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Energy Efficiency Market Transformation and Lasting Impact

The healthcare sector uses 836 trillion BTUs of energy annually and is fertile ground for a market transformation initiative that promotes sustained adoption of energy-efficient business practices. While healthcare systems and hospitals have embraced one-off energy efficiency projects that have a cost reduction value proposition, it is historically challenging to stimulate broad organizational commitment to the Strategic Energy Management (SEM) processes needed to achieve significant energy savings and market shift behavior.

SEM is the integration of energy management into standard business practices using a continuous improvement approach to manage energy performance, based on classic Plan-Do-Check-Act methodologies. It uses a comprehensive set of business tools and practices that enable hospitals to reduce energy consumption maximize resource efficiency, and lower costs. SEM programs encourage a broad set of activities, such as senior management commitment, energy assessments, employment of energy managers, goal setting, energy monitoring, implementation of activities and projects, employee/occupant engagement, and management review.

The Northwest Energy Efficiency Alliance (NEEA) implemented a 10-year market transformation initiative to increase awareness and facilitate adoption of SEM at hospitals and healthcare systems in the Northwest. A primary barrier hospitals faced in adopting SEM is the lack of awareness of how energy efficiency supports the goals of healthcare institutions and the perception that it does not have the return on investment necessary to justify the time and organizational resources needed to support it. With this initiative, NEEA sought to change the way healthcare systems and hospitals view energy management and integrate energy consciousness into their habits, practices, and planning.

This whitepaper reviews the approach NEEA implemented to achieve market transformation, the importance of gaining and maintaining executive commitment in to long-term energy efficiency practices, and the lasting impact of the initiative on the healthcare sector in the Northwest and nationally.

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High Performance Hospital Partnership Overview

In 2003 NEEA started the High Performance Hospital Partnership initiative, one of three high-priority initiatives created to more effectively engage the commercial sector. NEEA believed the characteristics and circumstances of the healthcare industry provided a unique opportunity to effect long-term, comprehensive changes in the sector's energy business practices. This regional SEM initiative targeted large northwest hospital systems, representing 27 percent of regional hospital capacity, and sought to achieve the following goals:

- Make energy efficiency an integral part of hospital system decision-making
- Shift thinking about energy efficiency in the healthcare sector by increasing demand for energy efficiency solutions
- Increase awareness of high performance buildings in the healthcare marketplace
- Provide tools, resources and training to architects, engineers, and trade allies to enable SEM across the healthcare sector

The initiative addressed barriers such as lack of awareness of the business case for energy efficiency, and provided knowledge, expertise and market-based services to support energy efficiency projects. To execute and support the initiative goals, NEEA selected a team of business and technical specialists and coordinated with local utilities; this team identified healthcare systems, along with state associations for hospital executives and engineers, with the greatest potential for energy savings and impact and began to solicit their participation in the program. In this paper, we will demonstrate how NEEA, through this initiative and collaboration, engaged with hospital systems and local utilities to successfully develop and implement SEM plans and a comprehensive, integrated approach to energy efficiency.

Understanding the Healthcare Industry and the Barriers

In this section, we present the barriers associated with integrating energy efficiency and SEM into the healthcare system, including the perceived incongruence between energy efficiency and healthcare goals, the relatively small line item energy costs represent in a healthcare organization's budget, and timelines associated with capital project planning.

Healthcare organizations focus on the health of their patients: their core mission is to offer the best possible healthcare to their community. This goal is not traditionally seen as aligned with energy efficiency; as such, energy efficiency does not often garner significant attention or support from executives or senior leadership. In fact, in many cases, projects or budgetary items with more perceived alignment with this core mission, such as funding for an advanced MRI machine and the corresponding benefit of potential improvement to patient care, compete directly with SEM projects.

Another barrier associated with energy efficiency and SEM adoption in this industry is the return on investment timeline associated with SEM projects: energy projects may take three to five years to pay for themselves while a new MRI machine is perceived to benefit a hospital the moment it is plugged in. Keeping in mind that healthcare is an expensive industry where energy use often accounts for only 2 percent of a total budget, these timelines and return on investments often delay specific commitments to energy efficiency.

Further, it is also important to understand the way in which healthcare systems and hospitals carefully plan and implement projects, often moving more slowly than many industries due to clinical considerations and regulatory processes. For instance, a proposal to upgrade an air-handling system must not only involve the facilities manag-

> "It was not an issue convincing them that there was good benefit, but that the size of the prize was worth the long term commitment."
>
> – NEEA Consultant Ray Crerand, former Providence Health and Services CEO

ers, planners, and the financing department, but also take into account infection control and patient care. If new construction is added to an existing facility, architects, engineers, and contractors must be brought in to make sure existing construction and systems are compatible with new construction and systems. This cautious approach esults in lengthy timelines associated with substantial and systematic energy efficiency changes, as well as impacting how the project is perceived and integrated into operations, maintenance, planning and behavior.

Compounding all of this is the risk adverse nature of the healthcare industry. Hospitals and healthcare systems are heavily regulated and focused on patient care and outcomes; they don't want to break administrative rules or lose a certification that could shut down their services. To successfully get the attention of executives and win their support, you have to present a meaningful argument that addresses the existing concerns and goals of their industry and organization. While it is often easy to get support for the idea of energy efficiency, it is more difficult to achieve large-scale, institutional change in this environment.

As such, trying something new, such as SEM, is viewed as risky—especially for early adopters. While many in the healthcare sector had completed a single, ad-hoc energy project, the idea of a comprehensive approach was new. When NEEA began this initiative, no healthcare system in the United States had implemented a strategic energy management effort; in order to successfully make inroads with healthcare systems, NEEA needed a plan.

> "You can't expect to walk in, and in two years make a ton of change. It takes time."
>
> – NEEA Consultant Ray Crerand, former Providence Health and Services CEO

Achieving System-Wide Change in a Complex Environment

NEEA planned to foster a marketplace transformation in the healthcare industry. From healthcare systems, they wanted demand for energy efficiency to increase; on the supply side NEEA wanted expertise, processes and tools to be accessible for healthcare organizations that chose to pursue a comprehensive approach to energy efficiency.

Drawing upon their expertise across industrial and commercial sectors, NEEA understood that a diverse group of consultants, utility partners, and healthcare workers with differing perspectives on energy would have to work together to implement successful projects and embed strategic energy management into healthcare organizations. Energy consultants would measure and audit energy use, as well as provide scoping reports with ideas for energy projects. Architects and designers learned new ways to build structures to optimize energy efficiency by reducing the impact of solar load, using more efficient comfort delivery systems, and reducing energy waste by utilizing lighting and HVAC sensors. Utilities participated in project planning, provided subject matter expertise, and in some cases provided monetary incentives for energy efficiency projects. In short, NEEA supplied the marketplace with all of the tools healthcare executives needed to evaluate how energy efficiency aligned with their goals and how to plan for these projects.

Increasing demand for energy efficiency is also challenging: to successfully implement SEM, healthcare facilities managers and operations staff needed to commit to a comprehensive approach to energy efficiency and an individual within their organization (an energy champion) needed to create awareness and momentum to make SEM a priority. Further, this harnessed human capital and project management also needed to align with the core mission of the health system—to provide excellent patient care and service. To ensure this type of result and recruit facility managers and operations staff, NEEA sought commitment and support from executive-level management by creating a Strategic Energy Management Plan (SEMP) at each prospective healthcare

organization. The SEMP set energy efficiency goals for the entire organization, integrating energy efficiency into all aspects of operations. Next, NEEA sought commitment from executives at each healthcare system to adopt the SEMP and implement energy projects. To earn this executive level support for an SEMP, NEEA recognized the case for energy efficiency would need to reach beyond cost savings and include a compelling argument that energy efficiency and SEM specifically aligned with the core mission of the healthcare system.

Setting the Stage

The first step in making the business case to executives in the healthcare industry is setting up a meeting to present your plan; to facilitate these meetings, NEEA teamed up with Ray Crerand, a prominent figure in hospital management in the Northwest. Mr. Crerand is a former CEO of Providence Everett Medical Center and past chair of the Washington State Hospital Association; his credentials and contacts helped facilitate many introductions. Simultaneously, NEEA staff leveraged contacts within the healthcare organizations as internal advocates who could facilitate a meeting with the CEO and share their personal interest in energy efficiency; these internal champions were often executives who had a connection with the targeted decision maker, or even architects, engineers, or contractors with connections to the executive team.

When conducting these meetings, it is critical to frame a sound argument for energy efficiency, starting with ensuring an understanding of SEM. It is essential to distance SEM from the perception that using less energy results in less capability, and clarify that SEM allows for the same level of operation using less energy. One way to explain this point is to ask the executive what activities are not in place at their organization, but if implemented, could save energy.

Making the Business Case

Remember that each healthcare system, each case, and each executive is unique: the only way to make a compelling case for SEM is to appeal to the individual institution and its motivations. For example, some CEOs are cost-conscious and revenue focused, especially in an industry with high expenses and low profit margins: demonstrating the relationship between cost savings and energy savings could compel them. For example, $100,000 of savings might be the equivalent of $2 million in new revenue; translating cost savings to revenue equivalencies was an eye-opener from some revenue focused executives, allowing them to see SEM projects at the same level of value as other budgetary priorities. This placed SEM projects on par with other capital-intensive projects.

In other instances, sustainability was the more compelling argument: by presenting energy efficiency as a community responsibility and good stewardship, it's possible to illuminate the alignment between the core mission of the healthcare industry and the value proposition of SEM. Improving the health of patients and the community directly aligns with the core mission of healthcare systems.

In other cases, it was beneficial to identify internal motivations, such as the competitive nature of a CEO, and position SEM as an opportunity to differentiate their organization from industry rivals. Still other executives were compelled by the perception of their own legacy in this time of climate change. With energy management gaining interest in many outside industries, mapping SEM projects to positive action toward corporate social responsibility was motivating for many healthcare leaders. Finally, identify-

> "Translating energy costs savings to revenue equivalencies – that's a big deal that allows you to compete with a new MRI machine."
>
> – NEEA Consultant Stan Price, The Putnam Price Group, Inc.

ing other benefit streams such as improved indoor environmental quality resulting in increased patient comfort and better staff retention may also be a motivator.

With these narratives in mind, NEEA supported each business case by sharing data, demonstrating cost savings, and projecting payback timeframes. Many healthcare systems can achieve up to 20 percent energy cost reduction; in some cases, such as large facilities or integrated medical campuses, there is even more potential. Hospitals also worked with their utilities to align incentives and offset project costs. Using these carefully crafted business cases, NEEA made SEM projects more attractive and helped solidify executive sponsorship, clearing the way for SEM projects to be green-lighted.

The Need for Executive Commitment

In most organizations, resource allocation is a function of the senior leadership team. Where there are numerous competing budget priorities, the decision to invest in energy projects requires support from senior leadership. This is especially true for projects that have longer running, multi-year payback, as well as for NEEA's initiative, which sought to change long-term perceptions, habits, and thought processes around energy management.

> "If commitment is not there, things fall apart, and don't progress."
>
> – Kathleen Belkhayat, CSBA, Business Sector Project Manager, Energy Trust of Oregon

One of the early goals in NEEA's initiative was to broaden the profile of energy efficiency work completed by facilities managers and others, and to explain the importance of that work to senior leadership. In the past, utilities and energy market actors often worked with hospital and healthcare facilities managers on individual energy projects. Energy is a large part of a facilities manager's budget and they are constantly seeking ways to cut costs; this led to many successful energy saving projects, but most facilities managers were not part of the executive team or connected to institutional governance and could not tout their results or leverage them for long-term efforts. Executives are uniquely positioned to lead comprehensive change within an organization, to look at energy projects through an opportunistic lens, and to integrate energy efficiency into all aspects of operations, maintenance, and new construction.

By connecting energy efficiency to executive and institutional goals, energy efficiency is no longer solely the concern of a facilities manager and becomes part of the institution's priorities and mission, thus leveling the budgetary playing field and allowing energy projects to compete with other high profile budget items. Similarly, when an executive endorses and promotes an SEMP, and creates an energy policy, then SEM key performance indicators (KPIs) are tracked, documented, and reported. This reinforces the importance of the projects, maintains accountability for SEM initiatives throughout the organization, and creates a culture shift related to energy efficiency consciousness.

Embracing Different Levels of Commitment

Unique motivations and priorities at each institution result in different levels of commitment; as such NEEA adapted their approach and strategy based on the interest expressed by each executive. Some executives were enthusiastic, immediately understanding the value offered by SEM. In these instances, NEEA could quickly earn docu-

> "We typically see potential for a 10-20 percent cost reduction, especially when strategic energy management (SEM) initiatives have been championed at the executive management levels."
>
> – NEEA Consultant Mike Hatten, Principal at SOLARC Architecture and Engineering, Inc.

> "We tried to broaden the profile of energy projects and increase the impact on the C-suite."
>
> – NEEA Consultant Ray Crerand, former Providence Health and Services CEO

mented commitments, set energy targets, and assign roles and responsibilities. The executive sponsor became their internal advocate.

Other executives preferred a staged approach, adopting a "try before you buy" philosophy. This typically involved a commitment to collect data, assessment of these findings, and a cost benefit analysis before they would commit to larger projects. In these scenarios, NEEA focused on identifying the strongest case for SEM from the initial analysis; this often involved helping facilities managers identify systems for monitoring and data collection for the initial study. NEEA collaborated with energy consultants, engineers, architects, and utilities for data, case studies, and incentives to facilitate the strongest possible case for the cost benefit analysis. Further, once activities were underway, NEEA identified internal resources to become energy advocates and raise awareness inside the organization, including up to the executive level.

"You might get a little nibble, a commitment to do some investigation and present your findings to the executive team. Then they would formalize their commitment."

– NEEA Consultant Cynthia Putnam, The Putnam Price Group, Inc.

"SEM success in the market is generally about gaining and sustaining a small level of momentum so that they continue to improve overall performance with time."

– NEEA Consultant Jim Volkman, Strategic Energy Group

Connecting Executives to SEM Takes Perseverance

In all cases, perseverance was critical to achieving initiative success and to keeping SEM at the forefront of operations, maintenance, and energy saving discussions with executive level market actors. NEEA sought to change habits, thinking, and actions around energy use—to create long-lasting, system-wide change, but perceptions and processes don't change quickly, especially in the healthcare sector. Each organization is unique and can only absorb a certain amount of change at any given time. NEEA had to understand the organizations they were working with as well as the science of organizational change. They had to dig in, and be patient while also maintaining communications with existing and new executives and maintain a connection and intensity surrounding ongoing SEM initiatives and new opportunities.

"It takes creativity and guile. Walking a fine line between annoying people and being endearing through commitment."

– NEEA Consultant Stan Price, The Putnam Price Group, Inc.

To facilitate this, NEEA relied heavily on accountability and reporting as a key to keeping executives updated, involved, and enthusiastic about SEM initiatives. SEM projects generally require a large commitment from staff; executives need to see progress towards established goals and targets in order to maintain that level of commitment. Similarly, gains made through system-wide changes are important to document in order to socialize the return on their investment and justify continued support for ongoing or new SEM projects amongst executives. Quarterly progress reports using the

institution's existing reporting cadences and formats are an effective approach. In the NEEA initiative, the progress shown in these reports allowed ongoing SEM projects to continue and often resulted in approval for new projects.

Integrating accountability for SEM projects and reporting results is also key to facilitating a culture shift in an organization, especially where SEM operations and maintenance project benefits are not immediately apparent or where it may be harder to capture savings. Part of the value of a SEMP is that it harnesses top-down valuation and becomes embedded in an organization's philosophy, ideally surviving shifts in mission priorities, differing departmental visions, and changes in key personnel. Accountability and reporting facilitates this culture shift inside of an organization and helps the SEM plan become a living document that will endure changes.

Finally, even in reporting, it is critical to tie SEM successes back to core values and messages that resonate with each executive, board, or institution. This creates a full-circle understanding of the value of SEM and speaks to individual motivations, ensuring project longevity.

"In one case, when the executive sponsor left, the board decided to hire a sustainability manager because they felt sustainability fit their core mission."

– NEEA Consultant Cynthia Putnam, The Putnam Price Group, Inc.

Big Wins Are Possible: SEM Success Stories

Swedish Hospital

With strong commitment, good partnerships and hard work, significant initiative wins are possible. One example is Swedish Hospital in Issaquah, Washington, which is served by Puget Sound Energy. It was the first new Greenfield hospital project in King County in 25 years, totaling 585,000 square feet. Swedish executives set the target energy use for the new facility at 150 KBTU/SF/YR, a very aggressive goal considering most hospitals use 230 KBTU/SF/YR.

Architects and designers met with staff to design the facility and plan energy savings based on usage patterns and service needs. Engineers and utility consultants worked to model savings for various system components to find those that work best for the facility and provide the energy savings needed; they also found grants to offset project costs. One such measure was an advanced heat recovery system that captured and reused large amounts of waste heat. Finally, PSE-funded, third party commissioning that executed careful planning, validated systems, and ensured energy savings were accurate—helping to ease operations from the start. These factors added time and effort to an already lengthy construction project that was subject to the same types of time pressures, and budgetary requirements inherent in any large construction project. In the case of the Swedish Hospital in Issaquah, this barrier was addressed because executive commitment to the target goal of 150 KBTU/SF/YR ensured energy efficiency requirements were addressed through the construction process and strengthened their commitment to this long-term process. Through NEEA's partnership, support from Puget Sound Energy, and hard work on the Swedish executive and operations team, Swedish is saving now $600,000 a year in energy costs.

PeaceHealth

PeaceHealth, a healthcare system spanning communities in Oregon, Washington and Alaska, also saw big energy savings. In 2007, PeaceHealth developed a three-year strategic energy management plan. Hospital-level and system-level facility managers surveyed buildings to determine that energy use could be reduced by 10 percent via incremental efforts over three years, generating $900,000 in savings annually. Much of this was done through retro commissioning, or taking existing systems and putting

them back into fine-tuned operating mode. The focus on SEM was championed by Medrice Coluccio, Lower Columbia Region CEO, who took on the role of facilities and planning functional manager for PeaceHealth. Through her leadership, SEM became a key component of facilities planning.

Legacy Health

SEM also helped Legacy Health in Oregon find potential energy savings. Legacy Health initially worked with NEEA to establish a SEM program, and later transitioned into a highly successful SEM cohort with Energy Trust of Oregon. Energy efficiency is a central element supporting Legacy's core mission—quality of patient care, environmental stewardship and progressive action. Legacy initiated Energy Star benchmarking studies permitting its facilities mangers to understand and compare current energy use across campuses and create a comprehensive list of specific action items that could reduce annual energy use and maintenance costs, while increasing system reliability and control. The total opportunities identified represent 23 million kWh savings or $1.3 million if fully implemented. This resulted in recognition from senior leaders and lasting partnerships with organizations like Energy Trust of Oregon, which offered significantly larger incentives because of Legacy's across-system, strategic approach, including incentives that paid for two years of measures in 2007 resulting in ongoing energy savings in excess of $1 million over the life of the measures.

Kalispell Regional Medical Center

Kalispell Regional Medical Center (KRMC) also focused on operations and maintenance to achieve energy savings and implemented a number of energy efficiency optimizations at their facility. These measures included scheduling air handlers to turn off in unoccupied areas during nights and weekends, cleaning air flow sensors to restore accuracy resulting in slower fan speeds, lowering differential pressure set points of both hot and chilled water loops for better efficiency, programming Variable Air Volume (VAV) boxes to close or go to minimum flow when the areas served are unoccupied, and reworking boiler controls to improve sequencing and improve combustion efficiency. In addition, KRMC installed a Building Automation System (BAS) to better control building energy consumption and reliability rates.

But perhaps the biggest testament to this initiative and the resulting relationships came when KRMC broke ground on a new, state-of-the-art, three-story surgical tower designed in 2011. In keeping with the goal of implementing enhanced design and construction practices set out in KRMC's own SEMP, KRMC and energy industry partners worked closely on this new project. Because KRMC built a close working relationship these partners, KRMC felt comfortable working with utility experts and energy efficiency aware architects, designers, and consultants.

By participating in design charrettes, several energy conservation measures (ECMs) were identified for the new tower. But there was a problem: the ECMs recommended drove the cost of the project beyond KRMC's budget. The local utility, Flathead Electric Cooperative, realized that if KRMC did not implement those ECMs, the utility would have to spend a significant amount of money to increase their energy capacity. Not only would implementing the ECMs save money for KRMC, they would also save money for Flathead. Flathead came up with an innovative solution. They offered KRMC a $1.2 million dollar, low-interest loan to facilitate implementation of the ECMs. Working together, this team identified potential savings, and overcame significant barriers to implement energy conservation measures. The outcome was a win for everyone involved.

Through its commitment to Strategic Energy Management, KRMC reduced operating

costs for existing facilities by an average of 25 percent over five years. The SEM initiative also reduced their Energy Use Index (EUI) from 263,000 BTU/sf to 197,000 BTU/sf by 2014 Over that same period, they improved their ENERGYSTAR rating from 27 to 64 from 2007 to 2014.

Benefits Beyond Savings

For the healthcare systems and hospitals that have implemented SEM, benefits extend beyond cost savings. In facilities where heating and cooling are optimized, patients and staff are more comfortable: improved lighting provides a better workplace and care facility. For these systems, a healthier bottom line helps ensure more funding for new medical equipment and services. Additionally, many facilities have achieved recognition for their efforts, projecting a reputation as leaders in energy efficiency in the healthcare sector, and as good stewards of the environment in their communities.

Lasting Impact

NEEA's hospitals initiative changed perceptions and knowledge about energy efficiency in the healthcare sector, in part due to the notoriety that hospitals and healthcare systems have received from energy efficiency efforts. Where energy was once considered a fixed cost, now many healthcare CFOs view energy as a managed cost. Understanding energy efficiency issues and acceptance of energy-efficient practices has filtered down to key players across all levels of healthcare systems. For healthcare systems that have embraced SEM, there is a focus on seeking opportunities to implement new efficiencies in equipment, capital purchases, operations and maintenance.

"Healthcare organizations have evidence that this stuff works. They can reduce costs by engaging in SEM. More than that, they know how they got there, and how to continue. This has created a track record for who are just starting. The roadmap is now known."

– Mike Hatten, Energy+Architectural Consulting

Energy efficiency awareness has changed significantly in the healthcare sector. This is likely due to a number of factors including the growing message and value propositions for energy efficiency by utilities, elected officials, and the general public. It is also almost certainly due in part to the persistent outreach NEEA implemented in this sector while making the business case for energy efficiency. Over the course of the NEEA initiative, healthcare facilities managers became more skilled at articulating the case for energy management to their financial leadership. In addition, the ability to optimize energy efficiency through maintenance and operation improvements gives hospital facility staff tools for improvement even where capital isn't available. Today, better energy

"Energy efficient design provides more than being a good steward of the environment. Infectious disease practitioners have accepted energy efficient design and understand that a better managed climate makes facilities more resilient against climate based emergencies."

– Duncan Griffin, Architect NBBJ

performance benchmark information provides them comparative performance targets that define energy opportunities, contrasted with 10 years ago when very few facilities managers measured energy or understood how much energy their buildings were using. Given the costs savings potential available through energy efficiency, there is a strong likelihood healthcare systems will continue to embrace SEM. The evidence seems to support that: the latest SEM Market Research and Evaluation Report (MPER) [1]for the hospitals and healthcare sector (Evergreen Economics, Due to be released Q1, 2015) shows that the overall score composite of SEM has risen from 40 percent in 2010, to 60 percent in 2014. Growth in energy efficiency was also seen in non-participating hospitals.

Perhaps even more significant is that this initiative occurred in a very risk adverse healthcare sector, where there were no examples in the United States of a system-wide energy efficiency approach; today there are multiple examples of hospitals and healthcare systems that have adopted SEMPs. Prior to this initiative, there were few templates to help other healthcare systems start down the path of energy efficiency, but today there are a number of projects, and a large body of knowledge detailing how to find energy savings opportunities and implement energy projects in the healthcare sector. Finally, where there was no evidence to show the costs and benefits of adopting strategic energy management, there is now evidence SEM works, and that SEM results in reduced costs. Collectively, these numerous examples help justify adoption of SEM.

This evidence and NEEA's roadmap to achieving this success may have the most impact and be the most enduring result of the Hospital and Healthcare initiative. The American Society for Healthcare Engineering (ASHE), an association devoted to optimizing the health care physical environment, created the SustainablityRoadmap.org website. The site was created at the request of ASHE members who wanted help doing energy efficiency, waste reduction, supply chain, and water sustainably projects. The evidence, lessons learned, and knowledge gained from the NEEA Hospitals and Healthcare initiative formed the basis of the new Energy2Care.com program. Even as NEEA ends its engagement with the healthcare sector, the roadmap it helped create will continue to guide other healthcare organizations looking at sustainable energy practices.

"The NEEA model was the model for the new E2C program."

– Laura Faye, Energy Consultant at Mazzetti Foursight and developer of the Sustainability Roadmap website

Conclusion

NEEA's Hospitals and Healthcare initiative sought to address energy use, and create opportunities for energy efficiency gains in a sector that is complex, heavily regulated, and focused on its core objectives. It succeeded in increasing awareness of energy efficiency, and changing views from energy being a fixed cost to a cost that can be managed. The successes facilitated by the project not only resulted in cost savings, but also provided a range of other benefits including improved patient comfort and industry recognition for participating health systems. Energy is now part of the conversation in healthcare systems. The knowledge, evidence, and guidance gained from this initiative lives on even as NEEA ends its engagement through the lasting SEM improvements and energy efficiency upgrades in regional healthcare systems, as well as through the impact these results create in the United States healthcare sector by driving awareness and vision for energy management throughout the entire industry.

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