

FACILITIES & CAMPUS ENERGY NORTH AMERICA

JULY 14-15, 2020

The American Institute of Architects | Washington, D.C.

"Improving Energy Resiliency, Efficiency and Sustainability
for the Built Environment"



Who we are:

Roosevelt Strategic Council (RSC) is a non-partisan woman owned, minority owned, small business. We serve as a catalyst for collaboration that fosters the interchange of knowledge among a cross sector of senior leaders from the federal, state and private sectors. We achieve this through our live, two day educational summits that are highly curated around a particular functional topic or sector challenge. Our forums are often referred to as business level "Town Halls" because of our strong promotion of dialogue, debate and discussion among all in attendance.

In order to maintain our neutrality, we receive no funding or investment for operating costs from any outside organization, group, or individual and are not a membership based organization. Our summits are open to the general public of Allied Nations, excluding members of the press or reporting organization.

Supporting our Veterans, severely injured Service men and women, and their families through our charitable donations and contributions is a core mission of Roosevelt Strategic Council. To learn more about the charities we support and how you may get involved, please visit us at: <https://rscouncil.org/giving-back>. (This Summit is not an official fundraising event.)

You may visit our sister organization, Defense Strategies Institute (in operation since 2011) for more information on our defense and intelligence summits.

Agenda Design:

- **This two - day educational summit** is designed to provide an interchange of knowledge and serve as a catalyst for collaboration across federal, state and private sector institutional, and commercial facility and campus energy sectors.

- **Over 18 highly curated and moderated plenary and panel sessions** with 6 hours of dedicated networking with an exclusive technology and solutions table top demonstration area. Over 90% of the agenda is by invitation only and chosen from our extensive unbiased research to provide a well-rounded set of perspectives

The American Institute of Architects, 1735 New York Avenue, NW, Washington, D.C.

Venue:



General Target Audience:

Senior Corporate and Engineering Leaders and Stakeholders of Institutional and Commercial Facilities and Campuses from the Federal, State and Private Sectors with titles such as:

CFO, Vice President of Facility Management; Chief Sustainability Officer; Executive Director Facility Management; Portfolio Energy Managers; Senior Energy Engineer and Facilities Manager; State Energy Administrators

Industry Solution Providers Specializing in: Design and Engineering Services, Energy Management, Building Automation and IT software systems; Power and Energy Providers with titles such as:

CTO, CEO, Vice President of Strategic Customers, Chief Innovation Officer, Vice President, Director or Manager of Business Development with **sub specialties as:** Certified Energy Managers (CEMs); Energy Service Performance Managers; Energy Efficiency Consultants; Certified Building Commissioning Professionals (CBCPs); Certified Energy Procurement Professionals (CEPs)

Focus Areas to Include:

With the core focus on driving improvements in energy efficiency, reliability, resiliency and sustainability, you will walk away after two days with new knowledge gained on business and technical operations and innovation, ideas sparked, and new collaborative relationships formed to support your respective organization.

Business Models, Strategies and Financing:

- Successful strategies and business models for gaining c-suite buy-in for funding efficiency, resiliency and sustainability projects for your built environment
- Operational strategies for the integration of DERs
- Developing Flexible Energy Master Plans that account for future 'unkowns' (from evolving digital capabilities to future threat environments)

Technical Topics:

- Cyber resiliency: Current threat landscape for facility and campus energy; how to build in cyber resilience, and what level of resilience to expect from your Control Systems, Energy Information Systems (EIS) and Building Automation Systems (BAS).
- Advanced energy management systems and data analytics to improve reliability and increase efficiencies
- DERS: Integrating battery storage, microgrids, PV, CHP, EV charging and wind into your energy portfolio through onsite generation or various PPA.
- Advanced Monitoring-Based Commissioning (MBCx): How far can the data take us? Using data analytics to automate and enhance the commissioning process.
- Fault Detection and Diagnostics: Using an intelligent predictive maintenance tool for detecting and predicting equipment failures including Automated Fault Detection and Diagnostics (AFDD).
- Future of Intelligent Facilities, Campuses and the National Energy Infrastructure: Near future state for supporting IoT; from sensors, management systems and standards to help you move forward. The future of Gird-Interactive Buildings and what energy managers need to prepare for.

Agenda POC:

Monica Mckenzie, Senior Partner, Roosevelt Strategic Council

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WEBSITE: <https://rscouncil.org/facilitiesenergy>

WORKING AGENDA: Originally scheduled for April 29 – 30, 2020 – the majority of all original speakers have re-confirmed for the new dates of July 14 – 15. We are still awaiting replies from a few final speakers.

JULY 14, 2020 | SUMMIT DAY 1

7:15 – 8:10 Registration and Networking Breakfast

8:10 – 8:20 Welcome remarks

FINANCING AND BUSINESS STRATEGY MODELS

8:20 – 8:50 Clean Energy Development and Financing for the Built Environment

- Understanding the Infrastructure – as – a – Service model
- Learning the right questions to ask your provider in order to meet your energy goals and ensure a successful outcome
- Capabilities to help support a more sustainable, clean energy portfolio for facilities and campuses
- Two emerging model case studies: Gallaudet University and Hillsborough School District, Tampa FL

Mr. Jigar Shah, President and Co-Founder, Generate Capital (confirmed)

8:50 – 9:50 Business Strategies and Operational Models for Developing a Resilient, Efficient, Sustainable and Flexible Energy Plan for your Facility or Campus

Resiliency: How to measure and sell resiliency and reliability upgrades to your financial decision makers, including investing in onsite generation and renewables

Efficiency and Sustainability : Key elements for successfully presenting a project to senior C-suite decision makers to finance and approve efficiency and / or sustainability retrofits and upgrades

Building Agility into your Energy Master Plan – how to build in flexibility and agile methodologies into current decision making that accounts for the future ‘unknowns’ (from natural weather impacts to future digital and asset innovations)

Where are we seeing the largest energy savings originating from across our portfolios?

Invited Panelists:

Dr. Steven Driver, CEM, CEA, Global Energy Program Director, Sanofi (confirmed)

Mr. Randy Gaines, Senior Vice President Operations and New Openings Americas, Hilton (tentative)

Mr. David Kang, P.E., CEM, Vice Chancellor for Infrastructure and Sustainability, University of Colorado Boulder (confirmed)

Mr. Mark Vanderhelm, Vice President, Energy, Walmart (tentative)

Moderator: Timothy D. Unruh, Ph.D., P.E., CEM, LEED AP, Executive Director, NAESCO (former Deputy Assistant Secretary for Renewable Power , Office of Energy Efficiency and Renewable Energy (EERE), DOE) (confirmed)

Continued on next page....

9:50 – 10:40	<p>Federal Panel : Energy Reliability, Efficiency and Sustainability Goals in Federal Buildings</p> <p>Resiliency: How to measure and sell resiliency and reliability upgrades to your financial decision makers, including investing in onsite generation and renewables</p> <p>Efficiency and Sustainability : Key elements for successfully presenting a project to senior decision makers to finance and approve efficiency and/or sustainability retrofits and upgrades</p> <p>Onsite vs off site generation: how we are determining the right mix to meet our facilities' energy needs and goals</p> <p>Building agility into our Energy Master Plans: how to build in flexibility and agile methodologies into current decision making that accounts for the future 'unknowns' (from natural weather impacts to future digital and asset innovations) including the role of federal facilities in a future grid integrated built environment</p> <p>Federal Panelists:</p> <p>Ms. Caroline D'Angelo, Senior Advisor for Energy, Environment, and Sustainability, and acting lead of the Greening Diplomacy Initiative, U.S. Department of State (tentative)</p> <p>Ms. Jennifer Groman, LEED AP, Chief, Facilities Engineering, NASA (confirmed)</p> <p>LTC Christopher W. Kiss, PhD, AIA, Deputy Chief of Design, Construction & Activation Facilities Division, Defense Health Agency, U.S. Department of Defense (confirmed)</p> <p>Moderator: Mr. Alan Edwards, Senior Programs Manager, U.S. Department of Justice (confirmed)</p>
10:40 -11:10	Networking Break
CYBER RESILIENCY	
11:10-11:30	<p>Securing the Built Environment through Information Sharing and Collaborative Partnerships</p> <ul style="list-style-type: none"> - Understanding the current cyber threat landscape for the built environment's IT and OT energy systems - Fostering a collaborative environment for increasing cyber resiliency: resource tools available to the private sector from DHS - Lessons learned from common deficiencies leading to compromise - Cyber perspective towards the future of grid integrated buildings : what facility and campus energy managers should consider for future master planning <p>Mr. Brian Harrell, Assistant Director for Infrastructure Security Division, CISA, DHS (invited)</p>
11:30-12:00	<p>Cyber Resiliency for Control Systems in Building Environments: Setting the baseline and what your system should include</p> <ul style="list-style-type: none"> - Cyber resiliency baselines: emerging threat intelligence towards new types of threats and vulnerabilities in the cyber physical environment - What your control systems' minimum-security capabilities should include - Advice towards raising the level of cyber awareness within your facility team in both the IT /OT environment <p>Mr. Jason Christman, Vice President, Chief Product Security Officer, Johnson Controls (confirmed)</p>
DERS : ENERGY STORAGE, CHP, PV, WIND AND MICROGRIDS	
12:00 -12:30	<p>Current Energy Storage Systems to Support Onsite Generation</p> <ul style="list-style-type: none"> -Understanding the current capabilities, and limitations, of onsite energy storage technologies (battery, electric vehicle, ice storage, flywheels, etc.) -Factors to consider when choosing a capability for your facility including technical complexities for integration and maintenance, and financial investments <p>Mr. Daniel Borneo, Engineering Program Lead, Sandia National Laboratory (confirmed)</p>

12:30-12:40	<p>10 minute Tech Talk: Energy- as- a Service</p> <ul style="list-style-type: none"> -How it works: Guaranteed Energy Savings with no out of pocket capital costs -Energy Efficient Equipment upgrades for Lighting, HVAC, Refrigeration, Motors, Air Compressors, etc with full turn key installation and maintenance services. -Comprehensive billing solution that includes segmented energy monitoring <p>Mr. Matt Nemerson, Vice President Corporatists Development, Budderfly (confirmed)</p>
12:40 – 1:30	Networking Lunch
1:30 – 2:00	<p>Case Study on U.S. Marine Corps Parris Island: Best Practices for improved Resiliency and Sustainability through Onsite Distributed Generation, Energy Storage, and Secure Microgrid Controls</p> <ul style="list-style-type: none"> - Operational goals and strategic factors that were considered towards the choice of comprehensive distributed generation system put in place - Top three lessons learned throughout our technical planning efforts: Key questions to consider including the supporting infrastructure you will need <p>CDR Andrew Litteral, USN, P.E., Public Works Officer, MCRD Parris Island (confirmed)</p>
Case Study: Blackstart	
2:00 – 2:30	<p>Case Study: Ft. Knox, U.S. Army and Recent Successful BlackStart: Improving Efficiencies and Resilience through On-Site Generation and Achieving Blackstart Capabilities</p> <ul style="list-style-type: none"> - From an operational perspective, why we choose our current onsite generation configuration - Top three lessons learned throughout our technical planning efforts - Two surprises along the way and two areas for continued improvement to maintain blackstart capabilities - How we built in cyber resiliency across our IT /OT energy ecosystem <p>Mr. R.J. Dyrdek, Energy Manager, Director of Public Works, Fort Knox, U.S Army (confirmed)</p>
2:30 – 3:00	Refreshment break
ADVANCED ENERGY MANAGEMENT SYSTEMS AND DATA ANALYTICS	
3:00 – 3:30	<p>Data to Decision: Turning data from your EIS into meaningful and measurable outcomes</p> <ul style="list-style-type: none"> - What data sets are proving meaningful to support predictive fault detection and continuous monitoring-based commissioning capabilities for increased reliability and efficiencies - Understanding how to incorporate data-based decisions into your planning : differences between predictive and prescriptive capabilities and where each can best be applied in the built energy environment - Top three lessons learned and areas for continued innovation for the near future <p>TBD</p>
3:30 – 4:00	<p>Utilizing Advanced Energy Data Management to Support Building Optimization and Demand Management</p> <ul style="list-style-type: none"> -What data sets / tools are proving meaningful in supporting demand response and smart operations. -Where are we seeing the largest energy savings emerging from in recent operational reviews retrofit projects? -Advice towards how to incorporate data-based outcomes into human planning and decision making. <p>Mr. Lee Dunfee, CEM, CDSM, LEED AP, Managing Director, Engineering Operations, Cushman and Wakefield (confirmed)</p>

4:00 – 4:30	<p>Utilizing Data Analytics to Improve Energy Efficiencies, Reliability, and Optimization Outcomes for Commercial and Institutional Facilities and Campuses</p> <ul style="list-style-type: none"> - How far can the data really take us? Brief overview of the current advancements in utilizing advanced analytics applications, from predictive to prescriptive, in the built environment - How you can increase energy efficiency and financial benefits through advanced data analytics: what data sets are proving meaningful and measurable - What does your supporting infrastructure need to look like for the successful utilization of data analytics (ability to ingest, store and disseminate data in real time, needed communication backbone, sensor capabilities, etc..) <p>Mr. John Petze, Principal, SkyFoundry and Executive Director, Project Haystack (confirmed)</p>
4:30 – 5:00 Closing Highlight	<p>DOE Closing Remarks: Supporting the Future of Energy Resiliency, Efficiency and Sustainability for the Nation’s Built Environment</p> <ul style="list-style-type: none"> - EER&E’s current activities and near term research priorities that can help improve energy efficiencies, affordability and sustainability for public and private facilities and campuses including Behind-The-Meter Storage (BTMS) initiative - A view over the horizon: What the future state of grid interactive buildings may require and what facility and campus energy leaders could begin to prepare for: including advanced sensors, controls and communications needed for secure grid integration <p>Mr. Daniel Simmons, Assistant Secretary Office of Energy Efficiency & Renewable Energy, Department of Energy (DOE) (invited)</p>
5:00	End of Day 1
JULY 15, 2020 SUMMIT DAY 2	
7:30 – 8:45	Networking Breakfast and welcome back
DATA DRIVEN ADVANCED COMMISSIONING AND FAULT DETECTION	
8:45 - 9:15	<p>Case Study: Optimizing Energy Performance through Advanced Monitoring-Based Commissioning (MBCx): Using automated data analytics tools to maintain energy savings, reliability, compliance, and to reduce performance drift</p> <ul style="list-style-type: none"> - How to avoid drowning in data: establishing foundational tools according to your end goals - What data sets are proving the most meaningful to Banner Health according to our desired outcomes including reduction performance drift -How far can the data really take us? Differences between predictive and prescriptive capabilities and where each can best be applied in the built energy environment -Best practices in leveraging MBCx services with modern data analytics software to address compliance, create historical, real-time and predictive reports about building and enterprise-wide performance -Advice towards structuring an organization and culture to maximize and maintain high performance buildings and to incorporate data-based decision making. <p>Mr. Shawn Mathiesen, CEM, Remote Operations Manager, Banner Health (confirmed)</p>
9:15 – 9:45	<p>Utilizing Data Analytics to improve Fault Detection and Diagnostics and Predictive Maintenance</p> <ul style="list-style-type: none"> -Lessons learned in combining disparate systems to create a unified view of all energy and building systems: what data sets have been proving the most meaningful for our desired goals. -Moving to data-based decision making with fault detection capabilities: our internal process for balancing human decision making processed with data - based tools - Where and how to store your data? -Areas for future improvement and the next evolution of our energy ecosystem <p>Ms. Devan Tracy, P.E., CEM, LEED AP O+M, Smart Buildings Lead & Energy Analytics Lead, Program Manager Lockheed Martin Corporation Rotary and Mission Systems Division (confirmed)</p>

MASTER PLANNING BEST PRACTICES

9:45 – 10:15

Green Building Master Planning: Best Practices in Achieving Energy Efficiencies and Sustainability while Strengthening Reliability and Resiliency

- Where to begin? Top three hardest hurdles to overcome and key questions to ask, from strategic planning to operational execution, when developing a project with the goal of LEED certification
- Where are we seeing the greatest energy efficiencies in our facilities deriving from? What new, emerging innovative solutions for energy conservation are we watching?
- What we have done to improve energy reliability and resiliency at our facilities

Ms. Paula Zimin, Director, Sustainable Buildings Services, Steven Winter Associates, Inc. (confirmed)**Mr. Chris Hamm, Senior Building Systems Engineer, Steven Winter Associates, Inc. (confirmed)**

10:15 -10:45

Networking Break

10:45 -11:15

Best Practices in Risk Management and Operational Planning for Multiple Facility Revitalization Projects

- Key questions to consider (strategic and operational) when developing a risk management framework for your deep retrofit or revitalization project: from the supporting IT and management tools to developing the right team with the right skills
- Case study: how the D.C. Federal Triangle Flood group is working to mitigate flood risks to their facilities and what all facility stakeholders should begin to plan for regarding natural disasters for their respective built environments

Mr. Michael Carrancho, P.E., Chief, Engineering and Design, Smithsonian Institution (confirmed)**FUTURE OF INTELLIGENT, CONNECTED FACILITIES and CAMPUSES**

11:15 -11:45

The Future of Grid-Interactive Buildings: Drivers, Status & How to Prepare

- Three core values and the key characteristics and benefits of GEB including demand flexibility
- Technological trends, opportunities, and challenges of grid-interactive building integration
- Where to start and what to prepare for? What facilities managers and stakeholders need to begin to prepare for with their current built infrastructure in order to participate in a future grid-interactive environment?

Mr. Kevin Kampschroer, Director, Office of Federal High Performance Buildings and Chief Sustainability Officer, GSA (confirmed)

11:45 -12:15

A View Towards the Future of Intelligent Corporate Campuses and Buildings

- Evolving landscape of digital capabilities that are emerging across corporate facilities. Top 3 capabilities that Microsoft is integrating to improve occupant user experience / interior environment and where we may see mainstream adoption in the near future
- Developing operational goals and strategies that focus on experiences – how do we build in flexibility and agility to account for future needs?
- How are we building cyber resiliency into a 'connected' building?
- Key questions to ask when evaluating any new technical innovation for supporting a connected / intelligent campus

Mr. Emmanuel Daniel, Director, Applied Innovation & Incubation - Smart Buildings & Campuses, Microsoft (tentative)

12:15-12:45	<p>Meeting the Energy Management Demands of Intelligent, Connected Buildings</p> <ul style="list-style-type: none"> - What impact does on premise data storage, the continual flow of data, and automated systems have on energy demands and how are we meeting these needs? - Financing : what models are proving the most effective according to desired outcome? - Building in risk to decision making: Key questions to ask when evaluating any new technical innovation for supporting a connected /intelligent building (s) <p>Ms. Jennifer Fortenberry, PE, CEM, LEED AP BD+C, Vice President, Global Energy Product Manager, JLL (confirmed)</p>
12:45 – 1:25	Networking Lunch
IoT and EMERGING TRENDS IN HVAC	
1:25 – 1:55	<p>Deep Dive into IoT and Intelligent Solutions for the HVAC Community to Support a More Efficient, Sustainable and Connected Built Environment</p> <ul style="list-style-type: none"> - Applying data analytics to HVAC systems: How far can the data currently take us and what data sets are proving meaningful according to the desired outcome (understanding the difference between predictive and prescriptive) -Where to store your data? Understanding the benefits and risks of cloud based solutions for data management - Building automation and IoT in HVACR evolution to meet the demands of a more connected, data driven built environment and how this impacts the way facility managers can now access their management system <p>Mr. Mike Hoppe, Senior Product Manager, IoT and Intelligent Solutions, Daikin Applied (tentative)</p>
STATE LEVEL FOCUS	
1:55 – 2:40	<p>Panel on State Buildings: Project Planning for Improving Resiliency, Efficiency, and Sustainability in our Built Environments</p> <p>Here directly from state energy stakeholders towards their process for undergoing a major retrofit, integration of a microgrid or onsite generation project at their facilities.</p> <ul style="list-style-type: none"> -Where do we begin? Our current focus across state facilities and how we determine which facility in our portfolio to prioritize -How we measure and sell resiliency and reliability upgrades to financial decision makers, including investing in onsite generation and renewables -Efficiency and sustainability : Key elements for successfully presenting a project to senior decision makers to finance and approve efficiency and/or sustainability retrofits and upgrades -Project financing: Advice towards key questions to ask when partnering with any outside organization for financing, management or maintenance <p>Next page for panelists:</p> <p>Panelists include:</p> <p>Mr. Eric Coffman, Director, Energy Programs, Maryland Energy Administration (confirmed)</p> <p>Mr. Douglas Hatcher, Director of Energy and Resource Management, Dept. of General Services, Pennsylvania (confirmed)</p> <p>Mr. Jamie Langdorf, Deputy Director, Office of Design and Construction, State of New Jersey (confirmed pending final approval)</p> <p>Moderator: Mr. Jamie Donovan, Program Analyst, Department of Energy & Environment (DOEE), District of Columbia (leading implementation of D.C. Clean Energy Plan) (confirmed)</p>

2:40 – 2:30	Refreshment Break
2:30 -3:00	<p>Case Study in Energy Efficiencies and Utilization of Renewables for Campus Energy</p> <ul style="list-style-type: none"> -Goals and current progress of the NY Higher Education LSRE Project which seeks to lower financial barriers to renewable energy procurement through combined purchases for private and public higher education. -Where are our greatest energy savings deriving from? Top 3 projects / capabilities that Cornell has put in place over the last decade that have proved to generate the most efficiencies and financial savings. - A look over the horizon: Overview and progress report on research for Earth Source Heat <p>Mr. Bert Bland, P.E., Associate Vice President for Energy and Sustainability, Cornell University (tentative, tbd)</p>
3:00 – 3:25	<p>Johnson Controls 2019 Energy Efficiency Indicator Survey of Energy and Facility Management Executives: U.S. Results</p> <p>Recently released, the thirteenth edition of the Energy Efficiency Indicator Study surveyed 400 energy and facility management executives across the U.S.</p> <p>Hear a summary overview of the results and future forecast from one of John Controls leading experts.</p> <p>Mr. Clay Nesler, Vice President, Global Sustainability and Regulatory Affairs, Johnson Controls (confirmed)</p>
3:25 – 3:50	<p>Emerging Trends and Innovation in HVACR systems to Support a More Efficient, Sustainable and Connected Built Environment</p> <ul style="list-style-type: none"> -Considerations towards the impact of electrification on current systems -Building automation, control systems and IoT: emerging trends in HVACR evolution to meet the demands of a more connected, data driven built environment - How the focus and priority on interior environment quality is driving product and technology development and what customers can expect /require from their near future systems <p>ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers); Senior Applications Engineer, Trane (tentative)</p>
3:50 – 4:30	Closing remarks TBD
4:30pm	End of Summit

FACILITIES & CAMPUS ENERGY NORTH AMERICA



RSC

Since 2011, Roosevelt Strategic Council has convened the most senior and respected leaders in business, technology and government to collaborate and examine the next generation of challenges transforming global enterprises. In each of our practice areas, RSC has developed a highly vetted network of end users, solutions providers, and field experts to contribute their unique perspective and insights to change business operations.

Animated by the values and guiding principles of RSC, our vision is to continually be the United States' most dynamic and ethical Institute to the business, healthcare, and energy communities; recognized by government, and private industry as both a thought leader and a reliable, trustworthy, value oriented operating partner. We strive to deliver mission relevant educational summits, seminars, and symposiums to the respective departments, agencies, and business leaders to help them achieve effective and efficient mission success.

Federal Government, State and Military Personnel: Complimentary to attend. The Summit is considered a no-cost to DoD, widely attend educational and training forum.

Ways to Register:

Online:
rscouncil.org/facilities-energy-register

Phone:
201.672.8745

Email:
registrations@rscouncil.org

Exhibit & Sponsorship Opportunities Available:

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