

# Create Value Through Energy Efficiency

*The president of an award-winning management group discusses his organization's energy-efficiency philosophy and strategies.*

BY DOUG WALKER

*Editor's Note: Harwood Management Services (HMS), a member of the Harwood International Corporation, Dallas, TX, an Environmental Protection Agency (EPA) Energy Star Charter Applicant, was recently awarded the first Energy Star Label for Buildings in the state of Texas. This award was presented by the EPA and the Department of Energy (DOE) at a ceremony held in Washington, DC on June 9, 1999.*

*The Energy Star Label for Buildings is awarded to buildings that have achieved outstanding performance and excellence in energy management. HMS has also received a number of other awards and distinctions related to the environment and excellence in design and construction.*

*For more information about the Energy Star Building program, call 1-888-STAR-YES (1-888-782-7937) toll free.*

**H**arwood Management Services (HMS), a member of the Harwood International Corporation group incorporated in 1988, purchases properties, develops land, and manages office buildings in the Dallas, TX area. Our vision and goal is to create exceptional value for our capital partners and tenants. For many years we've had a commitment to delivering ecological and environmental benefits to the community.

HMS is a company that wants to "give something back." We started by planting over 350 trees on land we purchased near the central business district in Dallas. Our goal was to reposition and renew the area from both a business and aesthetic standpoint. Trees and plantings are used throughout the properties that we develop, manage, and own in order to carry forth the ecological theme we strongly believe in and support as a company.

HMS has realized the importance of energy efficiency and environmental improvements since its inception. In fact, we market our company and our developments around this core concept.

While we were developing Phase I of our "International Center" project, we received a great deal of publicity about the trees and landscaping we installed on property surrounding the development site — so much so that we didn't have to produce the customary leasing or marketing brochures for the Phase II Centex Building or the Phase III building, which will be occupied by the law firm of Jones Day Reavis & Pogue.

In fact it wasn't necessary to advertise the buildings at all. In effect, we spent our marketing budget on landscaping and energy-related upgrades and because of this, everyone knew about our new buildings and the new neighborhood. Everyone has come out a winner: our capital partners, our tenants, our neighbors, the City of Dallas, and of course, HMS.

Energy efficiency has been a passion of mine for a long time. It's all about doing the right thing for everyone involved. I believe good real estate management operates its properties at their highest energy efficiency, which results in lower costs. This produces true, win-win, relationships. Property value is increased as a result of reducing operating costs, primarily utility expenses, resulting in capturing greater net operating income. The tenant receives the added benefits of enhanced comfort and convenience. Additionally, more efficient space is delivered at a lower cost. This results in a lower rent structure or a lower pass-through cost to the tenant, or savings can be repositioned to other areas of additional services or amenities.

## QuikScope Analysis Improves Project Viability

By Deborah J. Cloutier, ICF Consulting

QuikScope's cost/benefit analysis helps building owners and managers understand how leasing and real estate finance affect the economics of energy-efficiency. As the following four scenarios demonstrate, incorporating these factors when calculating financial benefits makes upgrade proposals much more compelling.

### Scenario "A"

Assume a 200,000-sq.ft. office building with eight tenants (each with varying expense stops) and 8% vacancy. QuikScope estimates that investing \$446,859 in a "whole building" energy upgrade program would produce \$0.76/sq.ft. of annual energy savings.

Given the expense-sharing provisions of the leases in this building, the tenants would enjoy \$0.48/sq.ft. of the total \$0.76/sq.ft. in annual energy savings. The owner's share of the savings is \$0.28/sq.ft., and net operating income (NOI) would increase by \$59,134/yr. (average over 10 years). With an internal rate of return (IRR) of 5%, and a net present value (NPV) of *negative* \$91,775, this proposal gives the owner a cash-on-cash return of 13%. But, this investment opportunity would not provide adequate incentive for many owners to invest in these energy-efficiency improvements.

### Scenario "B"

Now assume the owner decides to exercise a provision in the existing leases that permits tenant assessments for capital expenditures that reduce operating expenses. Assume that the owner decides to assess the tenants \$0.40/sq.ft./yr., which allows the tenants to keep a small portion of the projected annual energy savings. This approach to cost recovery increases the owner's NOI by \$102,734/yr. (average over 10 years), which raises the proposal's IRR to 21%, and its NPV to a positive \$217,224.

### Scenario "C"

Now assume that in addition to collecting a cost recovery of \$0.40/sq.ft. from existing tenants, the owner decides to raise the base rent of future tenants by \$0.48/sq.ft./yr. Since the contemplated upgrade is expected to lower tenant operating expenses by \$0.48/sq.ft., the future tenants' occupancy costs (*i.e.*, the total of base rent and operating expenses) will remain unchanged. The owner now enjoys a \$146,966 annual increase in NOI (average over 10 years), which raises the proposal's IRR to 28%, and its NPV to \$426,402.

### Scenario "D"

Alternatively, assume that the owner exercises the cost recovery of \$0.40/sq.ft./yr. from existing tenants, and that lowering occupancy costs for future tenants by \$0.48/sq.ft./yr. makes the building more competitive from a leasing standpoint, which reduces the building's vacancy rate by 2%. Considering the owner's original share of the energy savings (*i.e.*, \$0.28/sq.ft.), the cost recovery from existing tenants (*i.e.*, \$0.40/sq.ft.), and the increased rental income from this additional 2% occupancy, the owner now realizes a \$237,522 increase in NOI (average over 10 years). This raises the upgrade proposal's IRR to 47%, and its NPV to \$969,522.

These four scenarios demonstrate that it's essential to incorporate the realities of leasing and real estate finance into the cost/benefit analysis if a proposed upgrade involves leased space. Property owners and managers who understand these dynamics will be able to make a more financially compelling reason to fund energy-efficiency improvements.

As the provider of services, we benefit from the greater satisfaction experienced by our capital partners and tenants, resulting in higher retention. We feel that paying attention to these details sets us apart in the marketplace.

Companies that are not focusing on or becoming educated about energy efficiency are missing many opportunities. It's a complicated business — utility rates, tariffs, consumption, metering, and deregulation...technological developments...mechanical, electrical, architects and consultants — all of these elements create a huge tangled web to be mastered. Some are slow to change their way of thinking. They want to dust off the plans and specifications they have used on jobs for years. They operate in a world of "if it's not broke don't fix it."

Unfortunately, there are companies out there that don't realize that it IS broke, and has been for so long that they don't know what "fixed" looks like. This lack of attention results in a loss for owners, tenants, and the environment. These losses are not small or insignificant.

## Energy Monitoring

At HMS, we've implemented a state-of-the-art monitoring system to track all of our energy consumption. This system can monitor energy consumption minute-by-minute or down to a single plug if necessary. Energy efficiency doesn't just happen. It takes clear commitment from management and staff, along with ongoing monitoring and data analysis to make certain that the right adjustments are made to ensure the success of an entire initiative.

We participate in a strategic alliance with a major controls manufacturer. They've partnered with us to help us achieve our goals and objectives. I searched the market and didn't find a system that did everything I wanted it to. This vendor listened to my needs and together we developed a system to make it all happen. They were able to capture and provide the data necessary to make intelligent decisions and develop the controls process to carry out the desired directive, capable of capturing and reporting the results.

For the first time we can accurately capture after-hours use and excess utility use which is allowed for in our lease structure. The ability to accurately capture this data has created additional revenue, but more importantly has made tenants aware of wasted utility resources that could have been prevented by simply turning things off at the end of the day — thus the environmental benefit.

### **Partnering With Energy Star**

HMS is a member of the Environmental Protection Agency's (EPA's) Energy Star Buildings Program. When I first learned about the program, I was most impressed with the software offered to help property owners and building managers track and test the energy efficiency of buildings. This software (and our utility) provided the springboard for us to join the Energy Star program, and we became the first charter member from Texas.

As we became more involved, I was excited to see the emphasis that EPA was applying to the program from the federal level and how it was developing criteria for rating energy efficiency in commercial properties. What we had been doing — just because we thought it was the right thing to do — was now being given credibility and support from Uncle Sam. The entire program was a very positive thing for us to see and hear about, especially since we had devoted significant resources to energy management.

QuikScope is a free software program offered to Energy Star Buildings partners. It's a business tool that provides an easy-to-use, fast, and effective method to assess opportunities for enhancing energy efficiency by making cost effective improvements. The output helps managers develop the strategies and timing to pay for energy improvements.

We find the software extremely useful when we're considering future purchases and selling existing properties. We take information we gain through the due-diligence process and use it with the program. The output helps us gain a competitive edge when making purchasing and disposition decisions. The existing efficiency of a property, or lack thereof, is factored into our decision process. The lower the efficiency, the more room for us to create value through our program.

Another tool offered through the program is a building rating system. Through the Energy Star Label for Buildings website ([www.epa.gov/buildinglabel](http://www.epa.gov/buildinglabel)) you can establish a benchmark score of energy efficiency by comparing buildings on a level playing field. Buildings that score 75 or greater on a scale of 0-100 earn the right to display an Energy Star

Label. Combined with QuikScope, these are powerful tools around which to build a comprehensive energy management program.

**“We spent our marketing budget on landscaping and energy-related upgrades... it wasn't necessary to advertise the buildings at all.”** *Differentiating*



**Doug Walker, president of Harwood Management Services, Dallas, oversees all operations of the company including energy systems and management; property management; leasing; food service; security systems; and monitoring.**

We have always looked at energy as a variable cost, whereas, many companies look at it as a fixed cost. But you can't just look at it as "a cost of doing business" and let it go at that. We have a full-time energy manager in our company, responsible for monitoring all energy consumption in our properties on a daily basis. It's his responsibility to know what's going on in these properties, to make sure that the controls are functioning properly, and to track, measure, and control the utility consumption, load, and demand. By controlling the demand, we save thousands of dollars on our utility bills. However, reducing utility expenses is not the only variable we seek to change. We also achieve a substantial reduction in consumption by properly applying and using energy-efficient products and equipment.

HMS is always searching for things that can set us apart and to help brand us as a quality provider of office space. Being an active participant in the Energy Star Buildings program furthers our goal. In the highly-competitive office space market — with our competitors being huge national companies, Real Estate Investment Trusts (REITs), major pension funds, and insurance companies — we see ourselves as being kind of a David in a world of Goliaths. So instead of trying to keep up with the others, we decided to just charge ahead. We hope that others — big and small — will follow us down the road and become committed to improving our environment through effective energy management.

The Energy Star Buildings program provided timely information and helped answer our questions. Achieving the award of the Energy Star Label for Buildings was very complimentary. It recognized a talented, dedicated group of HMS associates as well as the exceptional efforts of our vendors and consultants. HMS has supported our mission with funding, design, installation, and operation services. Eventually, we want to attach Energy Star Labels to all our properties.

We are looking forward to our long-term relationship with the Energy Star Buildings Program. All of us at HMS are excited about being involved in the transformation of the real estate market and we are always willing to talk with anyone interested in knowing more about our philosophy. Contact us at [www.harwoodinternational.com](http://www.harwoodinternational.com). 