Better Buildings® CHALLENGE
U.S. DEPARTMENT OF ENERGY

INDUSTRIAL PARTNER

3M

Implementation Model: Capital Set Aside Fund

ORGANIZATION TYPE
Diversified Manufacturing

BARRIER
Inability to access internal capital for energy efficiency projects

SOLUTION
Establishment of a capital set aside fund dedicated specifically for energy efficiency projects

OUTCOME
Rapid implementation of energy efficiency projects that would not have occurred otherwise

Overview

3M's goal was to ensure funding for worthwhile energy efficiency projects that were being overlooked through the normal budgeting process. 3M created a special pool of capital to fund cost-saving energy efficiency projects that provided positive returns, but otherwise failed to meet the company's investment criteria. For each of the past two years, 3M has committed $1 million to the set aside fund for investments in relatively small projects (less than $50,000 in capital costs).

3M's Playbook

Policies

3M's capital set aside fund allowed the company to implement cost-effective projects that were stalling due to lack of funds. This allowed the company to fund a wider range of energy efficiency projects than

its normal budget policies allowed. It also kept employees motivated, as they were able to see more of their proposed projects move forward.

The set aside fund was set up in 2010 in response to concerns raised by 3M's energy champions that worthwhile energy efficiency projects were failing to secure funding for implementation. Similar to most companies, 3M prioritizes investments that have the potential to increase business; raise output capacity; improve corporate infrastructure; or comply with environmental, health, and safety requirements. As a result, energy efficiency projects were often losing out to other projects higher on the priority scale. This meant that cost-effective energy saving projects were being left on the table. As many of these projects were proposed by employees, 3M's energy champions raised an additional concern: without funding more projects, employees might get discouraged and cease identifying and proposing new projects.

3M's corporate energy manager proposed the establishment of the set aside fund during a quarterly review meeting with senior management. 3M's management agreed to set aside $1 million for 2011 to fund projects that:

- Pay for themselves through energy savings in less than two years (this was extended to four years in 2012).
- Require less than $50,000 in upfront costs (after rebates and incentives).
- Fail to otherwise receive funds through the normal budgeting process.
- Receive approval from the plant manager.

3M placed a cap on the cost of projects to reduce the likelihood that facility managers would rely on the set aside for all energy projects and neglect to fund them internally. However, the program allows for certain projects with estimated costs of more than $50,000 to be divided into segments and approved as separate projects. For example, a lighting project on multiple floors of the same building that exceeds $50,000 in total upfront costs can be split into floor-by-floor projects. In addition, the $50,000 cap only applies to 3M's direct costs, net of any rebates or incentives from states, the federal government, or utilities. That is, a $75,000 project that receives a $25,000 utility incentive could qualify for funding from the capital set aside pool.

Process

The corporate energy manager selects energy-efficiency projects that meet specific criteria on a first-come, first-served basis until all dollars from the capital set aside fund have been dedicated. This process can be significantly faster than the company's traditional budget process, in which energy projects are evaluated along with other investment opportunities.

Plant staff use a standardized form to apply for funds. Sometimes applicants try to secure funding first through the normal budgeting process, and other times they go straight to the capital set aside fund. The corporate energy manager is in charge of reviewing and selecting projects. All proposed projects must already be listed in 3M's Energy Cost Reduction Projects Database, so applicants do not need to provide much new information in the application form. The corporate energy manager does not provide a significant amount of scrutiny to proposed projects, other than to make sure the projects meet the company's cost and savings criteria. In

the form, applicants are asked to describe the methodology to verify that the projected savings will actually materialize.

Approved projects can receive funding as soon as two weeks after submitting the application. The speed with which dollars are disbursed is a significant attribute of the fund. Under the traditional budget process, projects identified after the deadline must wait until the next year for consideration. This can lead to a relatively long wait period between project identification and implementation, which can sap enthusiasm for proposing projects. In contrast, projects submitted for consideration under the set aside fund are approved on a first-come-first-served basis. As a result, employees are able to more immediately see results from their proposed projects. This system also encourages employees to quickly identify and propose projects before all dollars from the special fund have been allocated.

Tools and Resources

3M's Energy Cost Reduction Projects Database is an important tool that supports the capital set aside fund and project approval process. The database currently contains more than 3,700 projects and allows the corporate energy manager and others to track project and technology type, estimated costs and savings, and implementation and funding status, among other data points.

Plant staff from 3M locations across the world can access and input project information into the database. Plant staff can sort through the database and view information on projects implemented at other plants, including cost-benefit data. In this way, the database also serves an important best practice sharing function. The database was first established in 2000, and was a key tool that aided the corporate energy manager in making the case for the capital set aside program. The corporate energy manager was able to point to numerous cost-effective energy efficiency projects stored in the database that were not moving forward due to lack of funds. This helped convince senior management to free up capital through the set aside fund.

Another important resource is the standardized form 3M plants use to apply for funds. On the form, applicants are asked to describe the project, detail the upfront cost, and estimate the annual cost savings. Applicants are also asked to describe why the project is not being funded through their division or business unit's normal budget process.

Tools:

- Spreadsheet Version of 3M Energy Cost Reduction Projects Database
- Project Submission Form

Measuring Success

Each year the corporate energy manager must make the case to management to allocate another $1 million to the program. In making the case, the manager measures and demonstrates quantitative energy-savings benefits from the projects funded in the previous year.

Although difficult, tracking and reporting on the effect the special set aside fund has had in keeping employees engaged and focused on energy efficiency is also important. 3M continues to rely on an active and engaged workforce to identify good projects that drive its energy management strategy toward meeting its energy goals.

Outcomes

The fund has been heavily utilized and has already dedicated $1.5 million to 69 projects—representing $580,000 and 56 billion British thermal units of annual energy savings that would likely not have been realized in the absence of the set aside fund. In providing energy savings data, 3M typically only counts savings that occur in the first year, even though it assumes that project benefits will persist and that savings will accrue year after year.

Alongside its success, 3M has faced some difficulties due to projects bypassing the more lengthy review process required of other capital investments. Some of these issues include the following:

1. Overspending – An employee underestimated the cost of a project and spent more than approved.
2. Overlooking Incentives – An employee new to energy management missed out on utility incentives that were available for a project.
3. Overestimating Savings – A third-party organization promised savings that were not accurate for the investment required.

The corporate energy manager is addressing these challenges by more carefully assessing and selecting projects to fund.