Intangibles and Corporate Value:
How Can Energy Efficiency Differentiate Corporate Performance?

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ABSTRACT

Intangibles - that is, non-financial factors that don't appear on corporate balance sheets - have evolved over the history of the U.S. financial markets to become the primary valuation driver for equities. A shift from traditional metrics such as units produced or net profits has followed from both the evolution of the U.S. economy toward less production-oriented business and the increased importance of the individual investor. Companies have long been aware of how intangibles such as brand recognition and corporate reputation influence their market value, but only recently have systematic approaches to understanding and managing the mix of intangible factors that contribute to stock price emerged.

Corporate energy costs are often treated as fixed. While progress is being made to benchmark and rate the energy performance of buildings and building portfolios, it's difficult, at a corporate level, to benchmark energy costs against those of comparable businesses. Energy efficiency, despite providing significant and real benefits in terms of operations costs and environmental responsibility, is treated as an intangible asset in corporate valuation. There are no common measures that allow stakeholders to rate and value companies in terms of relative energy efficiency.

This paper will detail efforts to clarify the intangible and tangible shareholder value benefits of corporate environmental performance and energy efficiency. Specific, compelling rewards for this type of approach, which often includes making energy efficiency a priority across the entire corporate building portfolio, will be described. These rewards may be a key motivational factor in moving energy efficiency programs further into the corporate marketplace.

The Historical Shift to Intangible Value

"*An ever increasing share of GDP has reflected the value of ideas more than material substance or manual labor input*."

Alan Greenspan, Chairman, U.S. Federal Reserve Board

"As intangible assets grow in size and scope, more and more people are questioning whether the true value…and the drivers of that value…are being reflected in a timely manner in publicly available disclosure."

Arthur Levitt, Chairman 1993-2001, U.S. Securities and Exchange Commission

Balance sheet financial performance has decreased in importance as the U.S. economy has matured from basic industry and manufacturing to service and marketing functions. The ratio of market value to book value has steadily increased over the past 25 years while the relationship between balance sheet financial performance and actual stock price has decreased over the same period. This unaccounted-for balance is attributable to intangibles. Sell-side analysts that rely on non-financial performance information produce more accurate earnings forecasts (Low and Kalafut 2002).

The International Accounting Standard on Intangible Assets (IAS 38) defines an intangible asset as "an identifiable non-monetary asset without physical substance held for use in the production or supply of goods or services, for rental to others, or for administrative purposes" (International Accounting Standards Board, 2). According to the Organization for Economic Cooperation and Development (OECD), investment by public companies in intangibles such as research & development, brand development, and training has exceeded total investment in tangible assets since 1997 (Low and Kalafut 2002).

At the same time, non-financial performance measures have become more significant: intangibles currently account for roughly 85 percent of market value in 2000, up from 30 percent in 1930 (Low and Kalafut 2002). Even for large, mature companies, a significant part of the valuation is attributable to non-financial information.

Corporate scandals associated with inappropriate accounting practices have further influenced investors to consider more than balance sheet fundamentals when assessing corporate value. Intangible value has emerged as a recognized but difficult to quantify component of corporate excellence, with the marketplace struggling to understand what performance metrics and measures best allow the communication and consideration of intangibles in the equities marketplace.

Environment, Health & Safety as Key Intangibles

"Every corporation is under intense pressure to create ever-increasing shareholder value. Enhancing environmental and social performance are enormous business opportunities to do just that."

Gary Pfeiffer, Senior Vice President & CFO, DuPont
(Global Environmental Management Initiative 2004, 2)

Environment, health & safety (EHS) issues are emerging as important intangible value drivers. Eighty-one percent of Global 500 executives rate EHS issues among the top ten value issues in their businesses (Global Environmental Management Initiative 2004, 4). The growing recognition of the value of EHS is reflected in the increase in corporate sustainability reporting:

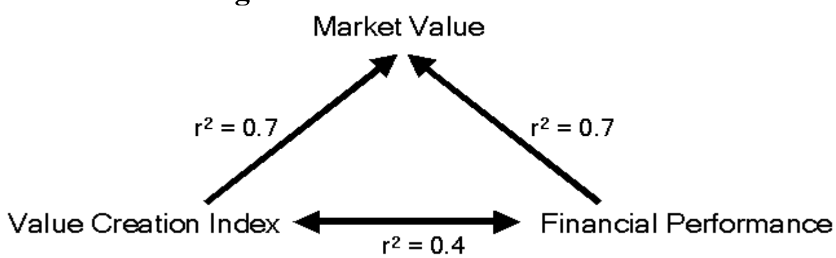
- Sixty-eight percent of the largest 100 global companies issue EHS reports (Social Investment Forum Research Program 2001).
- Four hundred eighty-seven companies published sustainability reports in 2001, up from 194 in 1995 and seven in 1990 (Cortese 2002).

The growth in reporting indicates that EHS is seen as a core business differentiator - companies choose to report on EHS and sustainability because they feel it will benefit their bottom line.

Research conducted under the auspices of the Cap Gemini Ernst & Young Center for Business Innovation provides strong indications that corporate focus on intangible value can yield significant benefits. Rigorous analysis of several key intangible factors across specific industries was used to create an index of factors called the Value Creation Index (VCI) that allows companies to quantify and track their performance on intangibles management. Application of this index to Fortune 500 companies revealed the following interrelationships; see Figure 1:

- R-squared values of around 0.70 indicated that intangible factors are as powerful as financial performance in explaining variance in market value between companies.
- The VCI is quite elastic. A 10 percent change in the VCI is associated with a 5 percent change in corporate market value, after controlling for financial variables.
- The VCI demonstrates that at least half of a traditional company's value is based on key intangible drivers. Also, improvement in intangible drivers translated strongly into increased market value (Low and Kalafut 2002, 211-12).

Figure 1. Value Creation Index



Source: Low and Kalafut 2002.

Corporations are now beginning to apply the VCI analysis and concepts specifically to environmental intangibles.

GEMI Clear Advantage: Building Shareholder Value

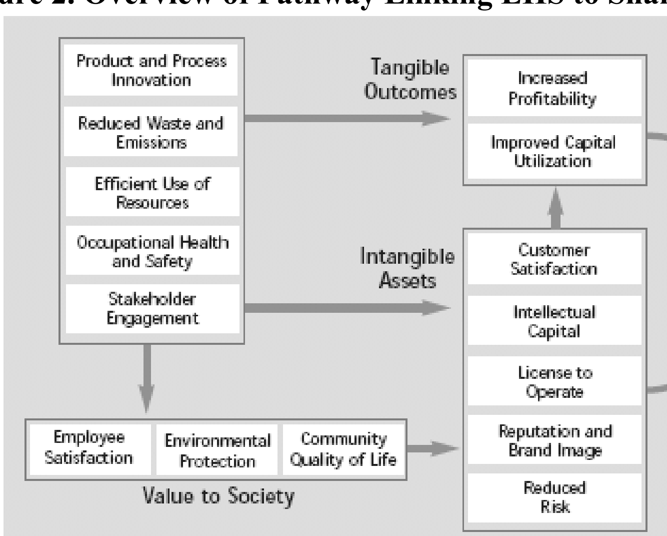
The Global Environmental Management Initiative (GEMI) is a non-profit organization of corporate leaders dedicated to promoting and facilitating improved environmental, health, and safety practices worldwide. Participating companies are listed in Table 1. Many of these companies also participate in U.S. Environmental Protection Agency's ENERGY STAR Program. GEMI has been promoting the bottom-line business value of EHS activities in ways that maximize recognition and reward from shareholders.

Table 1. GEMI Member Companies

3M	Hoffman La Roche
Abbott Laboratories	Intel Corporation
Altria	JohnsonDiversy, Inc.
Annheuser-Busch	Johnson & Johnson
Ashland, Inc.	Johnson Controls, Inc.
Aventis Pharmaceuticals, Inc.	Koch Industries, Inc.
Bristol-Myers Squibb Co.	Lockheed Martin Corporation
BNSF Railway Company	Merck & Company, Inc.
The Coca-Cola Company	Mirant Corporation
ConAgra Foods	Motorola, Inc.
Dell Inc.	Novartis Corporation
The Dow Chemical Company	Occidental Petroleum Corporation
Duke Energy	Pfizer, Inc.
DuPont	The Procter & Gamble Co.
Eastman Kodak Company	Schering-Plough Corporation
Eli Lilly and Company	Smithfield Foods, Inc.
FedEx Express	Southern Company
Georgia-Pacific Corporation	Temple-Inland, Inc.
Halliburton Company	Texas Instruments, Inc.
Hewlett-Packard	Wyeth

Figure 2, from "Clear Advantage: Building Shareholder Value" illustrates the relationship between EHS activities and shareholder value. Energy efficiency impacts both the tangible side (increased profitability and improved capital utilization) and the intangible side (brand image, reduced risk, environmental protection) of shareholder value (Environment: Value to the Investor Work Group 2004). Program managers, CEOs, facility managers, and third-party service providers can enhance the value of their efforts by ensuring that these intangible benefits are specifically considered when characterizing their energy efficiency efforts.

Figure 2. Overview of Pathway Linking EHS to Shareholder Value



Source: Environment: Value to the Investor Work Group 2004

ENERGY STAR's national energy performance rating system provides a uniform, impartial and reliable performance gauge for commercial building energy performance. The range of available space types has grown to include more than 50 percent of the U.S. commercial buildings market and new space types continue to be added. With this tool, program Partners have moved from single-technology or single-building approaches to managing and improving the energy performance of multi-million square foot portfolios of buildings. A careful portfolio approach leads to an ongoing cycle of performance improvement proven to provide compelling financial returns that are valued both at senior levels within a partnering organization and by outside financial stakeholders. Only a portfolio-level approach allows companies to leverage energy efficiency to impact shareholder value as outlined in Figure 2.

EPA offers ENERGY STAR to businesses and other organizations as a straightforward way to adopt superior energy management to realize the cost savings and environmental benefits that can result. EPA promotes a strategy for superior energy management that starts with the top leadership, engages the appropriate employees through the organization, uses standardized measurement tools, and helps an organization prioritize and get the most from its efficiency investments. Many of the program's most successful partners are leveraging the value of their energy performance improvements beyond the facilities or corporate real estate departments.

Energy and the Environment as Financial Issues

"We believe that quality energy management can be an indicator of overall management acuity."

Ingrid Dyott, Neuberger Berman (Neuberger Berman 2003)

Financial stakeholders are increasingly interested in corporate environmental performance as a factor in financial performance. Because of the complexity of effective environmental management - multiple layers of regulatory imperatives, complicated accountability chains, multiple stakeholders - financial stakeholders regard the issue as a useful proxy for overall management quality, the most important determinant of stock price performance. The theory is that a company that is able to effectively manage an issue as complex as the environment will also be able to effectively manage its core business challenges.

Analysis exists that traces the correlation between environmental and financial performance. Research conducted in 2002 by Innovest Strategic Value Advisors, a nationally recognized financial research firm, specifically compared the stock price performance of energy management leaders and laggards in three sectors:

- In the grocery sector, energy management leaders as a group outperformed energy management laggards by 17 percent over a three-year period. Leaders also outperformed laggards on price-to-earnings, price-to-book, return-on-assets, return-on-equity, return-on-invested-capital and Tobin's Q, a measure of intangible value (Innovest Strategic Value Advisors 2002a, 1).
- In the commercial real estate sector, the energy management leaders outperformed energy management laggards by 34 percent over a two-year period (Innovest Strategic Value Advisors 2002b, 1).
- For retail companies, companies with above-average energy management outperformed companies with below average performance by 71 percent over a five-year period (Innovest Strategic Value Advisors 2003, 2).

For financial stakeholders looking to integrate corporate environmental performance information in their investment evaluations, the availability of adequate and reliable data presents a significant challenge. There are few requirements for environmental performance disclosure and most of those requirements focus on the avoidance of negative performance; waste not released, thresholds not exceeded. Voluntary corporate reporting has increased dramatically in recent years. Four hundred eighty-seven companies published sustainability reports in 2001, up from 194 in 1995 and seven in 1990 (Cortese 2002). While helpful, because voluntary corporate reporting isn't governed by standardized metrics or widely agreed-upon protocols, making direct company-to-company comparisons can be problematic.

Many investors and investor research services track company participation in voluntary environmental initiatives, including ENERGY STAR. Some stakeholders have observed both that the ever-growing number of voluntary programs makes tracking difficult (and expensive) and that these programs too often fail to provide a basis for gauging participants' ongoing activities and accomplishments. EPA's energy performance rating system for buildings will allow participating companies to report an ongoing stream of objective performance improvement data that will be valued by investors.

Socially Responsible Investing As a Market Driver

The most dramatic example of intangibles being expressly valued in the equities marketplace is the emergence of socially responsible funds (SRIs). With over 800 portfolio managers and analysts and over 200 funds screened for environmental and social issues, this subset of the equities marketplace is a notable influence on corporate behavior. Recent statistics indicate why a better understanding of the SRI segment of the investment industry may be important to motivating portfolio-wide corporate energy efficiency:

- SRIs currently account for around $2.3 trillion in investment in the U.S. marketplace, which is 12 percent of all U.S. assets under management (Social Investment Forum 2003, 2).
- There was a three percent net inflow to SRI funds between January and June 2002, and a concurrent 9.5 percent net outflow from the total assets of U.S. diversified funds. SRI funds may attract new investors that have lost confidence in mainstream options, or the growth in responsible investing may compensate for down market conditions (Social Investment Forum 2003, 8).
- SRI portfolios turn over half as often as mainstream funds. SRI fund managers take a generally longer view regarding holdings in their portfolios, making SRIs very desirable to corporate IRs (Social Investment Forum 2003, 12).

An increasing number of mainstream investment providers, including pension funds, are adding screened investing options to their suite of offerings. Firms include TIAA-CREF, The Vanguard Group, and Neuberger Berman. The mainstream investment community's acknowledgment of the importance of investment options that consider intangibles signals a shift that will motivate more companies to focus on these issues.

Through the ENERGY STAR program, EPA has been working with a growing list of institutional investors, including SRIs, which are specifically interested in better understanding companies' energy efficiency performance. These efforts are described in more detail in a parallel paper at this conference (Collison, Teplitz and Anderson 2004). SRIs are eager for information regarding what their holdings are doing in the area of intangibles and are particularly interested in the kinds of objective pollution prevention and financial performance data that a company might provide associated with an energy efficiency initiative.

How Companies Can Capture Shareholder Value

ENERGY STAR and Financial Messaging

The emergence of financial stakeholder interest in corporate environmental, energy, and climate change performance offers significant opportunities for energy efficiency programs. In response, ENERGY STAR has focused both on helping: 1) financial stakeholders to increase their understanding and awareness of corporate energy activities; and, 2) its corporate Partners to describe and communicate the results of their ENERGY STAR-related actions in terms that financial stakeholders will value.

EPA has developed tools and core business messaging equivalents to help program participants communicate success to a larger stakeholder audience. The Financial Value Calculator (FVC) provides sector-specific calculations of energy management activities' financial consequences that are designed both to help companies build internal support for increased energy management investments and to ensure that their value is recognized by outside stakeholders. These calculations move energy management from being a facilities-level issue to an organization-wide source of quantifiable financial value. For example, for the average grocery sector company, a 10 percent reduction in energy costs is equivalent to a 6 percent increase in profit margins or a 7 percent increase in earnings per share.

In working with a leading supermarket company, EPA determined that the Partner would jump from twelfth to tenth in terms of profits if it reduced its energy per square foot costs only to the industry average. This type of messaging can be used to generate external stakeholder recognition (institutional investors, pension funds, etc.) of corporate performance as well as to capture the attention of senior corporate decision-makers. This group is ultimately responsible for committing to program participation, energy investment budget allocations, and can drive effective communication of program results. The national energy manager for a Top Three retail company reported that the FVC was perfect for explaining the value of his department's energy budget request to senior management.

Communication to external stakeholders is critical. The building energy community has grown accustomed to communicating single building successes through media that are oriented toward others in the building community. It takes some creativity to shift to communicating specific success in terms that the financial media will understand, and working with the IR department and corporate communications is key to this shift. It is also critical to communicate aggregate success across the entire building portfolio to capture more compelling financial and managerial messages and link directly to core business metrics. EPA is working to better inform the financial community of businesses' successes in ENERGY STAR. Companies can respond to a short, 10-question template to create brief, compelling descriptions of their energy management commitments and successes. ENERGY STAR gathers these pieces and shares them with a distribution list of more than 300 interested financial stakeholders on a regular basis. Here are two examples of communications for ENERGY STAR participants that could be integrated into annual or quarterly reports, or pushed out to financial media:

"Eastman Kodak has been awarded a 2004 Award for Leadership in Energy Management by the U.S. EPA's ENERGY STAR Program. An ENERGY STAR award winner for the second consecutive year, Kodak continues to demonstrate the value of superior energy performance by achieving energy savings amounting to $2 million in 2003. Since baselining its energy consumption and greenhouse gas emissions (GHG) in 1997, the company has reduced its energy costs by $10 million annually and overall usage by more than 15 percent. Overall, Kodak's greenhouse gas emissions are down 17 percent from a 1997 baseline. The greenhouse gas emissions reductions associated with the 2003 energy performance improvements are equivalent to eliminating the emissions of 94,000 cars. Kodak's Energy Focus teams held more than 16 three- to five-day events, concentrating on specific opportunities to increase energy efficiency in a designated manufacturing process" (EPA 2004).

"Starwood Hotels & Resorts Worldwide, Inc. is a leading U.S. hotel company, owning, operating and franchising over 700 hotels in 80 countries...Starwood's energy management initiatives are paying off. The company invested $8.5 million in energy projects completed in 2001, and saved $3.4 million - equivalent to renting 9,370 additional rooms. In 2002, Starwood invested approximately $4.6 million in energy projects and saved $1.3 million, the equivalent of renting 9,800 additional rooms" (EPA 2003).

Note that this communication approach is somewhat different than that typically generated by facility managers, efficiency programs, or energy service providers. It covers a portfolio-wide effort with a top-down mandate, and aggregates financial benefits in core business terms. ENERGY STAR offers assistance in creating this type of communication for Partners that are interested in taking a comprehensive approach to exemplary performance.

The Investor Relations Function

The National Investor Relations Institute (NIRI) defines the investor relations (IR) function as: "a strategic corporate marketing activity combining the disciplines of communications and finance that provides present and potential investors with an accurate portrayal of a company's performance and prospects… Marketing in this context does not mean 'selling' a company's securities, but rather a process of identifying target audiences and educating them about the present and potential value of those securities" (National Investor Relations Institute 2004). With the U.S. corporate environment recovering from several high profile scandals, IR professionals are more interested in positive benefits than ever before. There is an opportunity for portfolio-wide energy efficiency to be included in corporate IR activities.

Portfolio-wide building energy efficiency, as it provides opportunities for both cost savings and environmental stewardship, can be valuable at the IR level. However, IR staffs are often unaware of corporate energy efficiency activities. It is uncommon for the IR function to take advantage of or be approached by those that are carrying out corporate energy efficiency programs. The opportunities for companies that are engaging in the kind of portfolio-wide operational excellence facilitated by the ENERGY STAR Program and are making cross-functional internal connections are significant.

Changing and Repackaging Conventional Approaches

Turning the tangible benefits of energy efficiency into shareholder value requires a careful approach to energy management. In general, the building efficiency industry has evolved around single building technologies, large capital projects sold to individual facility managers, and success measured in increased efficiency or payback. This is an insufficient combination for capturing the attention of market analysts interested in potential value beyond the corporate balance sheet.

The following are recommended changes in the manner in which energy efficiency initiatives are promoted, sold, implemented, and measured. It is important to note that none increases the cost or complexity of the basic approach significantly, and can result in a stronger initial commitment to investing in efficiency projects and stronger returns on these investments.

Pursue efficiency for the entire portfolio. Turning commitment to energy performance into positive corporate messaging in terms of increased earnings per share equivalents or other business metrics requires that results be reportable as portfolio-wide. The specific intangible value categories described above can be addressed if best operational and building management practices are identified and spread across the portfolio

ENERGY STAR's national energy performance rating system provides a uniform, impartial and reliable performance gauge for commercial building energy performance. The range of available space types has grown to include the most significant market sectors in the U.S. economy and new space types continue to be added, making a portfolio-wide approach possible.

Communicate continued commitment broadly. Corporations that want to manage intangibles effectively must evolve continuous, open book systems for communicating commitment and success. Energy efficiency approaches and successes should be shared with customers, employees, industry groups, investors, suppliers, and Wall Street analysts. Benchmarked targets and improvements are specific ways to let others know what achievements are anticipated and why they are important.

Consider more compelling language. Professionals implementing energy efficiency options are accustomed to communicating success in terms of energy efficiency. Even economic benefits are cast in terms of payback in energy cost savings or life cycle costs. Consider communicating commitment and success in terms that resonate with a larger audience: performance improvement, operational excellence, operating cost savings, equivalent increased earnings per share, shareholder value, equivalent sales, etc.

Include IR and corporate communication functions. Facility management functions seldom intersect with IR or corporate communication functions, as neither is typically aware of what they can do for each other. As portfolio-wide success is envisioned or achieved, it is important to work with these outreach players to line up the most powerful recognition possible. This will include more compelling media outlets for initiative success stories compared to traditional energy industry and sector-specific publications.

Conclusion

Corporations and financial stakeholders are interested in capturing the tangible benefits from activities that have not historically been included in balance sheet valuation calculations. This presents a significant opportunity for energy efficiency programs to increase participation and pollution prevention. Market transformation programs can help companies elevate energy efficiency activities from single-building projects to portfolio-wide drivers of significant shareholder value. Engaging senior decision-makers, corporate communications and investor relations will lead to greater market reward for companies that invest in energy performance and in turn to greater environmental benefit. These lessons are as applicable to privately held companies and non-profit institutions - schools, health care providers, etc. - as they are to publicly traded ones.

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