



Water-Energy Nexus Learning Lab Agenda Virtual

All Times Eastern

Day 1 (September 1):

- 11:40-12:00 PM **Pre-Meeting Virtual Registration and Zoom Troubleshoot**
- 12:00-12:15 PM **Welcome – NGA, Arizona, and Wisconsin**
- 12:15-12:40 PM **State Participant Introductions**
- 12:40-1:05 PM **The Big Picture: Nationwide Drivers and Strategies for Water-Energy Savings**
Research and modeling performed at Sandia National Lab can be applied by decision makers to optimize power plant siting, infrastructure investments, resiliency and efficiency measures, and adapt to changing water supply. Dr. Tidwell will provide an overview of Sandia National Lab’s research on water-energy use and availability, weather patterns, water sector systems performance, and how their data-backed tools can help enhance integrated water and energy resource planning.
- Speaker:*
Vincent C. Tidwell, PhD, Principle Member of the Technical Staff, Sandia National Laboratories
- Facilitator:*
Bevin Buchheister, Senior Policy Analyst, NGA Center for Best Practices
- 1:05-1:30 PM **State Integrated Water & Energy Planning**
Achieving water and energy efficiencies requires state coordination among multiple agencies and stakeholders, and adoption of innovative regulatory approaches. This session will highlight the work of the *Governor’s Water Augmentation, Innovation and Conservation Council (Council)* that develops strategy recommendations for Arizona. Through the Council, diverse stakeholders collaborate to identify policy solutions to issues like long-term water availability, groundwater supply protection and water use for electricity generation.
- Speaker:*
Carol Ward, Deputy Assistant Director, Water Planning and Permitting, Arizona Department of Water Resources

Facilitator:

Bevin Buchheister, Senior Policy Analyst, NGA Center for Best Practices

1:30-2:00 PM

Break

2:00-2:20 PM

Wisconsin Focus on Energy Program

Wisconsin launched the Focus on Energy program, a statewide program, focused on energy efficiency in 2001. Focus on Energy is funded by Wisconsin's investor-owned utilities, as required by state law, and participating municipal and electric cooperative utilities. Focus on Energy has several energy efficiency incentive programs, including one focused on adopting water and wastewater efficiency measures. Joe Cantwell who serves as an advisor on Focus on Energy programs will talk about the development of an energy efficiency Best Practices Manual for water and wastewater systems, helping local governments drive efficiency and save money.

Speaker:

Joseph Cantwell, Senior Energy Engineer, Focus on Energy

Facilitator:

Timothy Schoonhoven, Policy Analyst, NGA Center for Best Practices

2:20-2:40 PM

Wisconsin Benchmarking Energy Performance

Wisconsin requires a Compliance Maintenance Annual Report (CMAR) that brings state agency staff and water and wastewater facility operators together to benchmark and measure efficient performance and evaluate water quality and pollutant discharge permit compliance. This panel will explore approaches to incentivize energy or water efficiency along with hurdles and innovative strategies.

Speaker:

Megan Levy, Local Energy Programs Manager & Energy Assurance Coordinator, Wisconsin Office of Energy Innovation

Facilitator:

Timothy Schoonhoven, Policy Analyst, NGA Center for Best Practices

2:40-3:15 PM

State Team Time

3:15-3:30 PM

Break

3:30-4:00 PM

State and Partner Best Practices for Education & Outreach

States must overcome educational barriers to address the water-energy nexus. Policymakers need to understand the issues and how to use their roles to champion efforts that drive progress, while system operators and technical service providers need to understand realistic innovative options available to them to optimize savings.

Wisconsin will talk about state outreach to operators and key elected officials and decisionmakers to educate them on the value of the Compliance Maintenance Annual Report (CMAR) project. Wisconsin will also highlight the state-federal partnership through the Department of Energy's Sustainable Wastewater of the Future (SWIFt) program. Arizona will describe the education and outreach efforts through the Arizona Municipal Water Users Association.

Speakers:

Megan Levy, Local Energy Programs Manager & Energy Assurance Coordinator, Wisconsin Office of Energy Innovation

Warren Tenney, Executive Director, Arizona Municipal Water Users Association

Facilitator:

Jessica Rackley, Program Director, NGA Center for Best Practices

4:00-4:15 PM

Report Out and Conclude Day 1

Day 2 (September 2):

11:45-12:00 PM

Virtual Registration and Zoom Troubleshoot

12:00-12:30 PM

Data Use and Benchmarking for Energy and Water Efficiencies

Arizona utility, Scottsdale Water, will present on management systems, tools, partnerships, and enabling rates that allow the utility to reduce energy and water usage and participate in demand response. Scottsdale Water will provide an overview of their optimization control room. This state-of-the-art control room enables Scottsdale Water to make smart management decisions on water purchasing and allows the utility to shift to alternate water pumping and transportation power sources depending on prices and other needs.

Speaker:

Brian Biesemeyer, Executive Director, Scottsdale Water

Facilitator:

Jessica Rackley, Program Director, NGA Center for Best Practices

12:30-1:15 PM

Cross Sector Savings Opportunities at Water and Power Utilities

Water utilities and power plants recognize the importance of achieving cost-effective water and energy savings to address resiliency, security, and other concerns. Robert Woods from Arizona's Salt River Project (SRP), which provides power and water to the Phoenix metropolitan area, will highlight efforts to reduce water use and offset water use for power production. He will also explain how SRP's sustainability goals drive new projects like biomass energy production, forest watershed protection to preserve water quality, and energy efficiency measures.

Joe Cantwell from Wisconsin's Focus on Energy program will discuss how the program helps decision-makers identify and execute energy and water efficiency measures at their facilities. Focus on Energy has helped municipal and industrial wastewater utilities and rural operations like dairies adopt systems that reduce waste, mitigate environmental risks, and create valuable byproducts like renewable natural gas for onsite electricity generation.

Speakers:

Robert Woods, O&M Manager, Salt River Project

Joseph Cantwell, Senior Energy Engineer, Focus on Energy

Facilitator:

Jessica Rackley, Program Director, NGA Center for Best Practices

1:15-2:00 PM

Agricultural Sector Water Use Efficiency

Agricultural operations consume large quantities of water and require substantial energy use for pumping, irrigation, and water conveyance. States will learn about opportunities to produce energy, and practices to reduce water and energy use in agricultural operations that can benefit water constricted areas. Arizona will discuss the state's Active Management Areas that protect groundwater resources, on-farm water reductions that occur outside of the regulatory zone in response to economic drivers, and water rights. Arizona and Wisconsin will discuss on-farm energy production and water quality protection measures such as water treatment for reuse.

Speakers:

Clint Chandler, Deputy Director, Arizona Department of Water Resources

Adrian Stocks, Water Quality Program Director, Wisconsin Department of Natural Resources

Facilitator:

Timothy Schoonhoven, Policy Analyst, NGA Center for Best Practices

2:00-2:30 PM

Break

2:30-3:15 PM

Funding & Financing

Innovative water and energy conservation projects often carry up-front costs, and small and rural water and electric systems often lack the resources needed to undertake such projects. Participants will learn how Wisconsin's data gathering initiative informed project priorities and helped the state leverage the State Revolving Fund and Clean Water Loan Fund in innovative ways. The U.S. Department of Energy will discuss how states can facilitate the use of energy savings performance contracts or other public private partnership options and the next generation SWIFt project.

Speakers:

Alice Dasek, Advisor, Energy Efficiency & Renewable Energy, US
Department of Energy

Adrian Stocks, Water Quality Program Director, Wisconsin Department
of Natural Resources

Facilitator:

Bevin Buchheister, Senior Policy Analyst, NGA Center for Best
Practices

3:15-4:00 PM

State Team Time

4:00-4:20 PM

Report Out and Wrap Up

Day 3 (September 3) Optional:

12:00-12:30 PM

Virtual Site Visit – 91st Ave Wastewater Treatment Plant

Speakers:

Nazario Prieto, Assistant Water Services Director, City of Phoenix

Cynthia Campbell, Water Resources Management Advisor, City of
Phoenix

12:30–1:30 PM

Facilitated State Team Time and Action Planning

1:30–2:00 PM

State Final Report Out