

BUILDING THE ARCHITECTURE OF Energy Management at Providence Health and Services

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Over the past 15 years at EPA, we've seen top organizations participating in the ENERGY STAR® program reduce energy costs by 3-10 percent annually. These high performers aren't achieving extraordinary savings by applying special technical knowledge unknown to the rest of the industry. Rather, what they bring into play that is rare among their peers is a structured approach to energy management, policies and procedures to ensure long-term results, and a belief that the job of saving energy is never done.

One organization that embodies these practices is Providence Health and Services, a non-profit healthcare system of 26 hospitals and other facilities in the Pacific Northwest. Providence saved \$2.3 million in energy costs last year and nearly \$3.4 million is predicted for 2006. I recently sat down with Richard Beam, Director of Energy Management Services, to learn how energy management at Providence has evolved over time, the benefits realized so far, and lessons for those wanting to establish their own energy management program.

AUTHOR: You live and work in an area that has the cheapest energy prices in the country. Why did Providence decide energy management was worth pursuing?

BEAM: True, hydro-electric dams provide over half the power to many of our facilities and it is still cheaper than fossil fuel plants. Energy is 1% of net operating costs for us, system-wide. But what makes energy management worth pursuing is when you look at the facility level. Typically, our operations budget is broken down as follows: Out of every dollar, 67 cents goes to utilities, 13 cents to water/sewer, 6 cents to supplies, and 14 cents to salaries. When the administration asks us to look for savings, the place with the most potential is clearly utilities. The second is salaries. In many respects, saving energy helps us to save our jobs.



AUTHOR: Is there anything else driving energy management besides dollars?

BEAM: Being a faith-based healthcare system means we take seriously the charge of being good stewards. It's one of the core values in our mission statement. In fact, we align our efforts with the Second Catholic Encyclical by Pope John Paul which calls

for holding precious resources in trust. It's up to us to use them wisely. Another driving force within Providence is the sustainability movement. We have many committees where participation at the grassroots level is very strong. We are very proud to be acknowledged by the EPA for our ENERGY STAR qualified facilities. We're also thrilled that our Providence Newburg facility is rated the first "LEED Gold" hospital in the country by the U.S. Green Buildings Council. Incidentally, Providence Newburg will be powered by 100% renewable energy that will come from a Washington State wind farm.

AUTHOR: Energy management at Providence has gone through some extensive changes over time. For instance, you just established a new Energy Management Services department. How was energy managed before its creation and what was the catalyst for creating the department?

BEAM: We managed energy at the facility level in the old days. Most COOs considered energy to be part of the cost of doing business so there was very little push to contain it. Facility directors juggled many other demands and rarely had time to tackle energy management. In 1997, we got our first call to conserve when our President challenged us to save energy as a way to uphold our core value of stewardship. We joined ENERGY STAR to learn best practices, began using the ENERGY STAR Buildings Manual for technical guidance and EPA's national rating system to track and manage energy performance. Our turning point came in 2003. That year, our combined savings in energy was equivalent to more

than \$28 million in new business. After Providence was named ENERGY STAR's Partner of the Year in 2004, I started getting calls from CEOs across the system who wanted to know how they could increase energy savings. I used the award to further articulate the value of taking this program to the next level and soon after, I was invited by the system CFOs to make the business case for a formal office.

AUTHOR: What did you tell your CFOs? How much savings will your department uncover?

BEAM: I told our CFOs that I believed we could mine an additional \$15 million in energy savings over five years. And we've been doing it. We're finding an average of \$3 million in savings per year, systemwide. I should mention an agreement I have with upper management—I will only report the compound effect of energy savings for the past three years. After three years, those savings are no longer counted on paper. Even so, I'm confident there are more than enough opportunities to meet my savings goal.

Author: Are you concerned that competition with other investments may hinder funding for your projects?

BEAM: Not at all. Management has assured me that as long as I can show an internal rate of return of 20% or better, I can run it through the normal channels to get it approved. Let's say I have identified a conservation package for a particular facility. I approach that local facility for funding first. If they can only partially fund it, then I go to the Regional or headquarters level to make up the difference. Funding is almost always there. Only one project has been denied in the past two years.

AUTHOR: I understand you use a non-traditional financial metric to show the value of energy savings. Can you explain what that is and how you use it?

BEAM: Senior leadership at Providence has set a goal for each hospital to produce a 6% net operating margin each year. That will help facilities sustain themselves and provide sizable funds for charitable giving. So every revenue-generating department in the hospital shows their value by contributing to the margin. But how does a non-revenue generating department like facility operations contribute? We show our value by translating our savings into revenue equivalents. We all know energy savings is bottom line profit. It means we didn't have to generate revenue to create it. If a hospital is currently at 2% net operating margin, then that means for every \$50 in revenue, we're contributing \$1 to the margin. So if our facility operations department saves \$50,000 in energy

over a year, that means we didn't have to raise \$2.5 million in revenues to create that profit. Or we can say we generated the equivalent of \$2.5 million dollars. Admittedly, this is creative, but it helps us get in the game with the rest of the departments and shows how facility operations can make a positive contribution to the mission, rather than being viewed as just a cost.

AUTHOR: How do you work with the facility managers in your system?


BEAM: It's my job to empower facility managers with the tools necessary to identify inefficiencies and take action. I deliver what I call my "Wolf at the Door" presentation that helps facility managers recognize that vendors are knocking on the doors of CFOs, talking in financial terms, and selling energy management services that could potentially cost facility managers their jobs. There is an urgency to address savings opportunities, to speak of these investments in the language that CFOs understand. I want to help show the value of our facility managers and I'm proud to say that everyone is in the same boat and everyone is pulling their oar in energy management.

AUTHOR: How do you decide which hospitals in the system get priority attention?

BEAM: We track the energy performance of our facilities in ENERGY STAR's Portfolio Manager and compare the ratings. Those that rate lower on the 1-100 scale have the best opportunities for cost-effective investments. Since Portfolio Manager allows for monthly ratings, we contracted with our bill handling service, Advantage IQ (formerly known as Avista Advantage), to provide us with automated benchmarks, twelve times a year. We receive ratings on all our acute care hospitals, many MOB's, offices, and warehouses. Frequent ratings tell us how well our energy initiatives are working. We can literally track the effectiveness of our projects by seeing how much the rating climbs each month.

AUTHOR: What advice would you give to someone who is considering creating their own Energy Services Department?

BEAM: Facility managers need to go right to the top. CEOs set the tone and the culture of the organization. They need to help you articulate the value of energy management to the rest of the organization and give everyone permission to turn out the light after leaving the room. Our President and CEO, Dr. John Koster, has been immensely helpful in transforming our culture at Providence. We could not have accomplished the progress we have made without his vision and support.

Senior leadership needs to understand the value of energy saved. Energy is not the cost of doing business. It's not overhead. It can be controlled and it does bring value to the corporate bottom line. To do energy management right, you need to make it a bonafide program within the organization. Get your energy management plan in writing and establish financial and other goals. As someone who has found immense value in EPA's ENERGY STAR program, I have to say "join it". Use their free tools. Set yearly targets in Portfolio Manager (EPA's rating system) and shoot for earning the ENERGY STAR in all your facilities. Providence is not there yet, but it's a standard of excellence we aim for every day we walk into work. 

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