



Measuring the Return on Sustainability Investments: Show Me the (Green) Money!

Sustainability has been garnering a growing presence on the list of key considerations for corporate strategies and operations. As stewards of the corporate “purse strings,” many finance executives are questioning what level of engagement to have with sustainability on corporate strategy, operations and finances.

In a recent Deloitte global survey of 208 CFOs¹, over 50% said sustainability issues were affecting the key areas of financial management, including capital planning, risk management, financial reporting and investor relations. More than three-quarters indicated that it is important or very important to communicate about sustainability to shareholders and institutional investors. And nearly half of those CFOs surveyed are planning capital investments in equipment for increasing energy efficiency, generating on-site renewable energy, or reducing industrial emissions. In another Deloitte survey of finance executives², approximately 65% surveyed said that over the next 2-3 years, sustainability will be “important” or “very important” to the capital plans in their organizations.

While finance executives are increasingly thinking about sustainability, one important driver in this discussion is investor expectations and shareholder value. Recent event studies show that capital market participants are paying closer attention to sustainability, and stock price movement can be significant in response to negative or positive news about a company’s sustainability performance. An extreme example is the stock performance following British Petroleum (BP)’s oil spill on April 20, 2010: by the end of June 2010, BP’s stock price had fallen in half to \$28.9 from its price of \$59 the day of the incident. Looking over a 29 year period of less dramatic environmental news events for US corporations, one study³ showed that stock prices dropped an average of 1.12% within the two-day window following a negative environmental news announcement regarding the company’s behavior. This stock price sensitivity has increased steadily over the past 30 years. Similarly, positive news on a company’s environmental behavior produced an average increase of 0.84%. Another event study⁴ focusing on stock price movements following negative news concerning human rights corporate behavior quantified a median drop in market value of \$47 million within the 11 days surrounding the announcement (the average drop was \$892 million due to a sample set skewed by a few very large drops in value).

¹ “Sustainable Finance: The risks and opportunities that (some) CFOs are overlooking,” Deloitte Global Services Limited whitepaper, 2011.

² Deloitte Dbriefs Webcast, “Capital Planning Trends: New Ways Organizations Are Adapting to Uncertain Times”, July 12, 2010, 1330 participants.

³ Caroline Flammer, “Corporate Social Responsibility and Shareholder Value: The Environmental Consciousness of Investors,” MIT Sloan School of Management, July 2011.

⁴ Vivien Kappel, Peter Schmidt, Adreas Ziegler. “Human rights abuse and corporate stock performance – an event study analysis,” whitepaper, December 21, 2009.

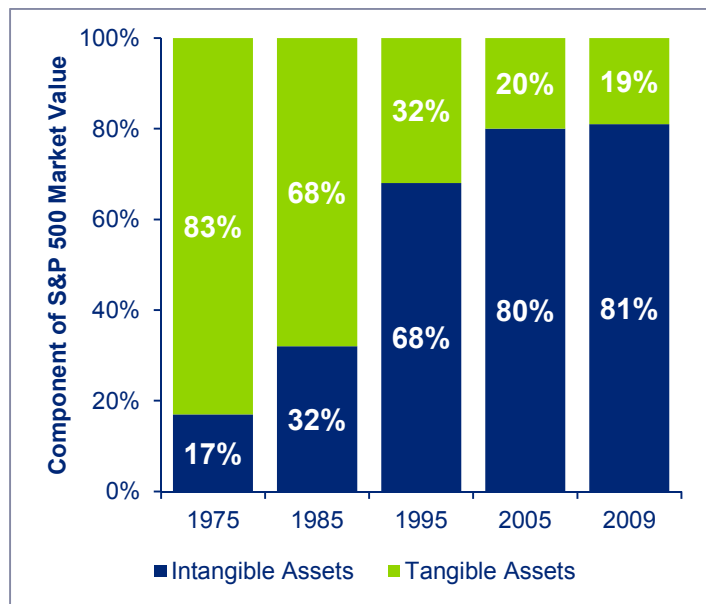
One conclusion to draw from these studies is that investor expectations regarding corporate sustainability performance, whether those expectations are disappointed or exceeded, can have a material impact the market value of a company. This suggests a two-phased approach to maximizing shareholder value with respect to sustainability: 1) activities that create parity in sustainability performance to mitigate against downside market price risk, and 2) activities that create differentiation in sustainability performance and that may help drive up stock price. A recent brand study provides some insights both for managing performance and for managing market perceptions regarding corporate sustainability.

Intangible “Strategic” Value

An analysis of the S&P 500 over the last 39 years was conducted by Oceantomo, and indicates a shift in shareholder focus from tangible to intangible value. Intangible book value was calculated by subtracting the tangible book value from the market capitalization of a given company or index, and the average component of a company’s market value that is derived from intangible assets has increased from 17% in 1975 to 81% by 2009⁵. Capital markets have consistently shifted towards companies with an increasing proportion of their perceived value in strategic, intangible value rather than favoring companies with large, tangible assets. This dramatic shift towards intangible value is a reflection of the increasing importance for many organizations of brand value, customer expectations, corporate reputation, investor confidence in management, investments in intellectual property – and increasingly intangible value is also a function of real and perceived environmental sustainability of the organization.

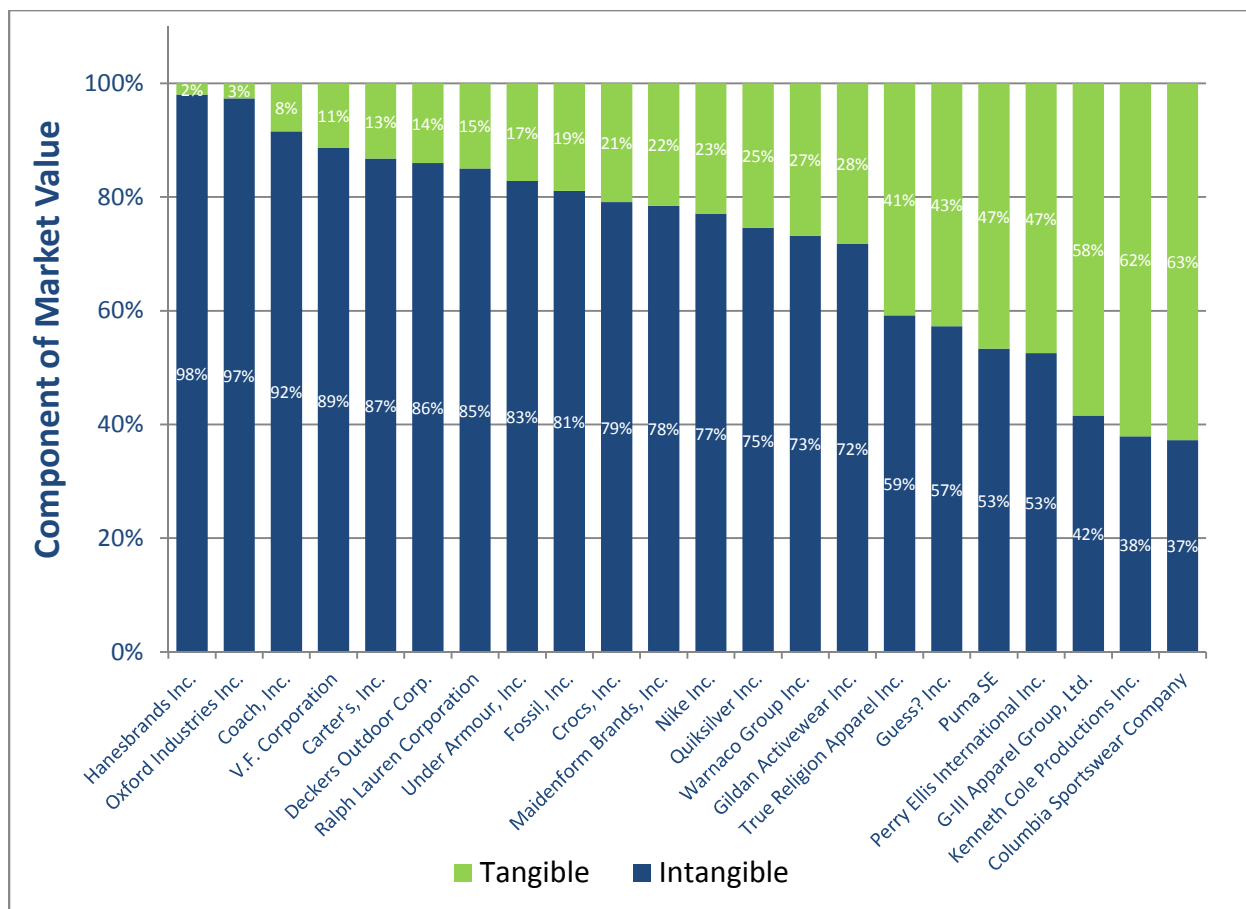
The time series analysis at right shows changes for the broad market over the past few decades. In addition, on the following page is a comparison at one point in time (September 2011) of several peer companies in the apparel industry.

Distribution of S&P 500 Market Value



⁵ Source: <http://www.oceantomo.com/productsandservices/investments/intangible-market-value>.

Distribution of Market Value for Branded Apparel Companies
Market Values as of September 30, 2011⁶



The peer analysis illustrates that even for a set of fairly comparable companies, the component of market value derived for intangible assets ranges from 37% to 98%, a very wide variance. This analysis does not conclude on how much of the intangible value is due to expectations regarding sustainability as compared to other sources of intangible value, though the impact of sustainability on corporate shareholder value is on the rise. For companies with high intangible asset values, shareholders have very high expectations regarding future value creation, and the source of this value creation may come from many sources, including investments in sustainability.

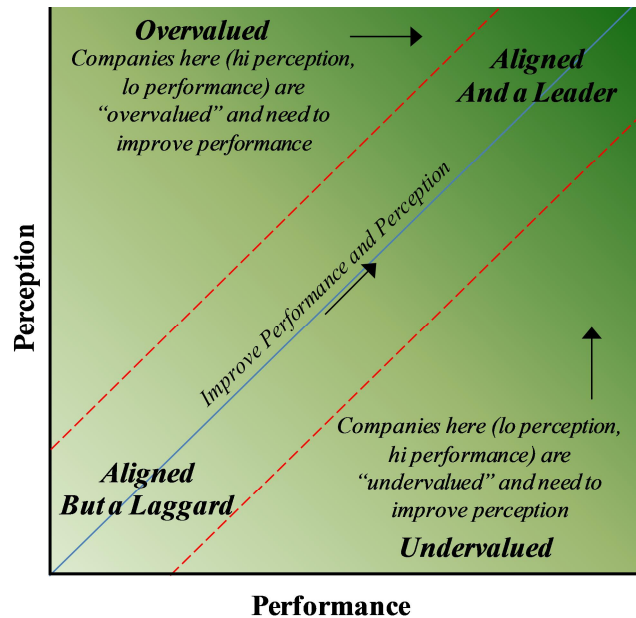
Interbrand recently released its first global report focusing exclusively on environmental sustainability, ranking the “Best Global Green Brands of 2011”⁷. They analyzed both the brand’s actual *performance* in sustainability efforts as well as the public *perception* of a brand’s sustainability. This approach also identified where brands had a major “gap” between perception and performance.

⁶ Source: Capital IQ, FV financials and Deloitte estimates

⁷ <http://www.interbrand.com/en/best-global-brands/Best-Global-Green-Brands/2011-Report/BGGB-2011-Key-Insights.aspx>

A gap in performance may exist for companies whose *perception* on sustainability goals, as perceived by customers and stakeholders, outpaces the companies' actual *performance*. Companies in the upper left quadrant, indicating that they are enjoying enhanced brand perception and its associated benefits, are at risk of a valuation decline if their perceptions drop to their level of actual performance. Companies in the lower right quadrant, those whose performance outpaces their perceived levels of sustainability, are not leveraging their performance to enhance their brand and missing out on opportunities for potentially increasing customer loyalty, entering new markets, improving employee retention and more. This study illustrates that although the intangible value of sustainability is driven by perception, an important issue is to decide not only *how* green a company wishes to be, but also that it needs to align both its performance and perception of sustainability.

Sustainability Performance and Perception Quadrants



How to implement into practical decision tool/process?

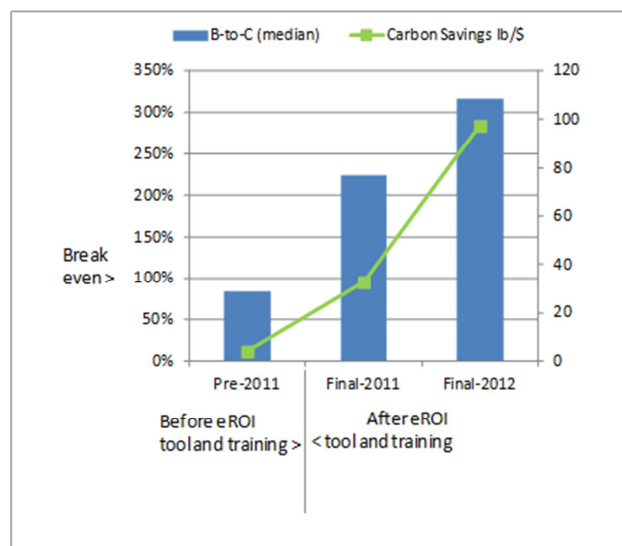
Case Study – Improving Sustainability Performance

A large U.S. organization with a wide range of industrial, commercial and residential assets and over 100,000 staff deployed globally was launching an energy management and sustainability transformation. They had ambitious targets for reducing energy consumption, carbon emissions and operating costs while increasing their knowledge of, preparation for and use of alternative energy. However, they needed to greatly improve enterprise-wide coordination, expertise in energy management, and energy project scoping in order to meet their goals in a cost efficient manner.

Deloitte worked with this organization to develop a long-term strategy, to conduct a fact-based analysis of their current energy usage benchmarked against industry standards, to develop a customized decision framework and model for evaluating energy management project business cases (Energy ROI (“eROI”)), and to train their staff in the fundamentals of attractive energy and sustainability projects.

The eROI decision model needed to be customized to the organization’s specific strategic objectives, which included: cost savings, emissions reduction, reliability of energy supply, impact on stakeholders’ perceptions, and building a platform for future innovation. By using an efficient process and a multi-criteria scoring tool to “dollarize” soft benefits, the organization was able to easily compare divergent projects and prioritize them to obtain the biggest benefit for any budget constraint.

Case Study Results



At first, the organization faced challenges: most managers were not experienced in developing multi-attribute business cases for energy management and sustainability goals. In addition, the managers were not accustomed to scoping large projects across multiple organizational functions and facility management domains. As a measure of their initial efforts, the eROI decision model analyzed the initial batch of projects, which produced in a low median eROI of 84% (the eROI metric is a form of the benefit-to-cost ratio, so that anything below 100% is below the break-even point; the majority of these initial projects did not expect to break even, as needed to justify their spending authorization).

Managers were subsequently trained in the fundamentals of what comprises a compelling and comprehensive energy or sustainability business case and how to look for additional opportunities. Managers understood and internalized the new strategic criteria through use of the newly deployed decision model. The median eROI of proposed projects increased to 224% (well above the 100% break-even point) in the first full funding cycle (Final-2011), and it increased even further to 316% in the second full funding cycle (Final-2012). Even more dramatically, the carbon savings per proposed project increased from a median of 4 pounds saved per dollar invested, to a median of over 97 lb/\$ invested (an improvement of 2,000%!). The decision tool combined with training and business planning helped to create strategic alignment across their global organization, and it resulted in hundreds of millions of dollars of energy savings and new value creation as well as over 20 million tons of expected CO₂ reduction.

Getting Started/Conclusion

Many companies start down the path towards improving sustainability by focusing first on energy management projects with a quick payback. This creates near-term success and momentum. A logical next step is to channel that early success into a systematic approach of embedding sustainability criteria into ongoing planning, budgeting and resource allocation decisions. As the case study above illustrates, incorporating a strategic set of sustainability criteria into the organization's capital budget criteria created significant value for the organization. For instance, if a company launched an initial set of energy management projects, perhaps costing in the range of \$5-10 million dollars, to achieve near term savings, the results of this effort and the savings captured could then be reinvested to create a systematic multi-criteria decision framework that could have tens of millions of dollars of value impact, if not more. A consistent method for including sustainability criteria helps an organization improve both its performance and its stakeholder perceptions, and helps to protect and strengthen brand value.

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