ENERGYCAP

Energy Management 101

The Building Blocks of an Effective Energy Management Program

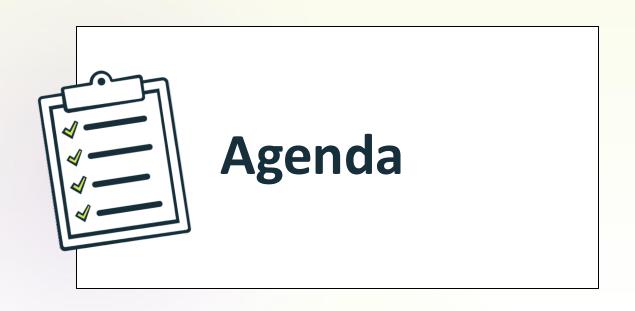


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- What is energy management?
- Why is energy management important?
- Philosophical approach to Energy Management - Energy Pyramid
- The building blocks of energy management

What is your experience working on/with energy management strategies in your organization?

- Just starting out
- 1-2 years
- 3-5 years
- 6-9 years
- More than 10 years



What are you hoping to learn in today's webinar?

- Strategies to help my organization save money
- Increase my passion for the environment
- Just curious thought it might be interesting
- Interested in helping others save energy

What is energy management?

What is energy management?

Energy management is the proactive and systematic monitoring, control, and optimization of energy consumption to conserve use, reduce costs, and minimize environmental impact.



Monitoring energy bills



Implementing energyefficient technologies



Optimizing energy usage patterns

Why is energy management important?



Saves money!

- Energy is typically the second most expensive line item in the budget - after personnel costs
- Utility prices are volatile, gives building owner more control over costs
- With more people returning to the office, helps to mitigate against increased costs

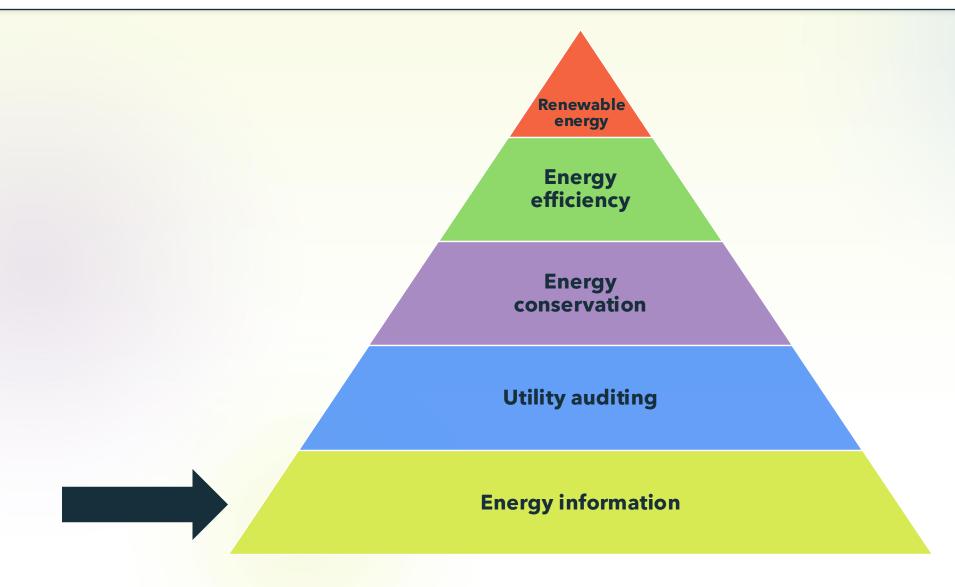
Good for the environment

Improves occupant comfort - increased productivity

Better decision-making

Hard to argue against improving efficiency

Energy Pyramid



The building blocks of energy efficiency



Make a plan



- Establish an Energy Committee
- Develop an energy policy
- Establish energy guidelines
- Set a multi-year vision to drive long-term success

Where do your KPIs originate?

Drop a comment in the chat.

Gather information



Aggregate your data

Establish a strong utility data foundation

- Collect all utility bills
- Identify all meters servicing the facilities
- Confirm meter numbers
- Gather key building information such as square footage, mechanical systems, and historical data
- Track building occupancy patterns

Gather information



Document and share your findings

Enhance transparency and operational insights

- Maintain clear documentation to enhance understanding
- Ensure open communication and provide visibility into facility data for better energy management.
- Consider where you store this information
 - Spreadsheets or Energy Management System?
 - BAS or asset management tools?

What best describes your role in the energy industry?

- Energy Manager
- Director of Sustainability
- Facility Director
- Chief Financial Office
- Operations Director
- Other

Foster strong relationships



Don't do it alone

Eliminate silos; encourage cross-department collaboration

- Executive leadership
- Facilities and operations
- Custodians
- Building staff
- Facility occupants

Get to know your utility providers

Foster strong relationships



Foster an energy-conscious culture

- Communicate consistently
- Focus on behavior change
- Recognize behavior change takes time and patience
- Highlight benefits beyond energy savings to gain organization-wide buy-in
- Ensure continuous engagement for sustained improvements

Learn your facilities



- Document current conditions
- Visit facilities at different times and under different conditions
- Understand occupancy patterns
- Audit all levels of a facility including basement and roof
- Focus initially on large HVAC equipment chillers, pumps, motors, boilers, ...
- Identify HVAC equipment running off schedule
- Listen carefully to detect running equipment

Take action



- Identifying billing errors and maximizing savings through utility data centralization
- Align Time of Day (TOD) schedules with occupancy
- Review occupied and unoccupied set points
- Take advantage of unoccupied time by setting back equipment
- Conduct "soft" recommissioning of BAS
- Standardize set points

Energy Management 201 Webinars



Understanding Your Utility Bills & Vendors

The Energy Manager: A Bridge Between Facilities and Finance

Developing a Five-Year Energy Plan

Reactive vs Proactive Energy Management

Developing Site Maps

Measurement and Verification

Benchmarking

Interval Data for Operational Efficiency

Sign me up for the Energy Management webinar series!

- Yes, please.
- No, thanks.

Questions