

ACHIEVING ENERGY & COST SAVINGS IN HEALTHCARE

BY ENGAGING PEOPLE AND INSPIRING BEHAVIOR CHANGE

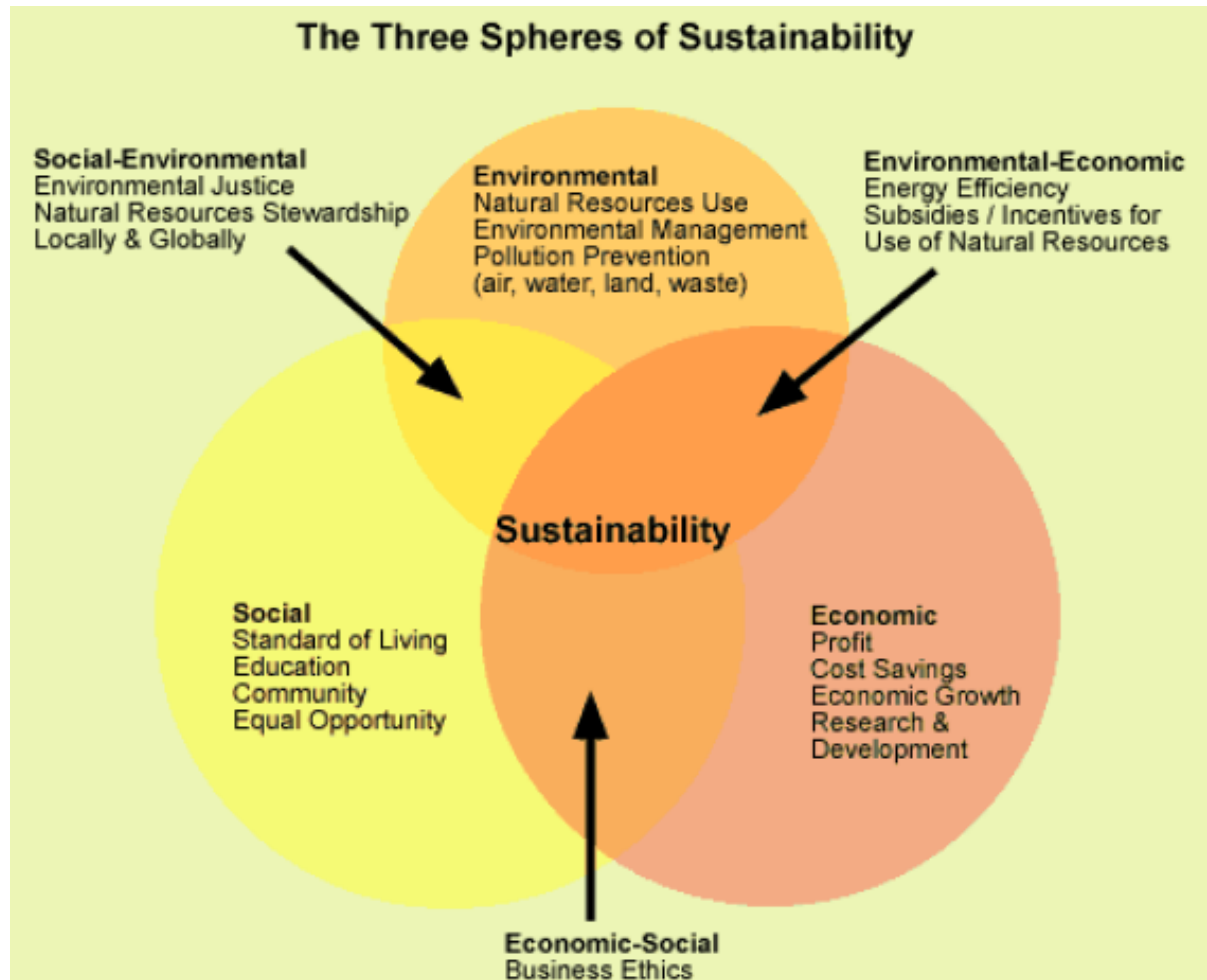
September 12, 2013



WHY SUSTAINABILITY AT RMC

- Do No Harm
- Improve Community Health
- Environmental Impact Improvement
- Enhancing a Culture
- Improve Healing Environments
- Improve Employee Satisfaction
- Improve upon the Business

TRIPLE BOTTOM LINE



BEYOND PROCESSES

- Plant upgrades
- Lighting upgrades
- Building controls
- Virtualization

PARTNERSHIPS

Recycling Rate

- 42%



Construction

- Recycling rate of 54.3%
- Most building items purchased locally
- Native Plantings



Single Use Devices (SUDs)

- Annual savings = \$111,175



Electrical Usage

- 23% reduction



Natural Gas Usage

- 19.6% reduction



Water/Sewer Usage

- 28.1% reduction



SINCE 2003

IT'S ABOUT PEOPLE



“OH, THE THINGS THEY DO”

- Busy
- Focused
- Unaware
- Not educated as to the “*why*”
- Internally motivated
- *No measurement, no worries*

***“Humans are the Hazard
in the System”***

THE PARTNERS AND PEOPLE

- CLASS 5 Energy
 - Consulting firm in White Bear Lake, MN, established in 2002
 - Specializes in behavioral energy programs, energy plan development, utility tracking and energy efficiency resources
 - Clients in K-12 schools, higher education and office/commercial

WHAT IS BEHAVIOR-BASED ENERGY EFFICIENCY?

Behavior-based energy efficiency (BBEE) is...

... a method of reducing energy grounded in psychology and behavior that relies on individual choice and decision making to realize verifiable energy savings
(BPA, 2013)

WHAT IS BBEE?

- Behavior-based energy efficiency programs target specific organizational behaviors, such as:
 - One-time behaviors (e.g., changing the settings on a thermostat)
 - Habitual behaviors (e.g., turning off lights, only running the dishwasher when full)
 - Purchasing decisions

GOALS FOR CLASS 5

- Implement program components and adapt as needed for a healthcare setting
- Develop new components specific to the healthcare sector
- Obtain feedback from RMC staff on the effectiveness of the program
- Evaluate the impact of the program on RMC's overall energy savings

GOALS FOR RMC

- Increase RMC's energy efficiency
- Engage staff in energy saving behaviors
- Achieve an 8% reduction in energy costs
- Work towards ENERGY STAR® recognition for RMC's buildings
- Run an effective program without affecting quality or patient and staff safety

THE SCIENCE

Organizational Change Management

Technical Approach: Improving business systems and processes



Convergence over time = **CHANGE MANAGEMENT**

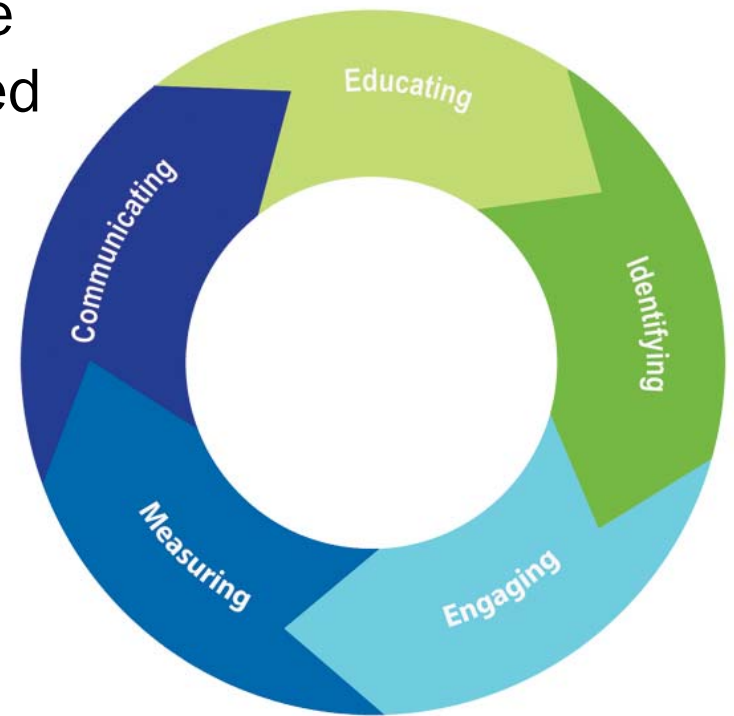


Human Approach: Managing the people side of change

HOW DOES IT WORK?

The Plan uses a dynamic, iterative change management process:

- Educate people about why a change is needed and how it will be achieved
- Identify opportunities for both short- and long-term wins
- Engage people and asking them to do their part
- Measure and track progress (using data) toward the goal
- Communicate and celebrate results



TECHNICAL APPROACH

- Adjusting thermostats in all areas except patient rooms and having setbacks for areas that are not open 24/7
- Putting timers on equipment that can be shut off without affecting patient care
- Utilizing power-saving functions on equipment and computers
- Asking employees to turn off lights, monitors, printers, etc.
- Delamping in over lit areas

ELIMINATING 24/7 MENTALITY

Calculated savings for timers on hydroculators:

$\$0.125 \text{ per KWH} \times 8 \text{ hours/day} \times 365/\text{days a year} =$
 $\$365 \text{ dollars per year per unit}$

$\$365 \times 8 \text{ units} = \$2,920$ in savings per year minimum
(additional savings with weekends and holidays)

Cost: $\$41/\text{timer} \times 8 \text{ timers} = \328

Payback in 1.68 months!!

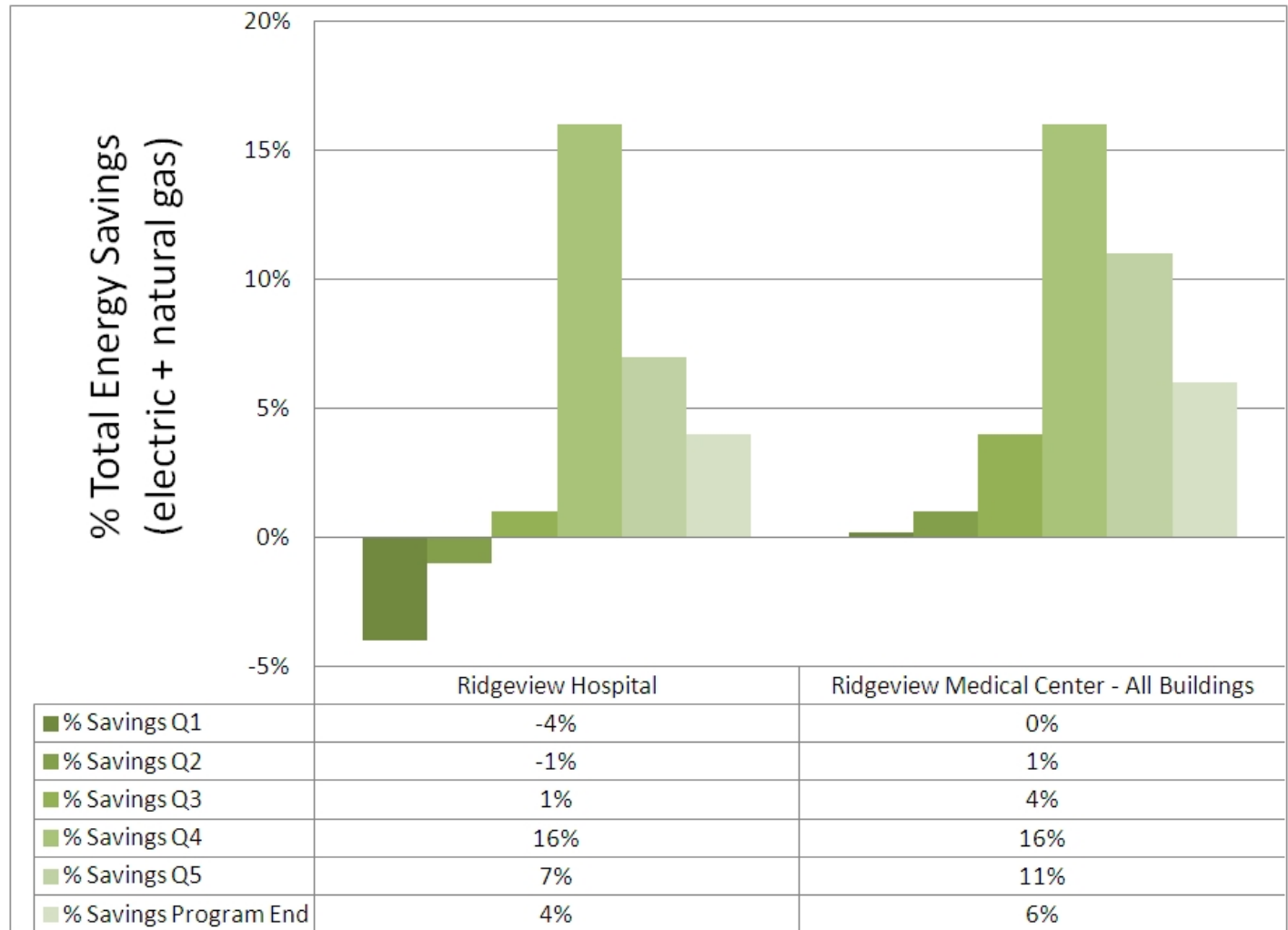
RESULTS

15 months

6% reduction
in energy use

\$75,000 in
energy cost
avoidance

No asset
projects



HUMAN APPROACH

- Securing leadership support
- Identifying internal coordinator/core team
- Facility-wide Energy Steering Committee
- All-facility public kick-off
- Network of peer champions (44 EPAs!)
- Tracking employee suggestions and providing feedback on implementation status

COMMUNICATE AND CELEBRATE!

- Progress updates on RMC's intranet
- All staff emails from leadership
- Presentations at staff meetings
- Messages on paystubs and time clocks
- Treats!



SURVEY RESULTS

Nearly 400 of RMC's 1,575 employees responded to a survey asking how the program affected their attitudes and behaviors:

- 89% are more likely to engage in energy saving behavior
- 83% have a more positive attitude toward saving energy
- 91% learned that individuals can have an impact on organizational energy costs
- 94% would be willing to submit an energy saving idea to their department if they had one

SURVEY RESULTS

“Was amazing how much energy departments saved when everyone did a little.”

“Learning about energy use has helped me become more aware of my surroundings at work as well as noticing how it affects my personal life. I’ve been able to cut my own energy bill as well!”

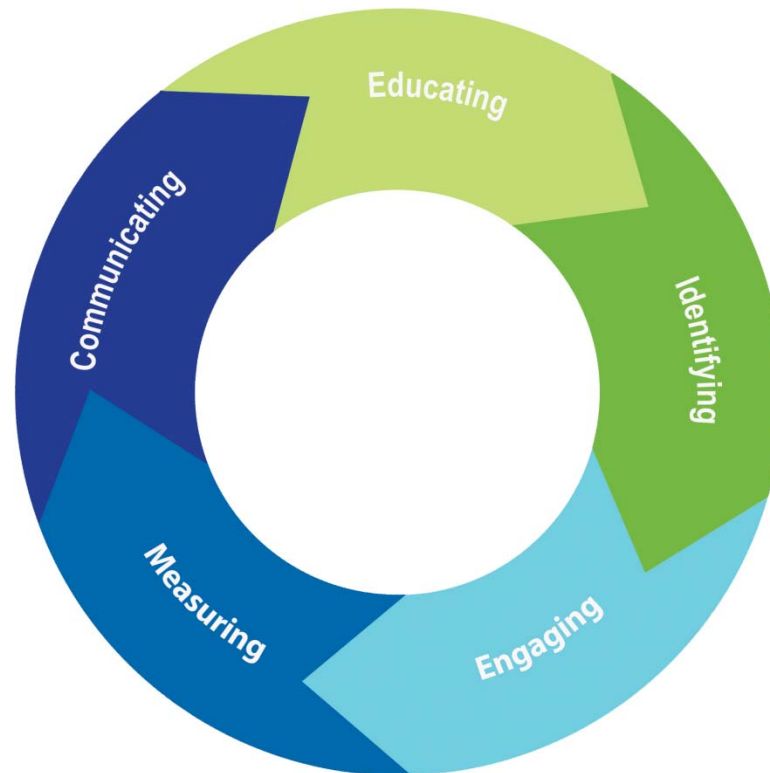
“Great program with impressive results! I like the updates on RidgeNet letting us all know the positive impact we've had on the organization's energy use.”

“I use a lot of energy saving techniques at home and was grateful for the chance to implement them at work to help cut waste and as a recognized effort by RMC to be more efficient.

THANK YOU!”

KEYS TO SUCCESS

- Senior Leadership Support
- Unified culture (notable at RMC)



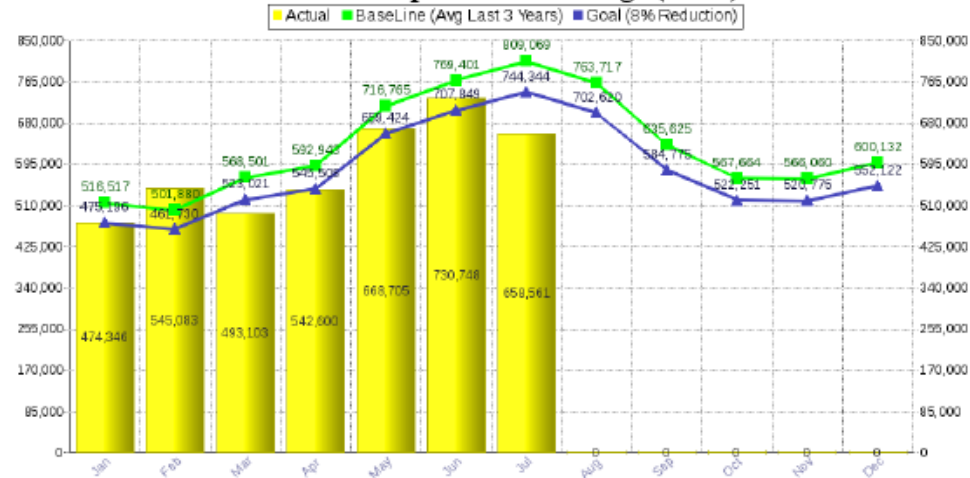
RIDGEVIEW - HOSPITAL

Today

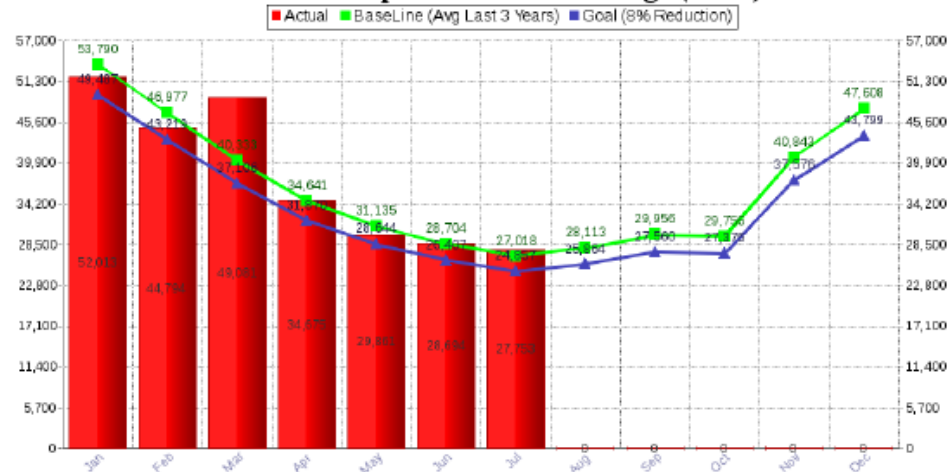
At 8% is
\$93,750 in
energy cost
avoidance
annually

No asset
projects

Main Campus Electric Usage (2013)



Main Campus Natural Gas Usage (2013)



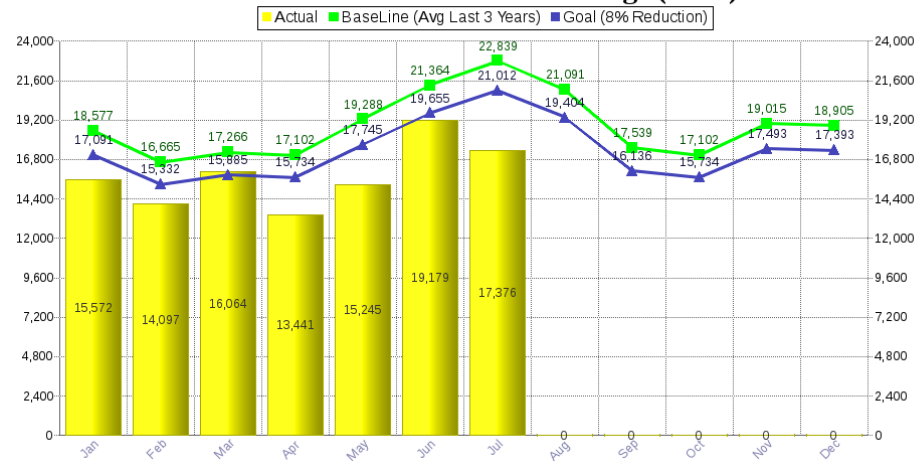
TODAY - CLINICS

Today

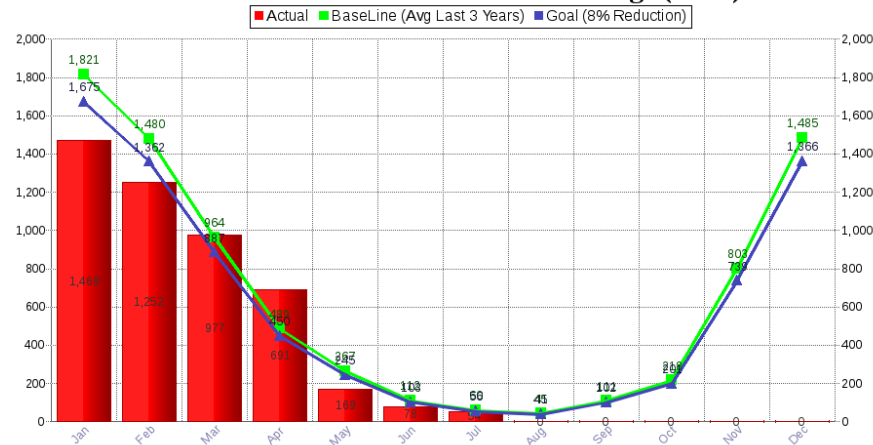
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Chanhasen Clinic Electric Usage (2013)



Chanhasen Clinic Natural Gas Usage (2013)



**How could your
organization benefit from
behavior-based
energy efficiency?**

QUESTIONS



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