Select Opportunities for Healthcare Members

BETTER BUILDINGS ALLIANCE

Members in the Better Buildings Alliance agree to participate in at least one program activity each year and share their successes with their peers. Explore a variety of activities below tailored to your sector, from testing out an implementation model to joining a technology adoption campaign. Contact us to participate today!

Technology and Market Solutions

Try a technology or market solutions activity for your sector. To view a full list of activities, visit each team's webpage on the Technology Solutions pages or Market solutions pages.

Team	Activity
Lighting & Electrical	▶ **New in 2015** Interior Lighting Campaign: Receive technical assistance and win awards for high efficiency troffer lighting retrofits. Coming soon: a specification for 2x2, 2x4, and 1x4 troffers, a utility incentives database, product lists, technical reports, and case studies. ▶ Lighting Energy Efficiency in Parking Campaign (LEEP): Receive technical assistance and recognition for reducing parking garage and parking lot energy use.
Energy Management Information Systems (EMIS)	▶ Use the technology classification framework, EIS cost and benefits report, and EMIS crash course to learn about critical aspects of successful EMIS use.
Space Conditioning	▶ Advanced RTU Campaign (ARC): Install efficient HVAC rooftop unit (RTU) technology. Gain access to DOE technical experts, be recognized for achievements in RTU retrofits or upgrades, and qualify for discounts on ASHRAE technical guides. ▶ Coming soon: Best practices for duct leakage fact sheet and guidance for a systems approach to central plant HVAC.
Renewables Integration	▶ Use the solar decision guide to evaluate solar for your organization, and stay tuned for the forthcoming Healthcare sector-specific solar PV guide, which will assess best practices for navigating barriers to implementation in healthcare facilities. ▶ Contribute case studies to help other members learn about solar PV options.
Plug & Process Loads	▶ Set up metering of plug and process loads (PPL) in one of your buildings using the Healthcare Energy End-Use Monitoring report.
Laboratories	▶ Save energy by retrofitting with high efficiency fume hoods, taking advantage of the fume hood sash management campaign, and reducing simultaneous heating and cooling. ▶ Manage laboratory freezer temperature settings and replace or eliminate older freezers with the Ultra-low Freezer User Guide.
Food Service	▶ Collaborate with the Consortium for Energy Efficiency (CEE) to develop guidance on commercial kitchen Demand Control Ventilation (DCV) best practices and a retrofit evaluation checklist. See the introductory webinar presentation here. ▶ Profile a food service energy efficiency project as a Showcase Project on the Better Buildings website or help quantify the non-energy benefits of energy management systems (EMS) to justify project costs.
Financing	▶ Overcome barriers to energy efficiency financing by leveraging solutions to common barriers. Consider ESCO financing, Property Assessed Clean Energy (PACE) financing, Energy Service Agreements, and other mechanisms.

Procurement Specifications

Try a procurement specification tailored for your sector when purchasing energy efficient technologies. The specifications listed below have the potential to offer significant benefit for the various end-use energy consumers in commercial buildings.

Specification	Savings Opportunity
High-Efficiency Troffer Lighting	**Save 15% – 45%** on lighting energy costs by replacing fixtures and up to **75%** by using controls. View spec. A **Walmart Neighborhood Market** in Wichita, KS installed an LED system with bi-level controls that reduced power usage over typical linear fluorescents by 29%. View the case study.
LED Site Lighting (for Parking Lots)	**Save 40%** or more on energy costs; additional benefits include long life, reduced maintenance costs, and improved lighting uniformity. View spec. **T.J.Maxx** realized a 3-year payback by replacing high-pressure sodium and metal halide luminaires with LED technology. View the case study.
High-Efficiency Parking Structure Lighting	**Save nearly 15%** on energy costs compared to current code; additional energy savings are possible with lighting controls and day-lighting techniques. View spec. **Cleveland Clinic Foundation** in Cleveland, OH installed a LED system in a 970,250-square-foot garage that utilizes sensors to operate in low states, and saved 82% on energy use. View the case study.
High-Efficiency Wallpack Lighting	**Save approximately 40%** by replacing fixtures and **70%** by using controls. Additional benefits include longer life and lower maintenance costs. View spec. If a hotel of 185 rooms applied the specification at 1,200 sites across its building portfolio, it would save an estimated 12.7 million kWh and $1.3 million in energy savings annually.
Fume Hoods	**Save up to 50%** per unit by retrofitting fume hoods in labs with fume-hood dominated ventilation system airflows. View spec. The **University of California, Irvine** implemented a suite of energy conservation measures in 10 laboratory retrofits, including installing and operating high-performance, low-flow fume hoods at a face velocity of 70 feet per minute. The average energy savings across the retrofitted laboratories was 61%. View the field demonstration study.
Ultra-Low Temperature Freezers (ULT)	**Save up to 66%** over typical freezers. View spec. **Michigan State University** and the **University of Colorado at Boulder** installed high-efficiency ULT freezers in their laboratories. The ULT freezers generated between 20% and 66% electricity savings over typical units. View the field demonstration study.
Commercial Heat Pump Water Heater	**Save 70%** on water heating energy by using heat pump water heaters instead of electric storage water heaters. View spec. A **commercial kitchen** with daily hot water usage of 1,000 gallons installed a heat pump water heater with a heating capacity of 32,000 British thermal units per hour and a coefficient of performance of 3.5. The heat pump water heater saved the facility more than $6,000 per year with additional space conditioning impacts.
Low-Voltage Distribution Transformer	**Save more than 40%** on energy use by installing high-efficiency distribution transformers. View spec. The **University of California, Merced** replaced two existing distribution transformers at an off-campus office building with high-efficiency models, and reduced related energy losses by 85%. View the case study.

Implementation Models

Try a proven solution from a Better Buildings Challenge partner. Better Buildings Challenge partners share strategies for addressing key barriers to energy efficiency, including policies, processes, outreach efforts, tools, and resources. Click here for a full list.

Topic	Barrier	Solution
Gallery Walks **NEW YORK-PRESBYTERIAN**	▶ Improving patient care and managing energy use are not always perceived as being linked. By explaining how energy use impacts Patient Outcomes, Patient Safety and Patient Experience, NYP engages caregivers towards achieving both	▶ Create a retro-commissioning program engaging all hospital staff as caregivers through 'Gallery Walks' and associated feedback channels
Energy Management And Capital Set-Aside Fund **UNIVERSITY OF PITTSBURGH MEDICAL CENTER**	▶ Difficulty prioritizing energy efficiency improvements over clinical expenditures in a combined capital budget	▶ Create a UPMC Energy and Environmental Engineering Department with a targeted skillset and a dedicated annual budget for energy efficiency improvements
Engaging Clinicians To Reduce Resource Use In Operating Rooms **CLEVELAND CLINIC FOUNDATION**	▶ Lack of information and buy-in from clinicians around resource conservation	▶ Convene a committee to coordinate efforts to recycle waste, collect water use data, and pilot other improvements
Facilities Infrastructure Pool **ASCENSION HEALTH**	▶ "First-cost" hurdle or insufficient access to capital	▶ Create a Facilities Infrastructure Pool to provide capital for energy efficiency improvements and ensure proper infrastructure maintenance
Internal Green Revolving Fund **UNIVERSITY OF UTAH**	▶ Energy efficiency projects were being funded piecemeal from a general fund with savings disappearing back into the general facilities budget	▶ Implement an internal Green Revolving Fund (GRF) to allocate savings from current energy efficiency projects to invest in future energy efficiency projects
Chasing Quarters With Energy Set-Points **HEI HOTELS AND RESORTS**	▶ Lack of standard operating procedure for key energy set-points for HVAC systems, Domestic Hot Water, and Food & Beverage areas at managed properties	▶ Partner with chief engineers and hotel department heads at each facility to develop and certify building-specific temperature set-points ▶ Implement portfolio-wide standard operating procedures for set-point maintenance