

## Building Owner Resources

### Common Energy Efficiency Measures

- [Common Opportunities: The Top Five](#) – BetterBricks resource describing four key practices (developing a building system operations map, using EUI and benchmarking, targeting the envelope, and targeting HVAC systems and equipment) and the top five savings opportunities (envelope integrity, equipment scheduling, lighting, plug and process loads, and HVAC systems).
- [Save Energy](#) – U.S. EPA Energy Star Buildings information on low- and no-cost energy efficiency measures, measures with rapid payback, engaging occupants, and more
- Toolkits from U.S. DOE Better Buildings focus on different energy efficiency measures, providing tools such as decision guides, fact sheets, technical guidance, savings estimates, spreadsheet inventory forms, specifications, and case studies.
  - [Upgrade Your Rooftop Unit \(RTU\) to High-Efficiency](#)
  - [Understanding Plug and Process Load Controls for your Buildings](#)
  - [Data Center Energy Efficiency Toolkit](#)
  - [Upgrade Your Interior Lighting to High-Efficiency Solutions](#)
  - [K-12 Lighting Toolkit](#)
  - [Engaging Tenants in Energy Efficiency](#)

### Savings to investment ratios and estimated kWh for common EEMs

- [Fundamentals of Life Cycle Costing for Energy Conservation](#) – On-demand courses from FEMP

### Case Studies and White papers

- [Spokane Regional Health District Building](#) – 113,000 sq.ft. project with HVAC improvements, controls and lighting upgrades
- [Department Store Upgrade](#) – 87,300 sf department store. Measures implemented include replacing RTUs, sub-metering, comprehensive lighting upgrade, recommissioning controls systems. EUI decreased 67 units from 177 kBtu/sq.ft. to 110 kBtu/sq.ft.
- [Luminaire Level Lighting Controls \(LLLCs\)](#) – A business park in Seattle implemented LLLCs in their tenant spaces
- [Window retrofits](#) – A 200,000 sq.ft. building retrofitted windows using secondary glazing systems
- [HVAC retrofit](#) – In King County airport building

## Energy Auditing

- [Audit & Retrofit Techniques](#) – For lighting systems- (video)

## Benchmarking training opportunities

- [Benchmarking videos](#) – Created for Seattle Energy Benchmarking, useful information for everyone
- [ENERGY STAR Portfolio Manager](#) trainings – U.S. Environmental Protection Agency

## On-demand recorded trainings & workshops

- [Lighting Design Lab recorded classes](#) – Lighting Audit & Retrofit Techniques – [Recorded webinar](#) and [handout](#) on overview of a lighting audit, common retrofit lighting options, advantages of Luminaire Level Lighting Controls
- [Better Buildings Webinars](#) – Search for topics
- [Building Night Walk Video Series](#) – Demonstrates how many operational issues can be uncovered when buildings are vacant

## Financing options

- [Commercial Property Assessed Clean Energy \(C-PACE\)](#) – Extensive information from U.S. DOE Better Buildings about PACE, which will be available from some Washington State counties within a few years.
- [Find Financing for Your Energy Project](#) – Toolkit from U.S. DOE Better Buildings with information and case studies on loan or debt financing, lease financing, energy performance contracts, and more.
- [Green Revolving Funds](#) – US DOE Better Buildings Toolkit with fact sheets, tools, guidance, and case studies
- [Financing Energy Efficiency Projects](#) – US EPA ENERGY STAR slides discussing pros and cons of eight different financing options

## Other resources and materials

- [Building Energy Efficiency Checklist](#) – Tips for occupants, managers, and resource conservation managers from the City of Seattle

## Organizations with energy efficiency resources

- [Washington State University Energy Program Resource Conservation Management](#) – Information and resources to increase energy and water efficiency, manage generated waste, reduce operating costs for commercial buildings
- [Smart Buildings Center](#) – Educational resources and information to accelerate the adoption and commercialization of smart building technologies and practices, including a tool-lending library and webinars.
- [BetterBricks](#) – Resources and cost-effective solutions for energy efficiency commercial buildings.
  - Extensive information including: [solutions](#) for lighting, windows, HVAC, motor products, and building operations; [case studies](#); and [resources for specific technologies](#)

- [CRE Hub](#) by BetterBricks – Helps the commercial real estate market narrow the list of energy efficiency resources to get the operations, and operation tools that will help the most. Includes resources for building lifecycle, problems & solutions, and technologies