gres

Global Resource Efficiency Services

Energy and Environment Management Financing Model

www.gresworld.com

Concept Overview

GRES now offers a range of proven services that are adjusted to meet the specific needs of each client. Our services focus on fast payback measures and the training of facility staff and building occupants. This new offering is designed to achieve the following outcomes:

1. Positive cash flow in the first year and utility cost savings to pay for program efforts.
2. Sustainability policy and plan development at Senior Management level.
3. Training for operations and maintenance staff based on defined training needs.
4. Development of operation standards of performance and documentation which provides guidance for future capital intensive energy measures.
5. Occupant awareness programs and a web info center to share information with all stakeholders to promote sustainability education and action.
6. Reduction of greenhouse gas emissions to move towards a carbon neutral goal.
7. Programs for obtaining credit in the Innovation and Design Process category for the LEED (Leadership in Energy and Environmental Design) in either the Existing Buildings (LEED-EB) or the New Construction (LEED-NC) categories.

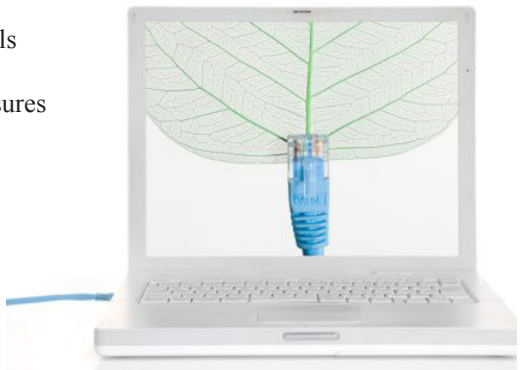
The program, the cost of which is typically taken directly out of the annual utility budget, is designed to generate $3 of savings for every $1 spent. The target savings is 10% of the utility budget and the program efforts will payback in approximately six months.

The majority of these costs are assigned to third party companies, which will implement low cost/high payback measures in the facilities. The training and low cost measures are designed to maximize savings cash flow in the first year of the program.

The program process positions the capital intensive energy measures in a second phase. The advantage of deferring the capital intensive measures to a second phase is:

- Maximize positive cash flow
- Show savings results sooner
- Team training approach provides motivation and alignment of goals
- Development of documentation provides guidance for future measures

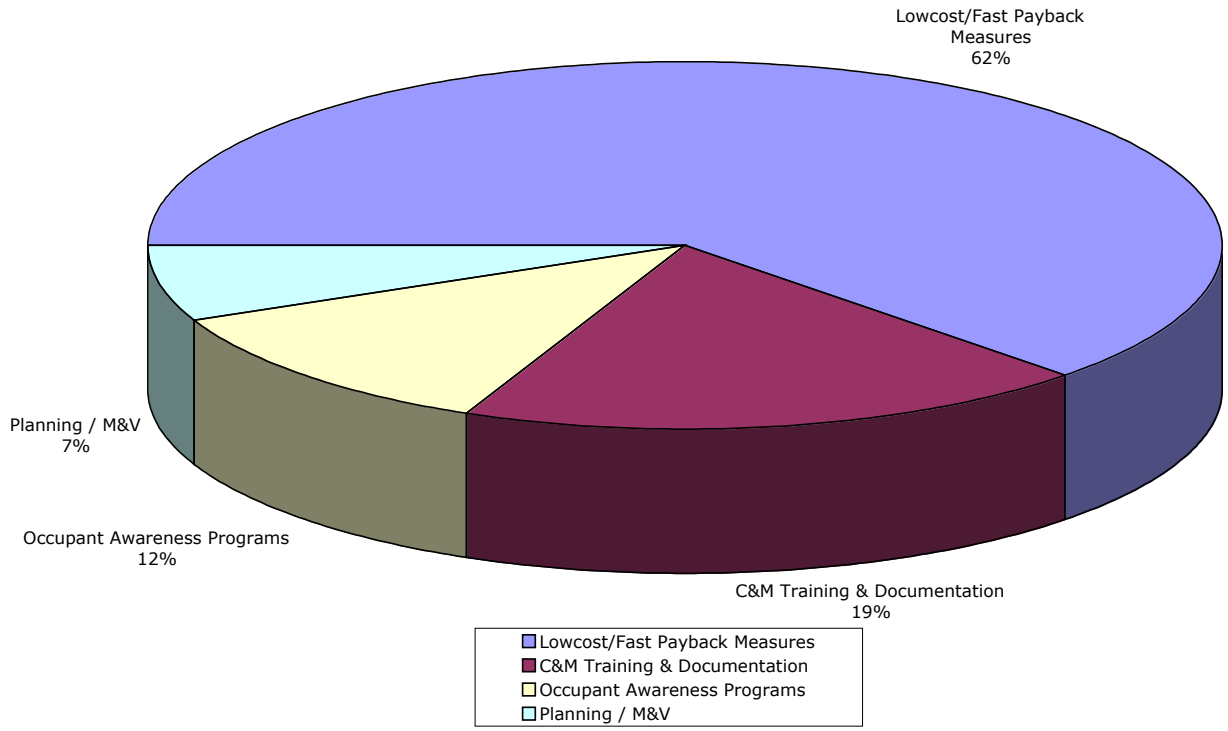
If you're not building or operating LEED projects today, your competitors are, and they're gaining the experience and expertise to get those future projects.



Financing Process

The financing of the program is typically from the client's utility budget since cash flow is positive within a 12 month cycle. The client may also choose to finance the program externally.

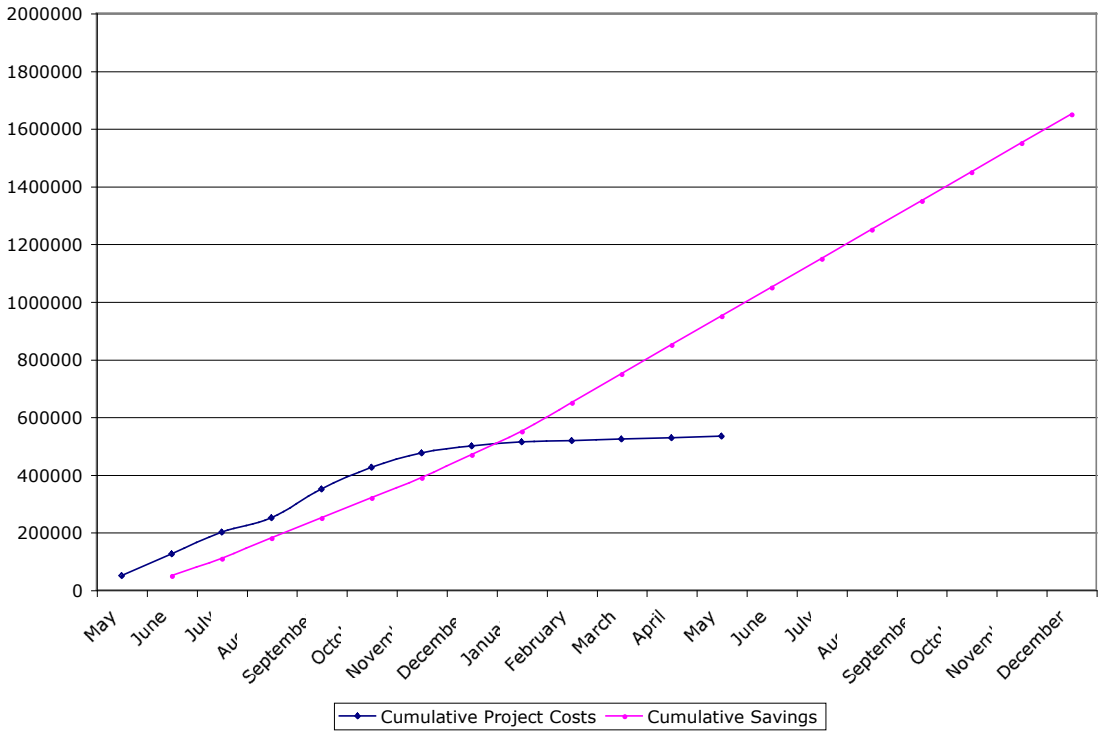
The components of the program involve training for O&M personnel, the development of standardized O&M documentation for efficient operation, occupant awareness programs for education/motivation and provision for planning, monitoring and verification of savings. Site audits will develop low cost/fast payback measures for each facility, which will be implemented by third parties. See an example of this in Figure 1.



Payback Scenario

The savings will start with the implementation of the measures in each facility. Some no cost measures will be implemented by the facility staff based on findings during the workshop training. Low cost/fast payback measures like control modifications and air balancing will be implemented by third parties.

The cumulative costs and savings are shown for a typical program in Figure 2. The cost of the program would be spread over a 12 month period. The savings will lag the program costs by about 2 months. The cumulative savings would pay for the entire program within a 12 month period as shown in Figure 2. The cash flows in Figure 2 do not show interest or the variation of energy costs. Both the interest and the escalation are not significant with a payback of less than 12 months. Savings from specific measures are accelerated by focusing on the new energy and environmental plan and the teamwork developed in the training workshops.



Program Components

1. Needs Assessment is conducted to help define the scope and timing of the program implementation, as well as customize the training mode and content.

2.1. Stakeholder Management occurs within and without the community and is instituted as part of the overall program. Communications and awareness tasks are designed to ensure that a good understanding of the program occurs, and that there is a strong sense of enrollment of all stakeholders.

2.2. Energy and Environmental Plans are developed where there are none and improved where they currently exist. The Energy and Environmental Plan is developed to be in coordination with the current institutions business plan.

2.3. Resource Conservation Management (RCM) Program is developed to provide guidance on the best practices for reducing the overall consumption and cost of utility and energy related resources, through no-cost and low-cost modifications.

3.1. Building Occupant Awareness (BOA) Training is designed to provide building staff and custodians with introductory information on complex topics related to the efficient operation of their buildings. There are five main learning aspects: lighting, electrical, HVAC, water and waste. As well, complimentary programs exist, such as a "Home Audit" and a "Dorm Competition" that further engage and enroll occupants into the program. (www.yourhomeaudit.com)

3.2. O&M Training Programs are designed to integrate the development of Standards of Performance for building operations for presentation in 3 workshops sessions. Standards of Performance for building operation are needed to benchmark building performance against optimum efficient operation.

3.3. Building Operation Guides (BOG) are constructed for each of the facilities identified in the project. These unique and customized documents outline the O&M documentation and standards of performance needed to operate each facility efficiently. The BOG is a critical part of managing accountability for energy management.

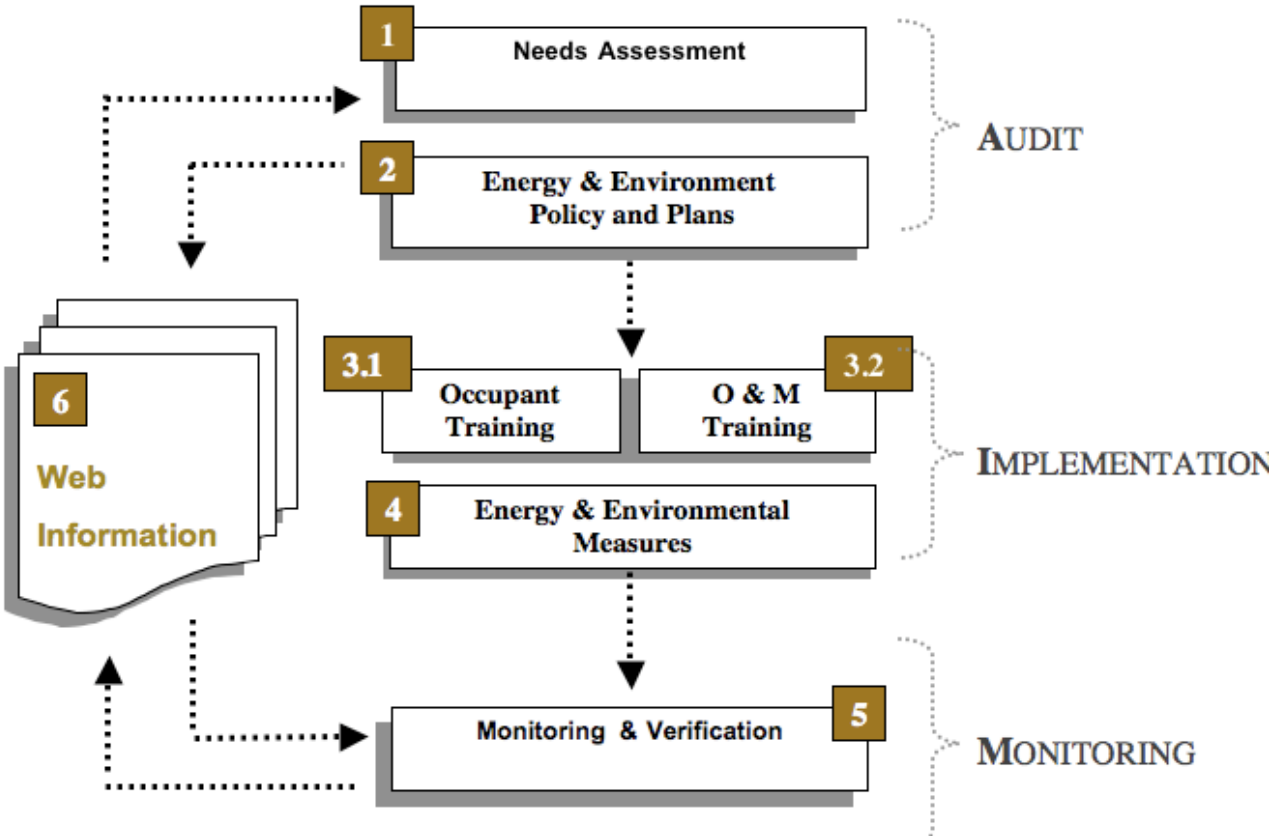
4. Energy and Environmental Measures is the work of retrofitting buildings with new and more efficient technologies. This work is conducted internally as a design build process or is outsourced via an energy performance contract and the utilization of an ESCO. The implementation plans must consider a number of efficiency measure types:

- Energy and environmental measures
- Modernization measures
- Real time metering systems
- Renewable energy measures and products
- Building automation and commissioning
- Energy efficient products (www.gresworld.com/products)

5. Energy Accounting Software is used to establish baselines and compare baseline energy use to current energy use. The software can adjust for weather and utility reading dates for utility billing periods. The software can also verify utility bills for the correct application of utility rate structures. Reports are provided that can be adapted for specific energy management needs. The utilization of real time utility monitoring is also part of the program.

6. Web Info Center serves as an information portal for all resource conservation activities within the organization. It provides a centralized location to store all documents pertaining to resource conservation as well as provide access to all learning and reference manuals. The web site is also branded as the client's and customized to display regionally relevant information learning resources and web links.

GRES Service Model



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