



Back to Basics: Corporate Energy Management at Unilever

A Corporate Energy Management Case Study
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OVERVIEW

Concerned by increasingly volatile energy markets and deregulation, Unilever HPC's corporate energy management (CEM) initiative combines energy-use targets with an energy service outsourcing strategy. A simple budget-to-actual spreadsheet compares energy performance at 14 facilities. From 2000 - 2002, this program has resulted in savings in excess of \$4 million.

Unilever's move toward energy management was deliberate but fraught with false starts. Energy service companies (ESCOs) courted Unilever throughout 2000-2001. During this period, however, changes within the ESCO industry caused several contenders to suddenly exit the business.

Unilever North America has since partnered with Summit Energy for energy supply management and with SourceNet for bill consolidation and analysis. Four to five vendors are also being used for targeted demand-side management, focusing on areas such as lighting, HVAC, refrigeration, steam, and compressed air upgrades.

What was the desired outcome of Unilever's CEM effort? The primary goal was to reduce energy costs and better understand the operational use of energy. As a corporation, Unilever wished to reinforce core competencies, which meant devoting few in-house resources to energy management. Outsourcing would be central to Unilever's energy management strategy.

What issues or symptoms led to the implementation of CEM? Energy management began with facility staff simply approving utility bills as they came in. By 2000, rising energy costs were a primary motivator for developing a focused energy management program. Also, the changing environment of utility deregulation posed opportunities as well as pitfalls. These events proved that energy was becoming too dynamic to manage the old way.

What technical, managerial, and behavioral elements were developed? Unilever established an energy team to function as in-house advisors to staff and energy service vendors. This team is led by the director of utilities. A single spreadsheet is central to the planning, budgeting, and progress reporting of energy use and expenditure at Unilever HPC's facilities. The spreadsheet is a 14 x 31 number grid that allows the energy team, facility managers, and corporate observers to compare current to past-year energy performance. Data is entered quarterly. Color coding is used to illustrate current value deviation from budgeted targets: red for overages in excess of 20 percent, yellow for overages of less than 20 percent, and green for values that are under budget.

How are empowerment and accountability addressed? All energy management is ultimately accountable to a senior vice president. Energy management would not be successful without this high-level support. Energy budgets at each facility reflect the input of various stakeholders. Process staff supply production estimates. Engineering managers estimate resource use in response to production targets. The draft budget is then submitted to the plant manager for approval. A vice president may review

FACTS & FIGURES

Unilever HPC (Home and Personal Care) North America: Manufactures laundry and hand soap, deodorants, and skin- and hair-care products.

Revenues: \$4.3 billion in 2002.

Scope of North American operations: Eight manufacturing facilities, three R&D centers, and three corporate offices.

Annual energy spend: \$22 million.

Cost of energy consulting: 0.5% of energy spend.

From 2002 Annual Report:

"Unilever is committed to making continuous improvements in the management of our environmental impact and to the longer-term goal of sustainable business. Unilever will work in partnership with others to promote environmental care, increase understanding of environmental issues and disseminate good practice." (p. 8)

Key energy professional: Jim Pease, energy & environmental manager, the inaugural holder of this title since mid-2000: "While Unilever is as competitive as any market player, we are eager to share best practices in the areas of safety, health and energy/environmental management."

estimates while also using this data for next year's expense planning. There may be a bit of negotiation among participants, but quarterly data reporting drives the review and accountability process.

What were the barriers to implementation, and how were they overcome?

At the facility level, there is a proud engineering culture which may push back against imposition of specific technologies or practices from external sources. Unilever HPC counters this by offering to pay for selected upgrades from a \$2 million corporate capital budget dedicated for energy improvements. While most capital projects must meet a two-year payback hurdle, the urgency of energy cost control allows the acceptance of energy projects with up to a 3.5-year payback. To "break the ice" with facility managers, the Energy Team may offer consultants to survey lighting, steam, compressed air, or similar technologies to meet a plant manager's needs. In this way, plants begin to demand energy efficiency services, making a "pull" for resources as opposed to a "push" from corporate.

How are results monitored and communicated? Unilever's energy management spreadsheet is central to planning, monitoring, and communication. Quarterly results are distributed throughout the company. Energy success stories are communicated via email to peer facilities.

What are the tangible results to date? Unilever has reduced its energy consumption by 16 percent from a 2000 threshold. Dollar savings for this period are on the order of \$4.25 million.

Who is the audience for the results? A senior vice president is primarily responsible for all energy cost accountability. In addition, Unilever's investor relations group has written up energy management activities for inclusion in annual reports and internal publications.

How do awards and recognition play a part? Compliance is attributable mainly to performance targets, goal-setting, and accountability. These goals embrace Unilever's commitment to operate in a responsible, sustainable fashion.

What are the threats to the durability of the CEM effort, and how are these addressed? Unilever's Energy Team sees its role and impact as similar to those of safety management. If no one watches, it erodes. Well-documented energy savings are the key to sustaining corporate interest and support.

What remains to be done? Successes can be replicated in Unilever's other business groups, totaling 52 sites within North America. Efforts to do this are gaining momentum. Plans include an ongoing energy awareness program that emphasizes what individuals can do to control costs. One idea is to develop an "Energy Day" for facility employees as a first step in influencing their energy decisions. This event would feature presentations describing the place of energy in people's professional and personal lives. A box of carry-home items including compact fluorescent bulbs, low-flow shower heads, and similar products would foster an appreciation for energy-efficient behavior.