

Ratings by Council on Economic Priorities based on ten key social issues, including environmental performance.

ENHANCING SHAREHOLDER VALUE

The primary responsibility of business management is to increase shareholder value. Shareholder value can be increased in many ways, including, but not limited to:

- * cutting costs,
- * increasing revenues,
- * increasing productivity,
- * improving product quality,
- * reducing risk, and
- * enhancing reputation.

Energy efficiency and pollution prevention have been shown to do all of these things. Several studies document a positive correlation between a company's environmental performance and its shareholder value:

Two management professors studied 243 firms over a two-year period (1991/92), comparing environmental ratings (including compliance records, expenditures, waste reduction, support for environmental groups, etc.). Using return on assets (ROA) as a dependent variable, they found a positive correlation between ROA and environmental ratings (Russo and Fouts 1997).

Innovest Group International, an environmental and investment advisory firm in Toronto, developed an analytical tool that predicts how a company's environmental performance translates into financial terms. Innovest found that environmental ratings correlate closely with financial performance and that the companies with the highest environmental ratings outperformed their competitors by as much as five percent. Besides being an indicator of strong financial performance, environmental performance also correlates with more sustainable earnings quality (Green Business Letter 1998).

A study conducted by two economics professors at Dickenson College in Pennsylvania (Stephen E. Erfle and Michael J. Fratantuono) found a positive correlation between a group of 84 companies' financial performance and several aspects of social performance, including environmental record¹. Companies with top-rated environmental records, compared to those with the worst records, fared significantly better financially, including a 3.9 percent higher return on investment, a 4.4 percent higher earnings-to-assets ratio, and a 16.7 percent higher operating income growth (Makower 1994).

Since these studies show a correlation and not causation between environmental and financial performance, further evidence is required to show whether: (1) financial performance is enhanced by good environmental performance; (2) companies that are stronger financially are better able to be more proactive environmentally; or (3) each kind

of improvement supports the other. Case studies presented in this paper support the hypothesis that environmental performance — specifically energy efficiency and pollution prevention — enhance shareholder value. For example, a 1992 study of 75 case studies of pollution prevention across a variety of industries found an average payback of 1.6 years (Fischer and Zachritz 1992) — these investments certainly would enhance shareholder value.

Critics may claim that there are a limited number of E2/P2 projects that have a favorable financial return. This is what Dow Chemical thought when the its Louisiana Division, in response to rising energy prices, created an Energy Contest to reduce energy use with projects that provided a minimum of 100 percent return on investment (ROI). In the first year (1981), the 27 (out of 39) projects that survived the review process cost \$1.7 million to implement, but paid off with a 173 percent ROI. These impressive results left employees feeling like all opportunities had been tapped, however, the following year's contest had 32 winners, at a cost of \$2.2 million and an ROI of 340 percent. In the third year, the contest was expanded to include waste reduction, and 38 winning projects had an ROI of 208 percent on a capital investment of \$4 million. Dow's contest was eventually formalized as "WRAP" — waste reduction always pays. Over a 12-year period, Dow implemented 936 projects with ROIs averaging between 97 percent and 470 percent. Of these projects, 575 projects were audited, verifying savings of more than \$110 million per year and an average ROI of 204 percent. Dow attributes its success with energy and waste reduction to creating an environment of teamwork and cooperation among plants that continually builds momentum towards bigger and better projects with higher ROIs (Nelson 1993).