

# Implementing a Strategic Energy Management Plan for Health Care

Gary Hall – Regional VP/System Director  
Facilities & Construction Admin  
PeaceHealth

Scott Dorough – Resource Conservation Manager  
St Joseph Hospital, Bellingham, WA

Ron Tolleson – Director of Facilities  
St John Medical Center, Longview, WA



## PEACEHEALTH SYSTEM

- Seven Hospitals
- 1000 Beds
- Oregon Washington Alaska
- System Integration with Regional Deployment



## FCG - Facilities Counterpart Group

- Established 2006
- Oversight of the FCG is through a System lens; a SVP serves as the chairperson for the Committee
- Regional Facility Directors & Support Personnel
- Standardize Polices
- Realize Operational Efficiencies



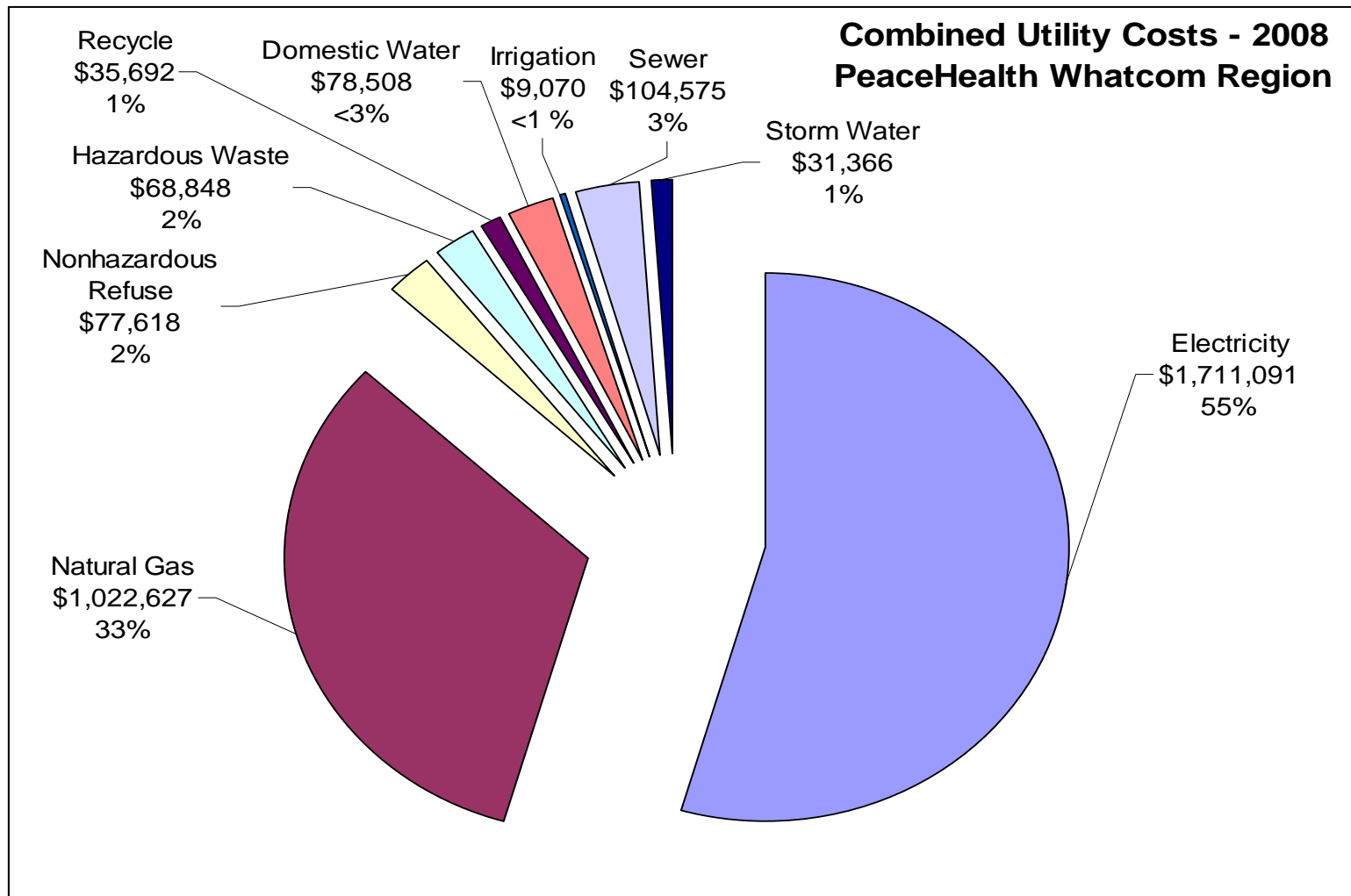
## PH Strategic Energy Management Plan

- Developed in Partnership with Better Bricks
- SEMP Partner - Cynthia Putnam of Putnam Price Consulting, in concert with NW Energy Alliance
- Goal 10% Energy Reduction over Three Years
- Goal \$800,000 Savings Per Year



## Energy Management Vision

Integrate energy management into PeaceHealth organizational policies, business practices, and institutional culture to ensure the most efficient use of energy in our facilities.





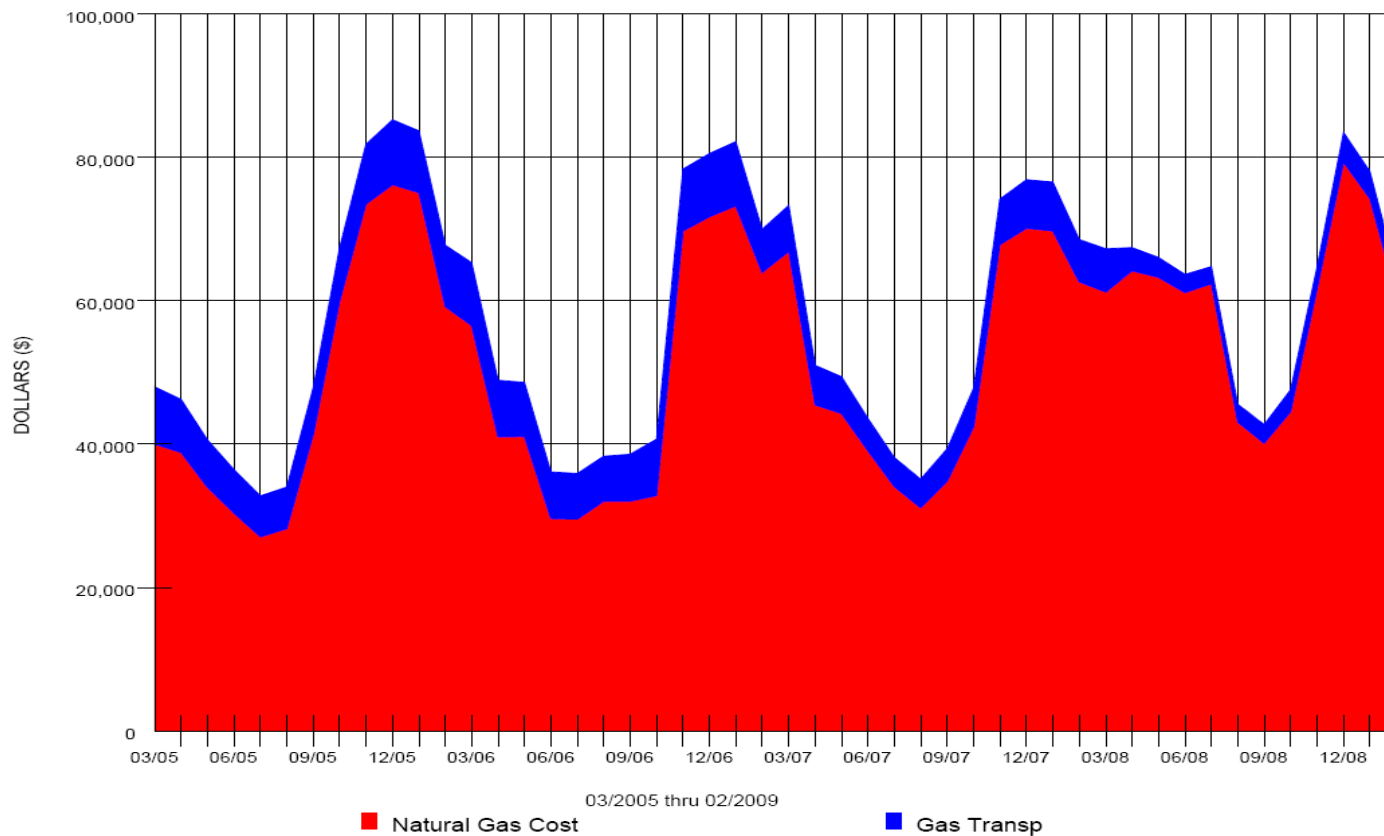
## Overall Plan Objectives

1. Operational Cost Savings
2. Improved Environmental Comfort and Performance
3. Effective Stewardship of Resources

## Rationale for the Plan

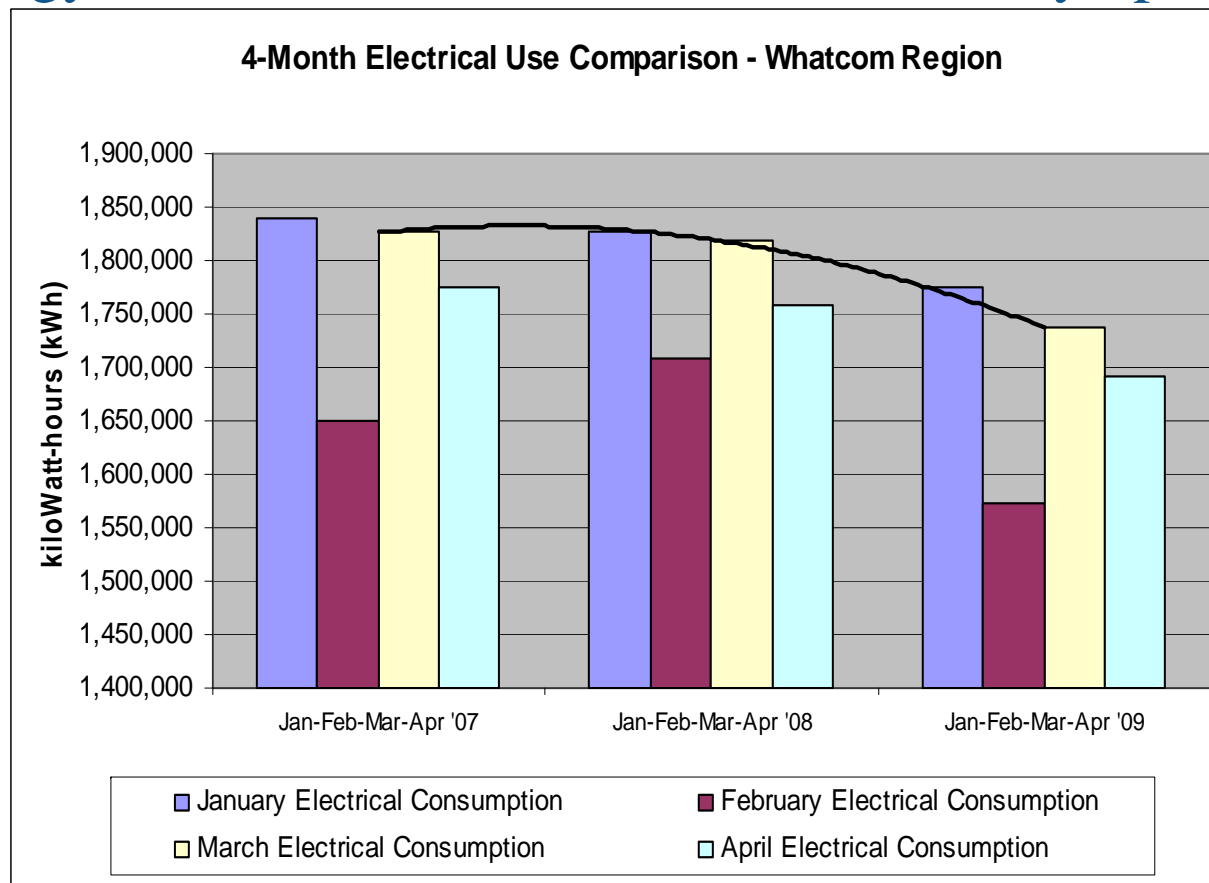
### 1. Minimize risk associated with price volatility.

Natural Gas Cost Breakdown for SJH - Main Campus



## Rationale for the Plan

2. Energy costs are the most controllable facility operating costs.



## Rationale for the Plan

3. Energy cost reductions improve operating margins.

At a 3.5% operating margin:

\$28.57 in revenue is required to net \$1.00



## Rationale for the Plan

4. Energy and environmental performance is being viewed as a strong proxy for management quality.

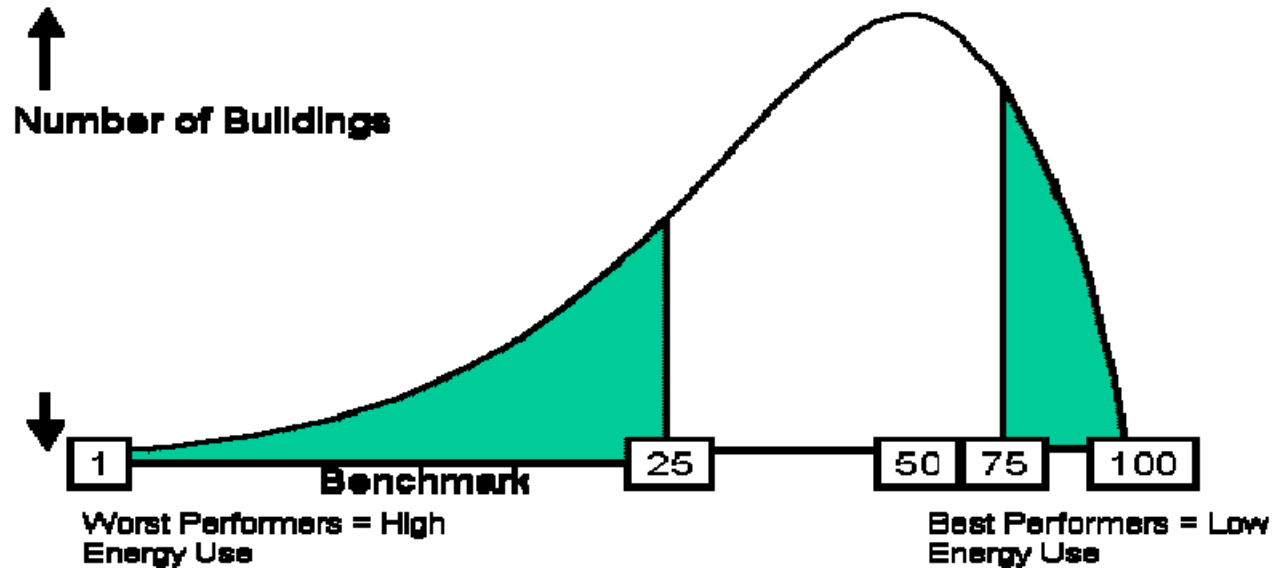
# Sarbanes - Oxley

# Prerequisites

## Energy Benchmarking - ENERGY STAR

### 1 to 100 Benchmark Scale

The benchmark overlays a 1 to 100 scale on the energy performance curve which gives relative meaning to energy use.



## Prerequisites – continued

### O & M Scoping (Operations & Maintenance)

Target low-cost opportunities

10 – 30% Improvement



**PLEASE TURN OFF LIGHTS!**  
**WHEN LEAVING THE ROOM**  
*Help Us Save Energy & Reduce Costs*

 **VISION 2012**  **PeaceHealth**  
*Every PeaceHealth patient will receive safe, evidence-based, compassionate care; every time, every touch.*  
High Value

## Prerequisites – continued

Engineering & Maintenance Staff Training

Building Operator Certification (BOC)

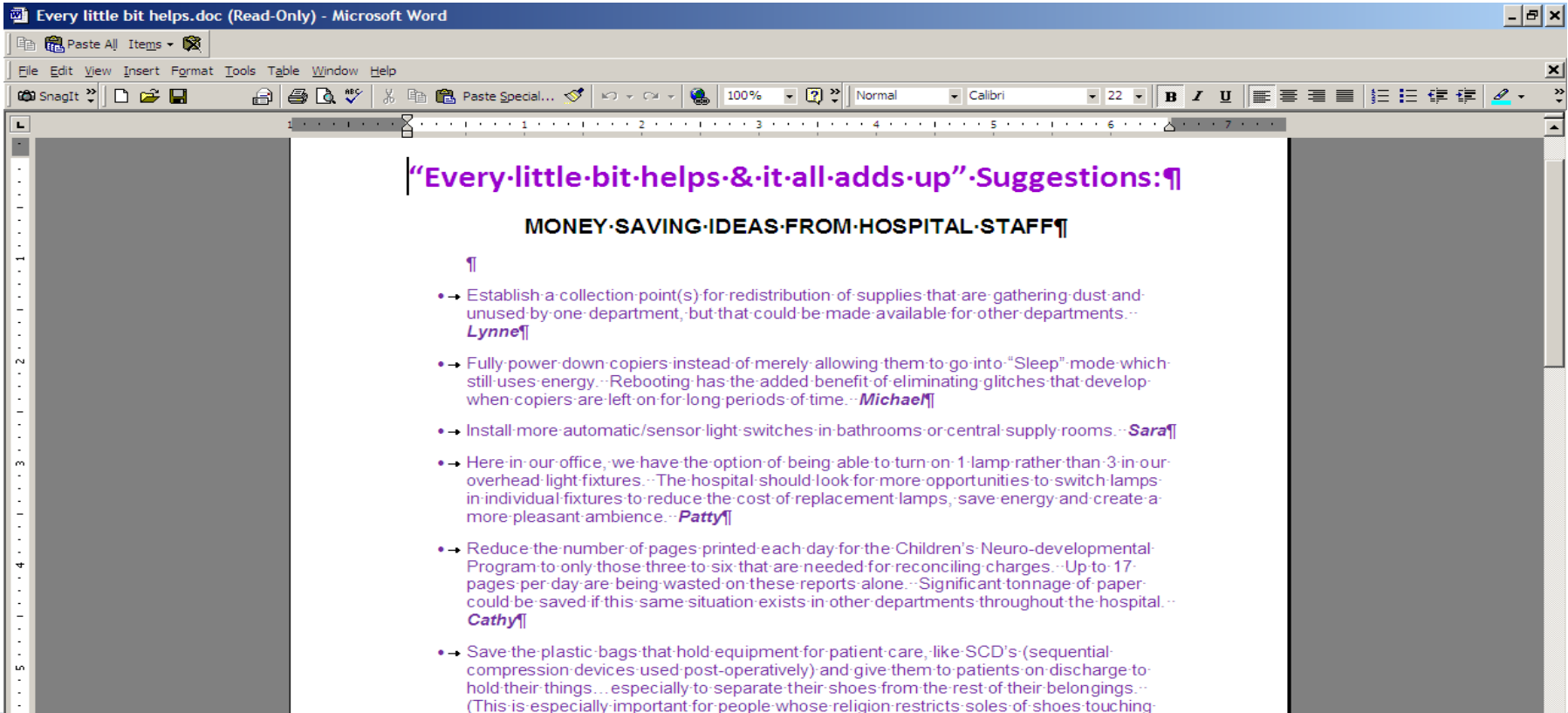
<http://www.theboc.info>



# Prerequisites – continued

## Employee Awareness

### Resource Conservation Management



Every little bit helps & it all adds up" Suggestions:

**MONEY SAVING IDEAS FROM HOSPITAL STAFF**

- Establish a collection point(s) for redistribution of supplies that are gathering dust and unused by one department, but that could be made available for other departments. **Lynne**
- Fully power down copiers instead of merely allowing them to go into "Sleep" mode which still uses energy. Rebooting has the added benefit of eliminating glitches that develop when copiers are left on for long periods of time. **Michael**
- Install more automatic/sensor light switches in bathrooms or central supply rooms. **Sara**
- Here in our office, we have the option of being able to turn on 1 lamp rather than 3 in our overhead light fixtures. The hospital should look for more opportunities to switch lamps in individual fixtures to reduce the cost of replacement lamps, save energy and create a more pleasant ambience. **Patty**
- Reduce the number of pages printed each day for the Children's Neuro-developmental Program to only those three to six that are needed for reconciling charges. Up to 17 pages per day are being wasted on these reports alone. Significant tonnage of paper could be saved if this same situation exists in other departments throughout the hospital. **Cathy**
- Save the plastic bags that hold equipment for patient care, like SCD's (sequential compression devices used post-operatively) and give them to patients on discharge to hold their things... especially to separate their shoes from the rest of their belongings. (This is especially important for people whose religion restricts soles of shoes touching)



## Prerequisites – continued

### Facilities Counterpart Leadership

Collaboration across all PeaceHealth regions

Standardize “Best Practices” system-wide

### Design Team Capability

A & E Services geared toward **GREEN** building

Construction Team knowledgeable with high efficiency materials and equipment



PeaceHealth

# Trends in Healthcare

American Society for Healthcare Engineering  
&  
EPA

ENERGY STAR Challenge

# Trends in Healthcare – continued

## Green Guide for Healthcare - LEED comparable design guide



### Table of Contents

#### Overview

- 1 – Introduction
- 2 – Checklist
- 3 – Credit Summary – Construction
- 4 – Credit Summary – Operations

#### Construction Credits

- 5 – Integrated Design
- 6 – Sustainable Sites
- 7 – Water Efficiency
- 8 – Energy & Atmosphere
- 9 – Materials & Resources
- 10 – Environmental Quality
- 11 – Innovation & Design Process

#### Operations Credits

- 12 – Integrated Operations
- 13 – Transportation Operations
- 14 – Energy Efficiency
- 15 – Water Conservation
- 16 – Chemical Management
- 17 – Waste Management
- 18 – Environmental Services
- 19 – Environmentally Preferable Purchasing
- 20 – Innovation in Operations

#### Release for Public Use

The *Green Guide for Health Care™* (Green Guide) is released for public use in PDF format. All replication in whole or in part must reference the *Green Guide* and include the limitations on its use described herein. The *Green Guide* is an open source document that is provided at no charge for use by the health care design, construction, and facilities management communities. Material contained within the *Green Guide* may not be used by or as part of a for-profit enterprise (for sale or as a component of an educational program) in which attendees are charged fees without the express permission of the *Green Guide for Health Care* Steering Committee.

Version 2.2 is a major revision of the *Green Guide* v2.1 Construction Section and a maintenance release of the Operations section. Published in January 2007.

Copyright © 2003-2007  
www.gghc.org

## Trends in Healthcare – continued

### Other Healthcare Organizations Taking Action

Providence Health and Services

2004 ENERGY STAR Partner of the Year

Catholic Health Initiatives

Central Plant Improvements \$72,000 Annual Savings

Providence Newberg Medical Center

New hospital in Oregon - \$117,000 annual savings beyond  
code requirements

## Guiding Principles

1. Executive and organizational commitment
2. Energy management criteria incorporated into policies and practices
3. All regions will maintain energy performance benchmarks for hospital and medical office building facilities.

## Business Proposition – Opportunities for PeaceHealth

- Conduct energy assessments system wide
- System wide energy reduction goal of 10%
- Establish a consistent financial decision guideline and investment hurdle rate for energy management
- Make a financial commitment of up to \$1.5 million annually to fund cost-effective energy management projects system wide
- Reinvest revenue from energy savings into new energy projects
- Recognize top performers and most improved facilities annually



**Goal**

Obtain Executive Approval

**Accomplishment**

PeaceHealth Executive Team Approved  
Strategic Energy Management Plan  
November 2006



*Goal*

Establish Facilities Counterpart Team as  
“Energy Champion” of PH System

*Accomplishment*

FCT Energy Champions

Scott Dorough – St Joseph Bellingham WA

Ron Tolleson – St John Longview WA

## *Goal*

Establish Financial Criteria

## *Accomplishment*

Life Cycle Costing

Hurdle Rates



*Goal*

Establish Procurement Standards

*Accomplishment*

Partnership with Materials Management

Purchasing Guidelines

GPA Opportunities



*Goal*

Enhance Facility Performance

*Accomplishment*

Facility Assessments

Staff Training

Share Best Practices



*Goal*

Collaborate on Construction & Upgrades

*Accomplishment*

Energy Efficiency Designed Into All  
Projects

*Goal*

Conduct Monitoring & Tracking

*Accomplishment*

Energy Star Portfolio Manager

Utility Manager