter (CPCU) designation.



Mr. Christopher B. Berendt is an energy partner in Drinker Biddle's Environmental and Energy Practice and concentrates his practice in the design and operations of the energy and environmental markets. He counsels clients on matters ranging from regulatory development and market design and strategy to portfolio commodity and service procurement and project development and financing. He is focused on the rise of distribution level resources. Chris counsels on screening, structuring, and developing and financing clean energy projects for hosts, developers and investors. He also assists clients undertaking advanced energy commodity, service and equipment procurements. Chris has assisted with pioneering efforts in the pooled origination, financing and securitization of clean energy project portfolios and to employ smart grid and microgrid technologies as dynamically managed load and onsite generation is becoming an asset in the power markets. He is counsel to the Microgrid Resources Coalition (MRC) and represents leading microgrid development projects.



Mr. Baird Brown is a Counsel in Drinker Biddle's Environment and Energy Practice Group. He works with communities and energy customers and their technology and finance partners to deploy a new generation of energy and sustainability infrastructure. He has helped develop pooled procurement and financing techniques for building energy efficiency and renewable energy, and has structured public/private partnerships for a broad array of infrastructure projects. He helped form and serves as counsel to the Microgrid Resources Coalition (MRC).



Mr. Rob Thornton is President and CEO of the International District Energy Association (IDEA), an industry association founded in 1909 to support, promote and advance efficient and sustainable district energy systems in cities, communities and campuses. In this capacity, he represents the interests of about 2,300 IDEA members from 26 countries. During 30 years in the district energy industry, Mr. Thornton has launched and expanded new downtown district energy systems in three U.S. cities and supported deployment in dozens more. He represents the US on the Executive Committee of International Energy Agency District Energy Implementing Agreement, the IEA CHP Collaborative, is a founding member of the Microgrid Resources Coalition and serves as a co-chair of the United Nations Environmental Program (UNEP) District Energy in Cities Initiative. Rob is a graduate of Tufts University and resides in Massachusetts with his family.



Mr. Kevin Vaughn is a Schneider Electric Federal ESPC Program Director. He has nearly 30 years of experience working in the energy conservation industry and has developed over 35 comprehensive Energy Savings Performance Contracts (ESPCs) in his career. His recent Federal ESPC projects portfolio includes the first-ever Net Zero ESPC project for the GSA. Mr. Vaughn's current responsibilities include developing relationships with agencies and serving as the main contact for Federal ESPC customers to ensure the optimal implementation of comprehensive solutions and adherence to Federal regulations and procurement methods. He is also responsible for leading negotiations and arranging financing for ESPC projects. Mr Vaughn is a registered PE. He received both his M.B.A. from the University of Chicago and B.A. in Physics from DePauw University.



Mr. Serge Zinger currently holds the position of Account Executive at Thermo Systems LLC, where he has worked for 8.5yrs. His past work experiences include the position of GM of Engineering at Panasonic Electric Works and Applications Engineer at Deutsch Relays. Serge has a Bachelor of Science degree in Electrical Engineering that he received from Rensselaer Polytechnic Institute in 1994.