

WHEA SUSTAINABILITY AND ENERGY COMMITTEE

2024 Annual Conference Presentation



2024 WHEA Annual Conference | KI Convention Center

WHEA SUSTAINABILITY AND ENERGY COMMITTEE

2024 Annual Conference Presentation Agenda

Energy to Care

Re-introduction of our committee to WHEA

A tale of 2 projects

Sustainability On the Horizon



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Energy to Care Chapter Challenge

Chapter Challenge is hosted by ASHE

The health systems in the state of Wisconsin are a team

The challenge compares weather normalized source EUI (energy use intensity) The chapter that demonstrates the greatest percent-based reduction is the winner



Energy to Care Chapter Challenge

Team facilities **MUST** participate in the ASHE Energy to Care Dashboard.

Energy Star Portfolio Manager feeds directly into the Energy to Care Dashboard

2 Divisions (in-patient and out-patient are eligible)

Small chapter category (5 to 15 enrolled hospitals)

Large chapter category (16 or more hospitals)



Energy to Care Chapter Challenge

2024 WHEA Chapter Challenge Participants

12/31/2023 to 12/31/24

UW Health

UnityPoint Health

Froedtert Health

SSM Health

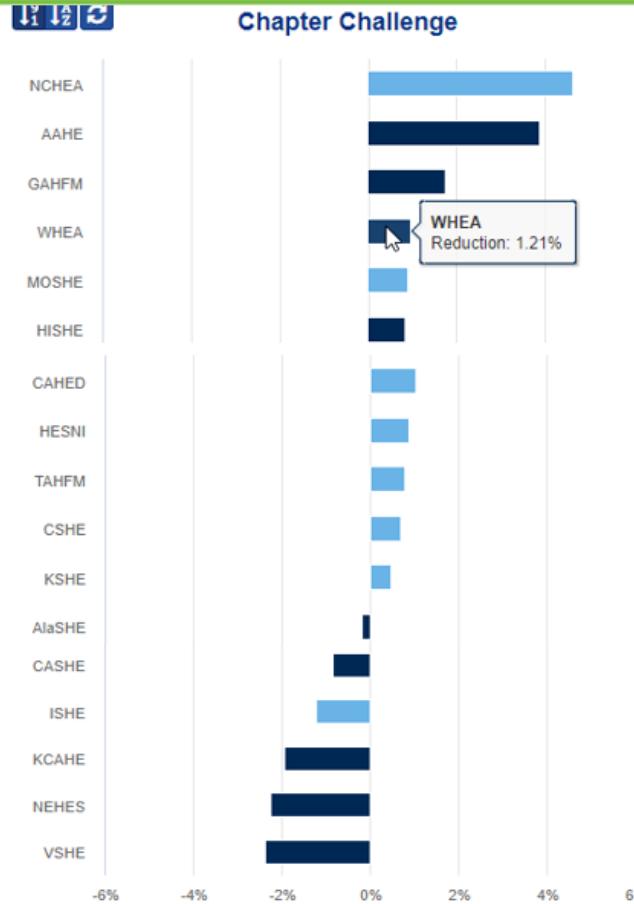
Aurora Health Care



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Energy to Care Chapter Challenge

Chapter Challenge YTD 2024 performance



WHEA has enrolled:
5 health systems
10 facilities

ASHE finalized CY2023 results
4/1/2024



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Interface with other WHEA Committees

Codes and Standards Committee

Education and Professional Development Committee



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WHEA SUSTAINABILITY AND ENERGY COMMITTEE

The WHEA Sustainability and Energy Committee:
Meets as a group about 6 times per calendar year

Committee set 4 goals for 2024

2 of the 4 related directly to education

Committee webinar presentation

Presentation at the annual conference



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The WHEA Sustainability and Energy Committee:
Committee Webinar Presentation – July 16, 2024

Focus on Energy (Kyle Thomas)

Managing Extreme Heat (Paul Vanduyne Jr)

Presentation at Annual Conference – Today

Gunderson Health

UW Health



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Membership

CHAIR: Eric Braun Froedtert Holy Family Memorial

Chapter 1

1	Jason Heindel	Azzo
2	Spencer VerVelde	Total Energy Systems
3	Mike Bergum	Quality Power Solutions
4	Scott Johnson	Faith Technologies
5		

Chapter 2

1	Sam Butzer	Affiliated Engineers Inc
2	Victoria O'Brien	JF Ahern
3	Koreen Pelot	ShawContract
4	Steve Borowski	SSM Health
5	Greg Hatzinger	SSM Health
6	Mary Evers Statz	UW Health

Chapter 3

1	Tim Klein	Theda Care
2	Jedd Winkler	Advocate Aurora
3	Kyle Ranker	Badger Balancing
4	Kelsey Richmond	IMEG Corp
5	Mark Guth	Bellin Health

Chapter 4

1	Dennis Kwasny	Watertech of America
2	Andrew Miller	Aspirus Wausau Hospital
3	Kyle Jacob	American Air Filter (AAF)
4		
5		

Chapter 5

1	Dustin Rehkamp	
2	David Kimball	Wendel
3	Kris Dubiel	Salas O'Brien
4		
5		

Chapter 6

1	Paul Van Duyne	IMEG Corp
2	Daryl Brye	Gunderson Health System
3	Jesse Beckendorf	Eneration
4		
5		

Parking Ramp Solar Canopies

Gundersen Health System

UW Health



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Similarities



Gundersen

- Quest Design
- Bifacial Panels (2,397)
 - 330W Panels
- Gutters & Heat Trace



UW Health

- Quest / IMEG / Staff Electric
- Bifacial Panels (2,064)
 - 580W panels
- Full coverage + Similar support structure



Differences



Gundersen

- Existing Parking Ramp
 - 3 Stories
- Capital Project Approval
- Life Cycle of Project
 - 3 Years Capital Submittal to Production
- 750 kW System



UW Health

- New Parking Ramp: 5 stories, 824 stalls
- Attached to 485,000 SF Eastpark Medical Center
- 1.1MW System
- Operational / Facility Opening Fall 2024



Challenges



Gundersen

- Local Permits
- Equipment Lead Times
- Material & Labor Cost Inflation
- Interconnection Timelines
- Ramp Closures During Construction



UW Health

- Wind Pressure and Panel Selection
- Utility Requirements
- Authorities Having Jurisdiction
- Insurance Requirements
- Panel Pitch & Glare



Gundersen Health Operations



- IRA & FOE Incentive ~\$1M
- Cost \$4,000/kW (\$2,700/kW)
 - Ground Mount \$2,000/kW
 - Rooftop \$1,500/kW
- Reduced Ramp Snow Removal
- Positive Staff Feedback
 - Cooler Cars in Summer
 - Less Snow Removal in Winter
 - Outdoor Event Space for Inclement Weather

- Envision PointE
 - Solar Production Displayed
 - ~950,000 kWh Produced Annually
 - ~ 10% of Hospital Annual Electrical Consumption
 - 1,025,926 kWh Production Sep 2023-Aug. 2024
 - Annual Greenhouse Equivalents
 - 717 Tons CO₂e
 - = 93 homes energy use for 1 year
 - = 171 gas vehicles driven for 1 year



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UW Health Operations



- Total Cost of Solar + Structure = \$3.75M
 - Structure = \$2.0M
 - Electrical = \$1.6M
 - Other (Plumbing, Fire Alarm) = \$150K
- Incentives:
 - 179D Energy Tax Credits: ~\$1.1M
 - Focus on Energy : ~ \$50K



- Maintenance Considerations
 - Snow & Ice Removal
 - Gutters + Heat Trace
 - Panel Cleaning
 - Bird Deterrents
- Annual Production: 1,263,833 kWh
- Lifetime CO2 Savings: 1,946,464 Pounds
- Greenhouse Equivalents
 - 14,600 Trees Planted
 - 2,258,000 Car Miles Driven
 - 2,050 Barrels of Oil Consumed
 - 99,350 Gallons of Gasoline Consumed



Inflation Reduction Act

- Project Reservation
 - Other Grant funding cannot be applied
- Project Documentation
 - Itemized invoices/ receipts
 - Interconnection agreements
- Solar PV Size Limitations



On The Horizon

- Joint Commission
- White House Pledge
- City of Madison Energy Benchmarking
- Gundersen Energy Goal – 50% Energy



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Q & A



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EMERGENCY

Hospital Entrance & Parking



THANK YOU



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UW HEALTH SOLAR PV LINK

GUNDERSON HEALTH SOLAR PV LINK



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