



A personal membership group of the
American Hospital Association

Energy to Care and the Sustainability Roadmap

Improving Efficiency to Reduce Cost and Support Patient Care



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Mazzetti's Energy and Sustainability
Consulting Practice

20 Years in Health Care EMS, Energy
Efficiency, Financial Modeling

Agenda

Why

- Deliver highest quality, cost effective patient care

What

- Energy to Care
- AHA Sustainability Roadmap

How

- Overcoming Barriers
- Energy to Care dashboard and Awards program
- Energy to Care dashboard demonstration



A Bit of History



1998

2000



2009

2005



2013



Health Care and Energy

- Health care cost trajectory is unsustainable
- Health care organizations have complex MEP systems and 24x7 operation
- Many opportunities to save energy and reduce cost



Benefits of Sustainability in Health Care

- Energy costs come off the bottom line...
- Patients and staff take notice
- Differentiate your hospital or system
- Energy cost inflation



HPOE Guide: The Value of Efficiency




Executives can set the course for their organizations to create an action plan for finding greater efficiencies.

Reaching the Tipping Point...

How do we start a MOVEMENT!




Complementary Programs



SUSTAINABILITY
Roadmap for Hospitals
A guide to achieving your sustainability goals

[Home](#) [Contact](#) [LISTSERV®](#) [Search](#)

[About](#) [Topics](#) [Drivers](#) [Strategies](#) [Implementation](#) [Resources](#)



ENERGY PROJECT:
Evaluate setback of temperature and airflow settings at night.

[Learn More](#)

Developed by leaders in health care facility design and construction, operations and maintenance, supply chain, and environmental services, the Sustainability Roadmap for Hospitals provides access to reliable, unbiased resources that can help organizations integrate sustainable practices into the health care environment.

Review strategies and performance improvement measures (PIMs), or how-to-guides, to get started on your journey toward sustainability for your health care facility.

Also, be sure to participate in ASHE's free Energy to Care program, which includes a robust dashboard that will allow you to track energy data and visualize progress made toward your sustainability goals. In addition, the Energy to Care program offers awards to celebrate hospitals' achievements in energy reduction.

Explore How-to-Guides for Sustainability

Access Robust Energy Dashboard via Energy to Care

Roadmap Supporters

Interested in being a supporter of the Sustainability Roadmap? Find out more!





Gold Supporter:

POWERSMITHS
POWER FOR THE FUTURE


Feedback

The Roadmap is fundamentally a sharing and learning community. We welcome and encourage your participation. If you have suggestions, materials, case studies, or experiences to share, please contact us.

Roadmap Developers

Powered by **MAZZETTI**



energy to care
Greater efficiency supports patient care.


[ABOUT](#) [GET STARTED](#) [RESOURCES](#) [CHALLENGES](#) [AWARDS](#)

Learn more about joining ASHE or renewing your membership.

[log into your dashboard](#)

[get started here](#)

[contact us](#)



Become more efficient.

Begin your journey to greater efficiency by joining the Energy to Care program.

In today's challenging health care climate, energy efficiency is more important than ever before. And benchmarking is critical to becoming more efficient—you can't manage what you don't measure.

What is ASHE's Energy to Care Program?

- ✓ Energy to Care is an opportunity for health care facility professionals to provide value to their organizations through energy efficiencies.
- ✓ Energy to Care helps you measure your facility's energy use using a robust dashboard.
- ✓ Energy to Care offers ways for you to be recognized for your efficiency accomplishments.

[Begin benchmarking today.](#)

many thanks to our Energy to Care sponsor

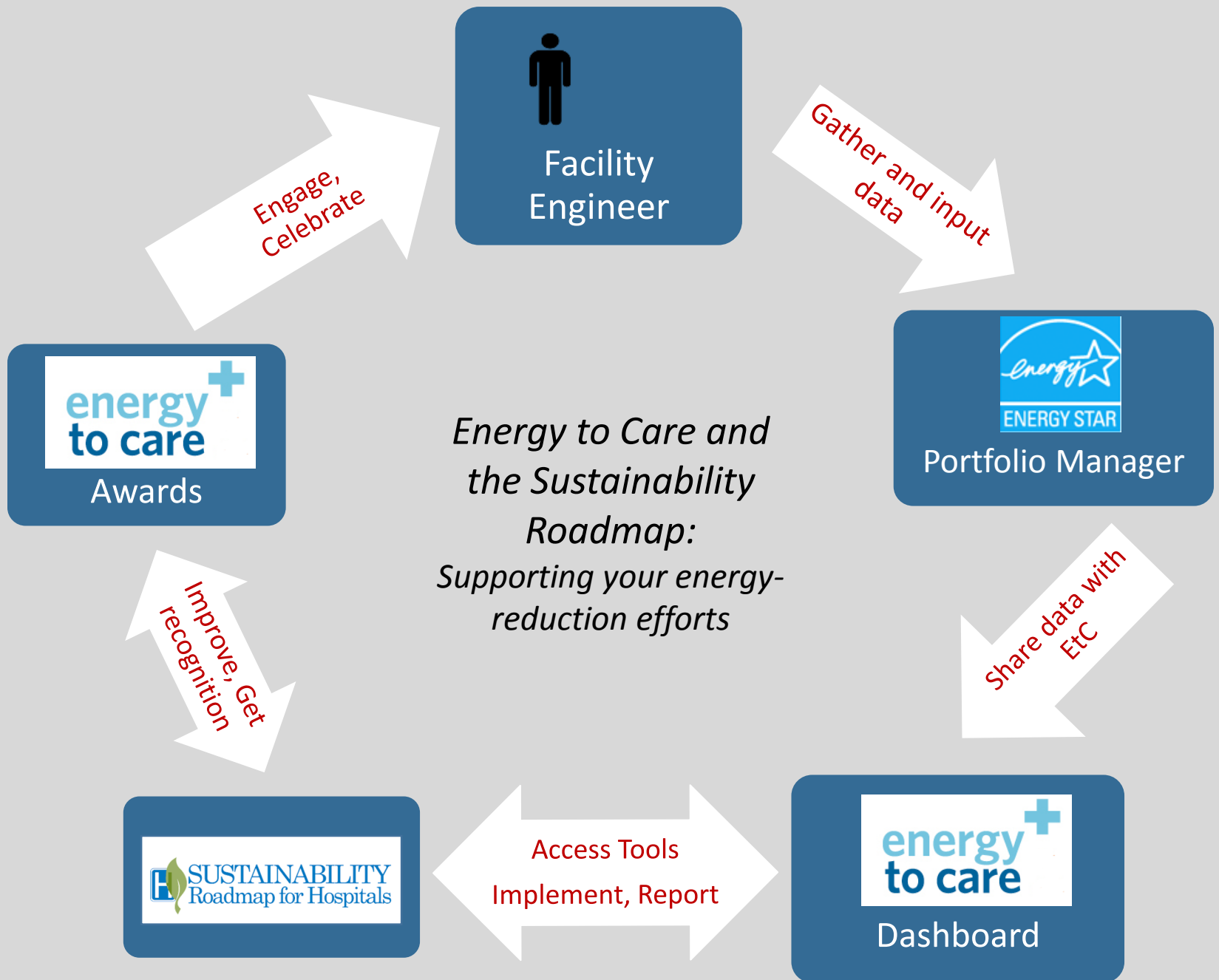
Johnson Controls

download the new Hospitals in Pursuit of Excellence (HPOE) report

A great resource from the American Hospital Association showing the value of sustainability in health care.

join these hospitals in making the commitment

Adventist Health System
Aurora Health Care
Bon Secours Baltimore Health System
Fredrick Health
Inova
Kaiser Permanente
Lutheran Health Network
Memorial Hermann
New York-Presbyterian
Seton Family of Hospitals
Shriners Hospitals for Children
Texas Children's Hospital
University of Arkansas for Medical Sciences
... and hundreds more!



What is Energy to Care?

- Complimentary program to help health care monitor and reduce energy consumption
- National awards program to celebrate continuous improvement and outstanding performance
- Energy dashboard and system challenges
- Energy data remains confidential

The screenshot shows the Energy to Care website. At the top, the logo reads "energy to care" with a blue plus sign, followed by the tagline "Greater efficiency supports patient care." in orange. A navigation bar contains links for ABOUT, GET STARTED, RESOURCES, CHALLENGES, and AWARDS. The main content area features a grid of icons for Facilities & Meters, Analyze Trends, Analytics, Reports, Occupant Engagement, Data Management, User Management, and Resources. A central orange box says "Track energy use." To the right, there are buttons for "log into your dashboard", "get started here", and "contact us". Below the grid, text encourages joining the program and lists benefits. A blue oval highlights a section titled "join these hospitals in making the commitment" which lists various health systems like Adventist Health System, Aurora Health Care, and others.

energy to care ⁺ Greater efficiency supports patient care.

Learn more about joining ASHE or renewing your membership.

ABOUT GET STARTED RESOURCES CHALLENGES AWARDS

log into your dashboard

get started here

contact us

many thanks to our Energy to Care Dashboard sponsor

Johnson Controls

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Shriners Hospitals for Children
University of Arkansas for Medical Sciences
... and hundreds more!

energy to care ⁺

How do I participate in ETC?

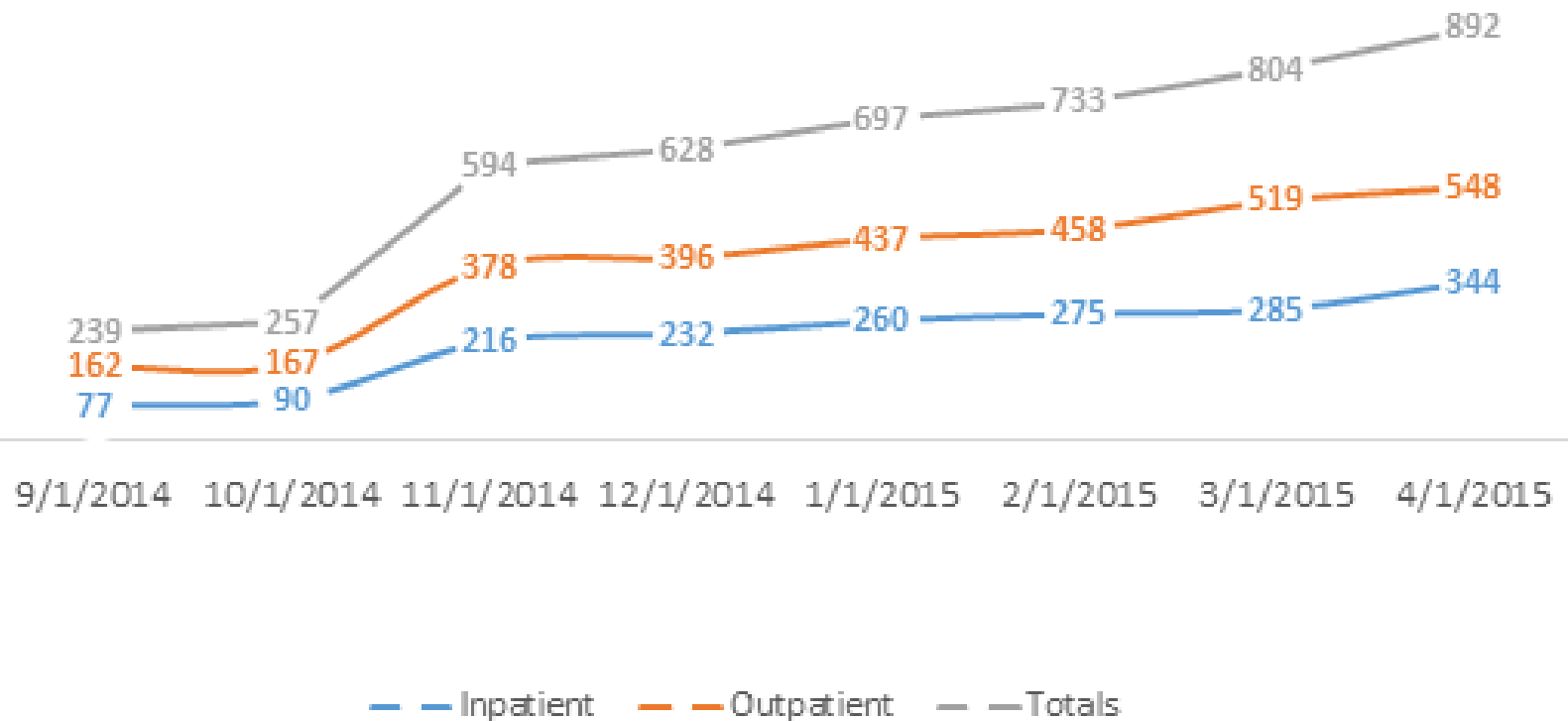
Three steps to take advantage of the benefits of EtC:

1. Sign up to participate in Energy to Care®. | [Sign up](#) |
2. Benchmark your data in Portfolio Manager®. | [How-to](#) | [Video](#) |
3. Share your Portfolio Manager with ASHE and BuildingOS | [How-to](#) | [Video](#) |

➤ **Having Trouble? Contact the Energy to Care Help Desk**

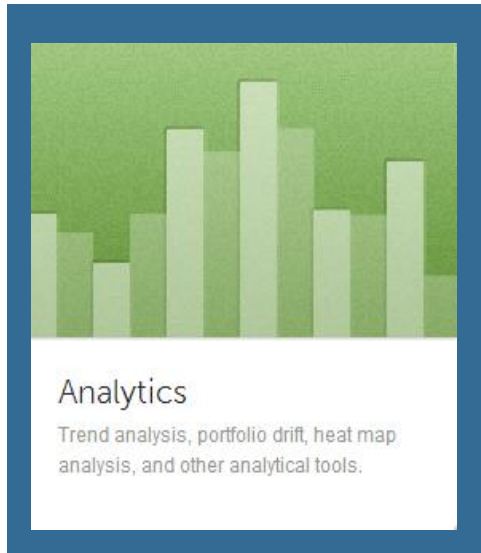
Participation Rates

ENERGY TO CARE PARTICIPATION



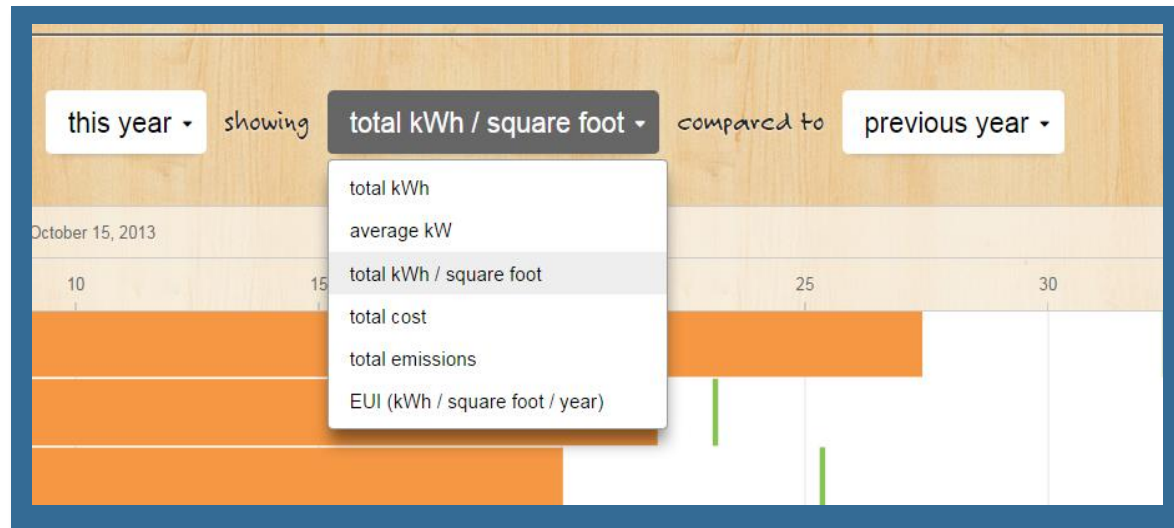
View Your Energy Performance

Trend Analysis



Facility Comparisons

energy to care+



Track Results



- Integrate meter and devices in one place
- Visualize trend analysis and comparisons
- Share and report performance
- Verify and track savings
- Benchmarking reduces over 2% of energy per year (US EPA)

energy to care+

Health System Competitions



	🏆 Participant	Reduction ?	Baseline use ?	Competition use ?	Total savings ?
1st	Hospital A	📈 50.4%	87.80 kW	43.59 kW	383,907.2 kWh
2nd	Hospital B	📈 41.1%	25.93 kW	15.26 kW	92,629.5 kWh
3rd	Hospital C	📈 36.1%	225.26 kW	144.00 kW	705,602.0 kWh
4th	Hospital D	📈 34.6%	140.41 kW	91.79 kW	422,151.3 kWh
5th	Hospital E	📈 26.8%	146.87 kW	107.45 kW	342,317.7 kWh

Start a Chapter Challenge



1. Create a friendly competition:
 - Highlight Challenge participants,
 - Track individual and collective performance
2. Engage members and build community around health care cost reduction and efficiency
3. Opportunities work with local utilities and business partners
4. Collaborative opportunities between ASHE chapters

Receive Awards and Recognition

Energy to Care Award

10% Energy Reduction

Inpatient and Outpatient Categories

Challenge Winners

Program is
Free


Streamlined
application
process

Multiple
opportunities
to be
recognized

Part of a
national
movement


Multi-Platform Integration

Utilities




EnergyCAP
Connect EnergyCAP™ with BuildingOS using Connect Now and enable visibility over your utility bill data.

[+ Connect now](#)




Green Button
Download your data using the 'Green Button' on your utility's bill pay website and upload it to BuildingOS.

[+ Connect now](#)




API
BuildingOS Bills

[+ Connect now](#)



DUKE ENERGY
Duke Energy
Connect your Duke Energy usage data with BuildingOS in minutes using Connect Now.

[+ Connect now](#)




Energy Star
Integrate your Energy Star Portfolio Account in minutes with BuildingOS using Connect Now functionality.

39 meters

[7 offline](#)


[32 online](#)

Building Automation Systems




Alerton
Connect your Alerton building automation system with BuildingOS over BACnet.

[→ Request integration](#)




Andover Controls
Connect your Andover building automation system with BuildingOS over BACnet.

[→ Request integration](#)




AUTOMATED LOGIC CORPORATION
Automated Logic
Connect your Automated Logic system with BuildingOS via the WebCTRL® web service interface.

[→ Request integration](#)




Constellation
Constellation VirtuWatt
Connect your VirtuWatt tool from Constellation Energy with BuildingOS.

[+ Connect now](#)




Delta CONTROLS
Delta Controls
Connect your Delta Controls building automation system with BuildingOS over BACnet.

[→ Request integration](#)




ENERNOC
EnerNOC
Connect your EfficiencySMART™ meter data with BuildingOS.

[+ Connect now](#)




Honeywell
Honeywell
Connect your Honeywell building automation system with BuildingOS over BACnet.

[→ Request integration](#)




ECHELON
iLon
Connect your iLon-100, e2, or e3 based networks with BuildingOS over the iLon web service interface.

[→ Request integration](#)




Johnson Controls
JCI Metasys
Connect data from Johnson Controls Metasys with your BuildingOS over BACnet.

[→ Request integration](#)




Johnson Controls
JCI Panoptix
Connect data from Johnson Controls Metasys or other supported devices on the Panoptix platform over the Panoptix API.

[+ Connect now](#)



OBIX
oBIX
Connect systems which support the oBIX protocol with BuildingOS.

[→ Request integration](#)



Schneider Electric
Schneider Electric
Connect your Invenys, iOP Enterprise or TAC system with BuildingOS over BACnet.

[→ Request integration](#)

What is the Sustainability Roadmap?



- Energy
- Water
- Supply Chain
- Waste
- Chemicals



Implement How-to-Guides (PIMs)

● Practice preventive maintenance of major HVAC equipment.

All PIM content was independently developed and reviewed to be vendor-, product-, and service provider-neutral.

Description

Establish regular and specific preventive maintenance schedules for all HVAC equipment to optimize efficiency, maximize estimated useful life, and maintain a level of indoor air quality that supports the well-being of patients, staff, and visitors.

▼ Project Talking Points

▼ Triple Bottom Line Benefits

▼ Commissioning Connections

▼ Purchasing Considerations

▼ How-To

▼ Tools

▼ Case Studies

▼ Regulations, Codes and Standards, Policies

▼ Cross References: LEED

▼ Cross References: GGHC

▼ PIM Synergies

▼ Education Resources














▼ More Resources

▼ PIM Descriptors

View only
what you need

Provides design tools, case studies, and resources to help you apply the improvement at your facility.

Implement How-to-Guides (PIMs)

EFFICIENCY PROJECT	TIME INVESTMENT	FINANCIAL INVESTMENT	RETURN ON INVESTMENT
Establish energy use baseline	  	  	   *
Schedule preventive maintenance	  	  	  
Program heating and cooling to ramp up only when spaces are occupied	  	  	  
Install energy efficient lighting	  	  	  

Health System/Hospital: Become an Ally

- Align your brand with a reputable, industry-specific sustainability toolkit
- Engage in a community of practice



Carolinus HealthCare System



Poudre Valley Hospital
UNIVERSITY OF COLORADO HEALTH



Wentworth-Douglass
Hospital
THE SEACOAST'S LEADING MEDICAL CENTER



Cleveland Clinic



Service Provider: Become a Sponsor



Benefit from a blanket of market visibility
































































Share expertise and contribute to thought-leadership

Be recognized at different PMG events



Make Energy Savings a Priority!

- Participate in EtC!
- Become a Roadmap Ally!
- Challenge Yourself and Others to be more Efficient.

EFFICIENCY PROJECT	TIME INVESTMENT	FINANCIAL INVESTMENT	RETURN ON INVESTMENT
Establish energy use baseline	  	  	   *
Schedule preventive maintenance	  	  	  
Program heating and cooling to ramp up only when spaces are occupied	  	  	  
Install energy efficient lighting	  	  	  
Insulate hot water system equipment and piping	  	  	  
Implement operating room setbacks that reduce air changes per hour when the operating room is not in use	  	  	  
Install on-site renewable energy	  	  	   **

* The act of establishing energy use baselines does not provide much return on investment itself, but is a critical component of other sustainability efforts.

**On-site renewable energy may have lower return on investment short term, but the potential for long-term return on investment is tremendous.

Source: American Society for Healthcare Engineering, 2014.

Summary

- Small energy cost savings create a large positive financial impact
- Energy to Care and Sustainability Roadmap help hospitals continually improve efficiency and sustainability
- Programs are designed to be:
 - ✓ Low cost
 - ✓ Easy to implement and maintain
- Patients and staff expect hospitals to be efficient and deliver cost effective patient care

Contact Us



www.energytocare.com



www.sustainabilityroadmap.org

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