





As REITs take steps to mitigate rising energy costs and improve efficiency, will investors see a spark in their returns?

BY ART  
GERING

# HIGH ENERGY

Many REITs from different property sectors entered 2003 with modest expectations for top-line growth, their optimism tempered by shaky property market fundamentals and weak prospects for rent increases. Under these circumstances, cost cutting—including the steps REITs have taken over the years to manage or reduce energy costs at their properties—became vital to protecting their bottom lines and driving shareholder value.

For REIT managements, energy is a constant concern and often a significant component of property operating expenses. Managements generally agree on the importance of managing energy costs and implementing cost-justified energy efficiency measures in their property portfolios.





## NERC Details Energy Trends

**B**y 2007, electricity generation additions in Mississippi will increase capacity in that state by more than twice the amount that existed in 1998. But additions in energy-hungry New York and California will boost capacity by only 16 percent and 21 percent, respectively, over the same period. These results are summarized in a report titled "Reliability Assessment 2003 to 2012: The Reliability of Bulk Electric Systems in North America" issued by the **North American Electric Reliability Council (NERC)**.

The report, available online at [www.nerc.com](http://www.nerc.com), examines energy consumption, generation and transmission trends likely to arise in the years ahead.

Other findings include:

- **More than 7,400 miles** of new transmission lines are proposed to be added through 2007 and 11,600 miles will be added between 2003 and 2012.
- **Electricity demand** is expected to increase by approximately 67,000 megawatts from 2003 to 2007, while projected resource additions in the period will total about 89,000 megawatts. "Even though overall resources appear adequate, generation additions and resulting capacity margins are not evenly distributed across North America," the NERC states.
- **Capacity fueled** by natural gas will total more than 38 percent of total generating capacity by 2008, compared to 23 percent as recently as 1998.

ELECTRIC METERS: DAVID JOB/GETTY IMAGES



Any reduction in property expenses through energy efficiency improvements raises a REIT's net operating income (NOI) and enhances a property's value.

"If you're able to drive a 30 percent or 35 percent decrease in energy costs, that's going to boil right down to the NOI of the building," says Scott Lyle, president of **Next Edge**, an energy management consultancy established as a taxable REIT subsidiary of **Arden Realty Inc.** (NYSE: ARI).

An improved bottom line will typically boost the value of any type of property. A question to consider is whether a higher asset value supports a lower cap rate than comparable properties, a factor that may be relevant when attempting to estimate the value of a property portfolio.

"You might find a spread in the cap rates (between an energy efficient building and one that is not energy efficient)," says Dove Goldman, a director with appraisal firm **Integra Realty Resources**. "The risk of a deteriorating asset is mitigated because the building is more efficient."

Arguably, an energy efficient and low-cost building helps attract and retain tenants. For example, Arden Realty has a roster of smaller office tenants that take 5,000-square foot to 6,000-square foot spaces. "Occupancy costs are very important to those tenants, probably more so than for a larger tenant," says Rick Davis, Arden's senior vice president and chief financial officer. "If we can reduce occupancy costs, it helps our retention efforts and shows tenants they'll pay less to occupy our buildings."

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TABLE 1

### Paying at the Office

Average electricity costs per s.f. for office space in selected markets

| Downtown Locations |        | Suburban Locations |        |
|--------------------|--------|--------------------|--------|
| New York           | \$2.61 | Minneapolis        | \$0.87 |
| San Francisco      | 2.28   | Chicago            | 1.00   |
| Boston             | 2.01   | Denver             | 1.22   |
| Washington, D.C.   | 2.01   | Houston            | 1.34   |
| Houston            | 1.84   | Atlanta            | 1.38   |
| Los Angeles        | 1.79   | San Antonio        | 1.40   |
| Portland, OR       | 1.31   | Indianapolis       | 1.41   |
| Atlanta            | 1.31   | Dallas             | 1.50   |
| Pittsburgh         | 1.20   | Sacramento, CA     | 1.54   |
| Chicago            | 1.17   | Portland, OR       | 1.56   |

Source: "2003 BOMA Experience Exchange Report," a survey conducted by the Building Owners and Managers Association.

## Different Sectors, Different Priorities

Not all property sectors are created equal when it comes to energy matters. REITs show great diversity in their priorities and practices regarding energy efficiency, across and even within specific property sectors, according to the **Institute for Market Transformation**, an organization that promotes energy efficiency and environmental protection in the U.S.

The differences in energy issues across the property sectors notwithstanding, the curious investor may encounter difficulty digging up data on a REIT's energy expenses. These costs are aggregated in the property operating expenses line of an income statement with other expense items. Also, some REITs are reluctant to share comprehensive information on energy costs in either financial statements or their discussion of operating results because reporting requirements do not obligate them to provide such specific disclosures. Still, it's important to the REIT investor to understand how office, lodging, multifamily, retail and industrial firms treat energy management and cost reduction differently because of how energy costs affect the bottom line.

### Office



According to the **Building Owners and Managers Association's**

(BOMA) "2003 Experience Exchange Report," utility costs of \$1.94 per square foot for downtown office properties represented 28 percent of property operating costs in 2002, the last year for which numbers are available. Costs for suburban properties came in at \$1.77 per square foot, or 30.4 percent of operating expenses.

The real estate adage, "location, location, location," also applies when examining energy costs. Office assets in downtown markets such as New York City, Boston, San Francisco and Washington, D.C. run up electricity costs greater than \$2.00 per square foot, BOMA reports. By comparison, electricity in downtown Atlanta is a relative bargain at \$1.31 per square foot (see Table 1 at left).

In office markets where tenants sign gross leases

(sometimes known as a full-service lease), the owner assumes responsibility for utility costs. These expenses are passed through to tenants in the form of an escalation payment, an amount calculated as the difference between the current year's operating costs and an operating cost figure established in the first, or base, year of a lease.

In some markets, office leases are written triple-net, meaning the tenant pays all operating costs for the property. Triple-net leases are common in suburban markets and in some downtowns, such as Washington, D.C., according to David Houck, a senior vice president in the Washington, D.C. office of the **Staubach Co.**, a Dallas-based real estate services company.

Under a gross lease, an owner operating an inefficient building with rising energy costs has the escalation mechanism to recover the amount of an increase, suggests Dove Goldman, director of Integra Realty Resources. However, it's unlikely office



tenants would allow owners to continually pass through rising energy costs, he adds.

Properties develop reputations, explains Edmund Cronin Jr., the chief executive officer of **Washington Real Estate Investment Trust** (NYSE: WRE).

"Any type of building that does not have double-paned windows, for instance, is going to have a much higher utility expense," Cronin says. "Sooner or later, tenants are going to find out they are paying more for utilities than they should be."

Intent to keep tenants happy and retain them beyond the current lease term, office REITs have the strongest cost-reduction motivation to pursue energy efficiency, the Institute for Market Transformation contends. Office REITs also display the greatest level of activity among all REITs in this area, according to the organization.

"Ideally, we like to find ways to make our buildings operate more efficiently," Reckson's Senior Vice President and Managing Director Todd Rechler says. "That makes our properties more competitive in the market and also keeps the tenants happier within our assets."

"We have great motivation to reduce energy costs," Equity Office's Senior Vice President of Engineering and Energy Operations Frank Frankini says. "When we do, it increases our net operating income and reduces expenses for our customers."

The commitment of office REITs to energy efficiency is evident by the number of such firms enrolled in the ENERGY STAR program. Of the 24 REITs enrolled as ENERGY STAR partners, 20 are in the office sector, according to the agency's Web site.

## Lodging



In the lodging sector, where occupancy rates typically run well below those for office properties, the effect of

volatile energy costs hits property owners particularly hard. Whether a hotel is half empty or completely booked, costs are being incurred to light common areas, run elevators and operate food and beverage services, among others.

Utility costs account for 4.4 percent of annual total property revenue for all hotels, according to the Hospitality Research Group of **PKF Consulting**. Differences exist between property subtypes, ranging from 3.3 percent of total revenue for resort assets to 4.8 percent for limited-service and extended-stay properties. Geographic factors also play a part, as it costs more to cool a hotel in Phoenix or heat one in Boston than in other locales.

"Our utility costs are running from about the high 4 percent range to 5 percent of total revenue," relates FelCor's Senior Vice President of Asset Management Jack Eslick. Total revenues for the firm were \$921 million through the end of September.

Both natural gas and electricity costs increased during 2003 and Eslick expects the final tally of utility expenses to be up between 8 percent and 9 percent for the year. Natural gas is used in food and beverage services, hotel laundry and to heat some hotels, he says.

Because energy comprises such a significant expense for FelCor, the firm is testing energy saving technologies, such as a sensing device in guest rooms that moderates heating and cooling depending upon whether the room is occupied.

"We've been watching the devices for about a year and a half and we're going to pursue it a bit more in 2004," Eslick says. The REIT is also testing a water recycling system in an Atlanta property and has been upgrading lighting across its portfolio.

"Like any expense item, some owners will concentrate on energy more than others," Eslick says. "In the past three

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## Is Energy a Factor in Site Selection?

**O**ffice towers in Laramie? Garden-style apartments in Casper?

If low electricity costs were all that mattered to commercial real estate companies and their tenants, there would be a lot of building going on in Wyoming. According to the Energy Information Administration of the U.S. Department of Energy, Wyoming's average cost per kilowatt-hour of 4.8 cents is the lowest figure for the 50 states and the District of Columbia.

## Meter Readings

Average cost of electricity costs per kilowatt-hour in the 10 most expensive states.

| State         | August 2003 | August 2002 |
|---------------|-------------|-------------|
| Hawaii        | \$0.1403    | \$0.1324    |
| New York      | 0.1278      | 0.1194      |
| California    | 0.123       | 0.1258      |
| Rhode Island  | 0.1157      | 0.0938      |
| Massachusetts | 0.115       | 0.1002      |
| New Jersey    | 0.1137      | 0.0981      |
| Vermont       | 0.1101      | 0.1075      |
| New Hampshire | 0.1077      | 0.1026      |
| Connecticut   | 0.1049      | 0.0961      |
| Alaska        | 0.1032      | 0.1033      |
| U.S. AVERAGE  | 0.0789      | 0.0756      |

Source: Energy Information Administration of the U.S. Department of Energy

Of course, tenants' site selection decisions are not based on utility costs alone. Different types of tenants have different needs, ones that typically override energy factors.

"The things that are important to our tenants are features that you would typically find in Class-A industrial properties," says a spokesperson for San Francisco-based AMB Property Corp. "This might be truck court parking, specific clear heights or cross docks. Those factors become the driving reasons behind decisions to lease, not necessarily energy efficiency."

Office tenants require locations in major cities for many reasons, including access to intellectual talent. New York, San Francisco and Boston, all major office markets, have the highest electricity cost per square foot, according to the 2003 BOMA "Experience Exchange Report", a survey conducted by BOMA.

For facilities such as call centers or data backup centers, however, office tenants don't need a central business district (CBD) location. "Those facilities could be located anywhere and you can often take advantage of a big difference in electricity costs from one state to another," says David Houck, a senior vice president in the Washington, D.C. office of Staubach Co., a tenant representation firm. "Deregulated states have an advantage over regulated states."



## Impact of Deregulation

Additionally, deregulated energy markets have provided investors an opportunity to assess a REIT management's ability to navigate through a new market structure. An untold number of REITs are purchasing electricity in the deregulated markets where they have properties.

Some 24 states and the District of Columbia have set about deregulating electricity, according to the Energy Information Administration of the U.S. Department of Energy. California's deregulation problems are well publicized and "market restructuring," as the electric industry calls deregulation, has produced mixed results for REITs that buy electricity in other markets where it has been implemented.

In New Jersey, energy prices rose 20 percent between September 2003 and December 2003, says Barbara Yamarick, senior vice president of tenant services and administration for **Brandywine Realty Trust** (NYSE: BDN). But Brandywine found a low-cost source of power and took only a 12 percent hit. When power was deregulated in Pennsylvania five years ago, the REIT realized it had to look for potential savings. The firm hired energy consultancy **EPEX Inc.** to help in its effort.

"There are times you realize what you don't know," Yamarick says. "A lot of real estate companies here were paralyzed and didn't make any choices. They lost the chance for some terrific savings."

**Equity Office Properties** (NYSE: EOP) has been purchasing power in deregulated markets such as California, Illinois, New York, Pennsylvania, Texas, Massachusetts and Washington, D.C. since 1995. Annual savings have ranged from \$16 million to \$28 million, reports Frank Frankini, the firm's senior vice president of engineering and energy operations.

**Reckson Associates Realty Corp.** (NYSE: RA) has been buying deregulated power in New Jersey and New York, but the firm has yet to capture any savings for its efforts. Todd Rechler, senior vice president and managing director of the REIT's New Jersey division, says energy costs have risen because of

or four years, however, energy has become a line item that is not taken for granted and something to focus on."

## Multifamily



Multifamily REIT investors have many factors to consider when

investigating a company's energy consumption and expenses. The property can either be master metered, where the owner pays for energy, or it can be individually metered, where tenants assume responsibility. Market location is also important and there is a difference in utility costs between garden-style assets and buildings with elevators.

For example, mean annual utility costs in New York City, a predominantly elevator market, run \$1,838 per unit, according to the **Urban Land Institute**. In San Diego, which has mostly garden-style properties, the cost is \$713 per unit (see Table 2 below left).

"Typically in a high rise, your common area utilities are going to run double what garden-style properties do because you have interior halls that have to be lit 24/7," explains Randall Ell, executive vice president of property operations for **Summit Properties Inc.** (NYSE: SMT) and the president of Summit Management Co.

In its "2003 Survey of Income and Expenses in Rental Apartment Communities," the **National Apartment Association** reports that utilities run \$317 per unit per year, or 9.6 percent of total operating expenses, for all individually metered market-rent properties. Master-metered complexes incurred average costs of \$893 per unit per year, or 20.5 percent of total operating expenses.

Summit has a number of individually metered proper-

ties in its Southeast markets. Here, the REIT pays common area utilities—items such as breezeway, interior corridor and parking lot lighting. In total, these expenses run approximately \$110 per unit annually. Summit owns approximately 14,700 units, according to the company's Web site.

"We got real smart on energy conservation a long time ago, even when the residents were paying for it," Ell says. One of the energy efficiency measures undertaken was the replacement of incandescent common area lighting with longer life fluorescent bulbs.

Summit also has a property in Atlanta that uses natural gas. Natural gas prices doubled during 2003, Ell says.

"It really hurt us, especially when you charge residents a flat rate for utilities. If you don't expect utilities to go up, then you don't get a chance to pass the increase along to the residents," he adds. "A lot of property owners in the Northeast experience the same thing."

Home Properties owns more than 41,000 units, many located in the Northeast. The company pays heating costs for approximately 70 percent of its units, relates Senior Vice President and CFO David P. Gardner.

In the 2002 to 2003 heating season—encompassing the fourth quarter 2002 and first quarter 2003—Home Properties' same store gas costs were \$11.3 million, up 6.8 percent from the year earlier, due primarily to a harsh winter.

"In 2002, gas costs represented just under 9.9 percent of same store property operating expenses," Gardner says. "During the heating season gas costs are approximately 14 percent of property operating expenses."

To save money, Home Properties has a schedule of window and door replacement in its properties. In 2002, the REIT

TABLE 2

### Largest U.S. Apartment Markets

Ranked by Mean Utility Expenses Per Unit

| Market                        | Mean Utilities Per Unit |
|-------------------------------|-------------------------|
| New York City                 | \$1,838                 |
| Boston                        | 1,152                   |
| Philadelphia                  | 1,055                   |
| Nassau-Suffolk Counties, N.Y. | 873                     |
| Chicago                       | 871                     |
| Washington, D.C. MSA          | 842                     |
| Detroit                       | 784                     |
| Minneapolis-St. Paul          | 753                     |
| San Diego                     | 713                     |
| Los Angeles-Long Beach        | 642                     |

Source: "Dollars & Cents of Multifamily Housing," a survey by the Urban Land Institute.



installed 10,000 new windows. "This is significant, considering the average age of our apartments is 33 years and when we purchase older properties, which is part of our repositioning strategy, they often have original windows," Gardner says.

## Retail



Utility costs at retail properties also show great variation.

According to New York City-based **International Council of Shopping Centers**, utilities at enclosed malls run \$2.06 per square foot, compared to \$16.37 per square foot of total operating expenses. Open-air centers, by comparison, run cheaply at \$0.25 per square foot and \$4.10 total.

"Whatever we can do to reduce the cost to the tenants and ourselves helps because a certain amount of the costs are borne by us," says John Hoeller, senior vice president of property management at **Glimcher Realty Trust** (NYSE: GRT). "We've retrofitted mechanical units with variable speed motors, we've co-oped with utility companies to provide emergency power and found opportunities to reduce spikes in our energy usage.

"We're constantly looking at energy," he stresses. "I have a national director of operations and probably 60 percent of his job is to investigate ways to save energy."

## Industrial



Warehouse and industrial properties are typically leased triple-net,

meaning the tenant assumes utility costs. For an industrial REIT, energy costs are not as relevant as they are in other property sectors. Energy costs run "around 40 cents to 50 cents a square foot on an

annual basis," says Kevin Crowley, vice president of the **Society of Office and Industrial Realtors**. "That's assuming the product doesn't have to be maintained at a certain temperature (such as a cold storage facility)."

"As a proportion of our non-reimbursable expenses, energy accounts for less than 1 percent of total property operating costs," reports a spokesperson for **AMB Property Corporation** (NYSE: AMB). While the REIT acknowledges its concern for minimizing tenants' occupancy costs and building customer goodwill, energy efficiency is "not as large a priority for us as other property types because of how leases are structured."

From a competitive standpoint, AMB acknowledges the value of energy efficiency initiatives and says the inclusion of such programs makes the most sense during the development or retrofit phase.

All commercial property owners pay for power on vacant units. But today, with occupancies near cyclical lows, the hit on industrial owners is not that great because the temperature assets are lower than those maintained in other properties, explains David P. Draft, executive vice president of operations for **First Industrial Realty Trust Inc.** (NYSE: FR).

"The impact is miniscule on a relative basis for a portfolio of more than 61 million square feet," he says. "Less than \$150,000 annually with a 2 percent variance in occupancy."

Energy issues seem to capture the public's attention only in times of crisis, such as the Arab oil embargo of the 1970s or the California deregulation imbroglio a few years back. The REIT investor, however, should pay attention to these issues all the time because energy consumption, costs and efficiency practices can influence the bottom line and affect property values.

## 2003 Blackout Pushes Demand For Backup Power?

A recently issued report, "The 2003 Blackout: Lessons for Property Owners and Managers," identifies problems in life-safety, communication and utility systems that arose during the massive blackout in August 2003. Gary Graham, the vice president of energy services at real estate services firm **Jones Lang LaSalle** and author of the reports, says despite increased attention, tenants' attitudes toward backup on-site power generation have been difficult to gauge.

"There was a spike in interest in discussion of it from a tenant standpoint," Graham says. "Has there been a big push for demanding it in leases or requesting it in leases? It's probably too early to say."

While it may be premature to ascertain tenants' preferences, office building owners seem to be seizing the initiative on redundant energy. Reckson's Todd Rechler adds that because of the blackout and deregulated energy markets, the firm has been investigating adding "additional generation—both backup power and distributed generation—in our buildings."

According to the California Energy Commission, distributed power generation, also known as co-generation, utilizes small-scale generation technologies, usually less than 10,000 kilowatts, located close to the point of usage to provide an alternative to or an enhancement of traditional power systems.

Equity Office Properties plans to invest \$15 million in distributed generation projects in 12 buildings in five cities within the next year, according to Equity Office's Frank Frankini. "Lower energy costs for tenants, increased revenues for landlords and improved reliability are a few of the advantages provided by distributed generation," he explains.

Equity Office has identified several markets, including Chicago, Boston, New York and San Francisco, where distributed generation may be a feasible alternative to traditional power supplies. "We focus on those MSAs (metropolitan statistical area) where we have a significantly sized portfolio, where financial conditions are attractive and where city and state incentives are offered," Frankini says.



WAREHOUSE: PHIL BANKO/GETTY IMAGES



deregulation. "It will be a while before you see enough generation capacity to stabilize the market and bring prices down," Rechler says.

**FelCor Lodging Trust Incorporated** (NYSE: FCH) has approximately 25 percent of its 161 properties in deregulated energy markets, according to the company's senior vice president of asset management, Jack Eslick. And, multifamily trust **Home Properties** (NYSE: HME) has a hedging program to mitigate the volatility of natural gas prices. Executive Vice President and Chief Financial Officer David P. Gardner reports that at the end of the third quarter, the company had fixed contracts for the current heating season for 99 percent of its natural gas exposure, at a cost approximately 15 percent below current prices.

### Effect on Stock Performance

A recent report by financial research firm **Innovest Strategic Value Advisors** suggests that a REIT's energy efficiency practices enhance stock performance. The firm investigated the involvement of 36 REITs in the U.S. Environmental Protection Agency's Energy Star program. Energy Star evaluates a property's energy performance to help building owners achieve energy efficiency. Buildings are graded on energy performance and a score of 75 or higher earns an Energy Star label, meaning the property is in the top quartile of all similar properties nationwide. A labeled building signifies the property is energy efficient and has lower operating costs than its peers, Frankini says.

Innovest divided the trusts into three groups of 12: those active in the Energy Star program; REITs that are less active in the program; and non-partners, i.e., REITs that are not involved. The active partners include Equity Office, Arden and **Trizec Properties Inc.** (NYSE: TRZ).

Active and less-active partners were distinguished by whether the company had a relatively high or low number of buildings that received an Energy Star label. From June 2000 to June 2002, stock prices of active members increased 33.1 percent, the less-active ones increased 26.5 percent and non-partners returned 20.4 percent.

Marc Brammer, an Innovest senior analyst, concedes that factors besides a firm's focus on energy management also contribute to stock price performance. However, he stresses that effective energy management is one of the most demanding challenges management must deal with.

"There are high levels of technical, regulatory and market uncertainty as well as many stakeholders and complex issues to address," he argues. Firms that are willing to get their arms around a complex issue such as energy management, he says, are probably able to deal with a range of "knotty issues."

"A company that understands energy efficiency and is able to implement it really well is probably doing a good job handling other challenging issues of their operation," Brammer says. ♦

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## The Payoff

**A**t times, simple solutions provide an immediate payback.

Two years ago, Washington Real Estate Investment Trust purchased a 267,000-square foot office property in Rockville, Md. Energy costs were running about \$2.50 per square foot, higher than the market average of \$1.98, Washington REIT's Edmund Cronin Jr. says.

"The property was not being very well managed by a third-party management company," he adds.

After the sale, Washington REIT scheduled maintenance on the mechanical equipment and cleaned the ducts. A savings of 40 cents per square foot was immediately realized and those savings dropped to the bottom line.

For REITs, the essential calculus of energy efficiency improvement comes down to how much the improvements will cost and how quickly they pay back.

"There's always the argument that if tenants are getting the benefit of the energy savings, why would I do an energy project?" asks Scott Lyle, president of Next Edge, an energy management consultancy set up as a taxable REIT subsidiary of Arden.

"You've got to do the math on it, look at the escalations passed through to tenants, and the state and federal energy efficiency rebates and tax incentives that are on the table. In the majority of cases, both the landlord and the tenant are participating significantly in the savings."

Indeed, federal and state rebates and tax incentives can go a long way toward defraying the costs of the energy improvements.

"The California Energy Commission, for example, provides rebates set at a specific dollar amount per kilowatt of reduction for energy efficiency projects such as lighting retrofits or adding variable speed drives to pumps and motors," Lyle says. "The federal government allows some of these retrofits to be included as tax benefits, usually in the form of accelerated depreciation."

FelCor Lodging Trust's Jack Eslick focuses his company's cost efficiency initiatives in markets where energy costs are high. "A project in California will pay back quicker than one in Dallas, for example," he says. "Typically, payback is 12 to 18 months."

Eslick also takes advantage of available rebates and financial incentives. "For a 250-room hotel, an energy efficiency project might cost \$50,000 to \$70,000, but we've been able to cut that in half" by tapping available state and federal money, he explains.

