



EFFICIENT AND HEALTHY SCHOOLS

U.S. Department of Energy and Lawrence Berkeley National Laboratory
2022 Efficient and Healthy Schools Webinar Series
Webinar 4 of 4: Efficient HVAC for Indoor Environmental Quality

July 14th 11:00 am Pacific | 2:00 pm Eastern
12:00 pm Mountain | 1:00 pm Central

[Registration Link](#)

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Webinar Objectives

- Greenville County Schools, SC received recognition as a Best in Class awardee for using technical specifications for HVAC retrofits, resulting in reduction in energy costs and improvements in energy efficiency and indoor environmental quality, and they will share their experience.
- kW Engineering will share best practices to ensure that HVAC retrofits meet energy goals and provide a healthy learning environment. Discussion topics will include using an integrated system approach that includes a set of efficiency measures to achieve greater energy savings.

Webinar Agenda

Time	Title	Speakers
Welcome and Opening Remarks		
[1 minute]	Welcome, logistics, and today's agenda	Alexandra Johnson, Senior Research Associate, Lawrence Berkeley National Laboratory (LBNL)
[5 minutes] 11:00 - 11:05 AM PT 2:00 - 2:05 PM ET	Introduction to the Efficient and Healthy Schools Campaign	Rengie Chan, PhD. Research Scientist, LBNL
Presentations: Efficient HVAC for Indoor Environmental Quality		
[15 minutes] 11:05 - 11:15 AM PT 2:05 - 2:15 PM ET	HVAC Design and Construction Standards	Bill Knight, P.E., CEM, LEED AP. Director of Energy Management, Greenville County Schools, SC. Best in Class, Awardee

[20 minutes] 11:15 - 11:35 AM PT 2:15 - 2:35 PM ET	HVAC Retrofit Best Practices	James Donson, P.E., LC, BEAP, Director, kW Engineering
Q&A and Closing		
[20 minutes] 11:35 - 11:55 AM PT 2:35 - 2:55 PM ET	Q&A section	Rengie Chan, LBNL, moderator
[5 minutes] 11:55 - 12:00 PM PT 2:55 - 3:00 PM ET	Closing remarks: - Join the campaign -Department of Energy's Low Carbon Technology Strategies Toolkit	Rengie Chan, LBNL

Speaker Bios

Featured District

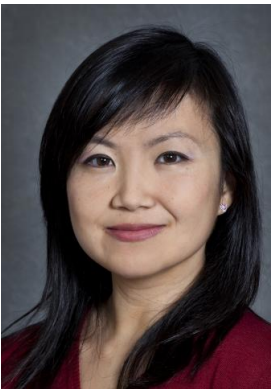


Bill Knight has been in the HVAC/Energy industry for 37 years specializing in large building HVAC systems and the analysis of building energy systems. He has been involved at the local and national level of ASHRAE serving on many Technical Committees, Local Chapter and Regional committees, teaching continuing education seminars, and has been awarded several ASHRAE Regional Technology Awards. Bill has been the Director of Energy Management at Greenville County Schools for the past 28 years. His duties have included the original organization of the EM Department, design and construction management of a \$1.2B construction program, and the on-going oversight of facilities operation and maintenance. Current major initiatives include system retrofits, facility commissioning, preventative maintenance and staff training/certifications. Bill is a Registered Professional Engineer, a Certified Energy Manager and LEED Accredited Professional. He has a BS in Mechanical Engineering from Clemson University.

Experts and Supporting Team



James Donson is a Director at kW Engineering, managing energy efficiency and lighting projects in Northern California. His professional experience includes energy audits, retro-commissioning, design review, strategic energy management, and training in a wide array of market sectors. James' experience with energy efficiency improvement projects includes lighting, control replacements, central plant upgrades, and air-side HVAC improvements. James worked with eight California school districts to identify, specify, and implement energy efficiency upgrades using the California Proposition 39 grant program and applied his experience with that of Lawrence Berkeley National Laboratory to develop the Integrate System Packages for Schools.



Dr. Wanyu (Rengie) Chan is a Research Scientist and Deputy Indoor Environment Group Leader in Energy Analysis and Environmental Impact Division at Lawrence Berkeley National Laboratory. Her work focuses on characterizing indoor air quality and implications to human exposures in residential and commercial buildings. She recently completed a research project studying indoor air quality and ventilation in California classrooms, working in collaboration with UC Davis Western Cooling Efficiency Center. Dr. Chan serves as the point of contact for the Efficient and Healthy Schools Campaign. She also manages the USEPA sponsored [iaqscience](#) website that summarizes the state of knowledge on indoor air quality and health. Dr. Chan earned her Ph.D. in Civil and Environmental Engineering from University of California, Berkeley in 2006.



Alexandra (Allie) Johnson is a Senior Research Associate in the Indoor Environment Group in the Energy Analysis and Environmental Impacts Division at Lawrence Berkeley National Laboratory. She has a BSChE in Chemical Engineering and a Masters of Public Health with an emphasis in epidemiology and biostatistics. Alexandra previously worked as an engineer in industry and energy before moving into both research and outreach within the field of environmental health sciences. While at Lawrence Berkeley Lab, her focus has been on air quality in various indoor environments.