



Benchmarks that Measure Success:

Corporate Energy Management at Kimberly-Clark Corporation

A Corporate Energy Management Case Study

Sponsored by the U.S. Department of Energy, Industrial Technologies Program

Contact: Christopher Russell, Director of Industrial Sector, (202) 530-2225 crussell@ase.org

OVERVIEW

Kimberly-Clark Corporation (KCC) has a broad mandate for environmental stewardship that includes energy conservation, air emissions abatement, wastewater treatment upgrades, process water use reduction, packaging reduction, landfill elimination, toxic chemical elimination, and Environmental Management System implementation. Five-year plans help coordinate benchmarking efforts across a global facility network. KCC's energy conservation efforts are currently in the middle of a second five-year plan, which seeks to expand on the success of the first plan (1995-2000). The first plan led to a corporate-wide 11.7 percent reduction in energy use per ton of product.

What was the desired outcome of the corporate energy management (CEM) effort?

KCC's goal is continuous improvement in its environmental stewardship in ways that improve business performance. These same activities also reduce compliance risks associated with environmental impact regulations—both current and future.

What issues (or symptoms) led to the implementation of CEM?

The initial corporate energy program, which was developed in the 1970s, focused on energy conservation studies. Once support infrastructure was in place, performance target roll-outs accelerated the pace of learning and implementation.

What technical, managerial and behavioral elements were developed?

Since the 1980s, KCC has maintained fuel and energy cost reports. By 1995, these records became the basis of a growing database that compiled energy-to-product ratios. This effort started in the U.S. and expanded through North America and then to the rest of the world. Still in use over several generations of evolution, the database continues to grow as new efficiencies are discovered. Staff members are trained to use this benchmarking tool as a part of their jobs.

KCC believes in using five-year planning exercises for achieving objectives. Its current *Vision 2005* calls for the attainment of world-class benchmark performance standards for a dozen processes. At the mill level, performance of each process is rolled into a total facility performance target.

Corporate staff facilitates communication through Energy Productivity Reviews (EPRs), which are conducted to support internal training as well as benchmarking. EPR engineering teams document technical best practices, generate benchmarks, and develop energy-efficiency studies. This comprehensive effort helps to prioritize improvement opportunities. A lot of expertise also resides at KCC mills, especially among staff that "grew up" at their facilities. Best practices ideas come from KCC mills all over the world. A KCC intranet site gives access to benchmarking data and a company newsletter. Consistent senior management support ensures that objectives, targets, and measurement are built into KCC's operating culture. Internal publicity on success stories helps to maintain friendly competition among mills.

How are empowerment and accountability addressed?

Energy targets and benchmarks are integral to mill and manager performance evaluations. Benchmarks are also the basis for production budgeting and capital investment. The corporate energy staff provides advice and reviews capabilities. Managers weigh energy projects against process improvement opportunities. The same financial criteria usually apply in both cases.

FACTS & FIGURES

Kimberly-Clark Corporation: Manufactures and markets a broad range of health and hygiene products. The company is organized into three global business segments: Personal Care, Consumer Tissue, and Business-to-Business.

Revenues: \$14.35 billion (2003).

Scope of operations: 165 - 170 plants in 43 countries. This scope encompasses staffs that speak 15 different languages.

Energy spending: \$670 million globally in 2003, half in North America. Energy represents 5 - 6 percent of manufacturing costs. The annual cost of energy management is less than 1 percent of energy spending.

Key energy professional: Ken Strassner, vice president - environment and energy.

Excerpt from Kimberly-Clark Corporation's corporate responsibility and citizenship policy: "[E]nsure that environmental and other legitimate social objectives are taken into account and balanced against other objectives in establishing policies and in the conduct of daily affairs."

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

At first, mill personnel resisted outside advice per the common “not invented here” syndrome (translation: “Outsiders can’t tell me how to run my plant”). KCC corporate energy teams responded by demonstrating technical know-how and by using other mills’ success stories. This method is still employed as KCC acquires plants or builds new facilities, and additional staff must be accommodated. KCC’s vice president for environment and energy gives numerous progress reports a year, underscoring the importance of cheerleading.

How are results monitored and communicated?

A list of best project successes is maintained for all plants to review. “Current vs. target” performance reviews track mills’ quarterly progress for energy per metric ton of product. Variance in energy usage (and the resulting lost savings) is reported to management.

What are the tangible results to date (consumption, emissions, financial, etc.)?

Between 1995 and 2000, KCC reduced its energy intensity by 11.7 percent. Similar gains are expected for the 2000-2005 period. KCC has reduced carbon emissions by 23 percent since 1990.

Who is the audience for the results?

KCC publishes an environmental sustainability report for shareholders. Competitors tend to keep track of each other’s environmental performance. Every quarter, an update is given to business and manufacturing leaders, so they are aware of cost and energy-efficiency trends.

How do awards and recognition play a part?

Small rewards become big motivators at KCC. Newsletter articles recognize individuals and entire facilities for outstanding performance. Team awards are emphasized. “Green flags” awarded at the end of 2000 were proudly flown by top-performing facilities.

What are the threats to the durability of the CEM effort, and how are these addressed?

If anything challenges KCC’s ongoing energy management efforts, it would be changing corporate priorities and evolving investment criteria. Energy remains an important cost factor for KCC. Energy management efforts will continue as long as there is value to be captured. Mill managers appreciate energy cost-control assistance.

What remains to be done?

KCC still has room to improve. Corporate objectives are reset every five years. The five-year planning horizon is ideal for the joint evaluation of emerging opportunities and company priorities.