

# THE WINDS OF CHANGE

*Institutional investors assess the investment opportunities and risk management issues that arise from global climate change.*



**D**uring the past year, there has been a seismic shift in the general public's attitude toward global climate change. Recognition of the detrimental impact of human activity on the climate and growing energy demands have combined to pressure governments around the world to address this issue head on. The International Energy Agency says the world will need almost 60% more energy in 2030 than during the early part of the decade and fossil fuels will still be needed to meet most of its needs. As a result, the asset management industry is more closely evaluating the financial implications of climate change along with the viability, sustainability and profitability of alternative energy sources.

"Investors are definitely becoming concerned about climate change and the impact it will have on future investment

performance," says Philip DeSantis, product manager at Northern Trust. "Recognizing how companies are addressing climate change is going to play a bigger role in separating winners from losers across various industries and sectors around the world. At the same time, more investors are taking advantage of growth opportunities emerging from the early adoption of new 'green' technologies and alternative sources of energy." DeSantis believes that developing an investment strategy to address climate change can enhance portfolio diversification while capitalizing on what could arguably be the biggest economic opportunity of this century.

## **Pursuing Opportunities**

Institutional investors have begun to pursue growth opportunities in alternative energy and clean technology during the past three years. "Some developments such as hydrogen fuel

cell technology will require a long-term view,” DeSantis notes, “but there are more immediate opportunities in profitable companies focused on renewable energy sources in the areas of wind and solar, for example.”

“Annual growth in the global wind and solar markets has been frenetic in recent years, with increases of 25% to 30% in both industries,” says Andrew Brengle, senior research analyst at KLD Research & Analytics. Brengle thinks other sectors deserve attention as well, since the climate solutions value chain offers opportunities across the economy.

Clean technology is now the third-largest North American venture capital investment category behind software and biotechnology, reaching \$2.8 billion in 2006, an increase of 78% since 2005. Investment growth has been fueled by rising energy prices, policies at the national and state level and private investment in clean-tech companies. As companies pursuing climate change solutions move from creation to adoption and acceleration, there is a robust growth story for the public markets as well. Dozens of indices track the opportunities that now exist.

### Balancing the Risks

The other side of the opportunity coin is risk. Companies could be affected by climate change risk in a number of ways. The most obvious is that the cost of polluting will rise because of increased regulatory requirements. Programs to internalize emissions costs, such as the EU Emissions Trading Scheme, will result in additional costs for high-emitting industries. Carbon emissions also might lead to additional liabilities for companies unprepared or unwilling to make changes to manufacturing processes.

“While an investor’s objective should be to quantify climate change exposure at a company level, a large extent of the impact is driven by sector and industry characteristics,” DeSantis explains. Trucost, a London-based environmental research organization, has analyzed the carbon dioxide emissions of the global industry classification system (GICS) sectors in the MSCI All World Developed Index. Trucost’s analysis helps to identify sectors and industries with the most significant exposure to climate change risk.

Low-intensity industries also face new risks. When evaluating companies, an environmental audit must look down the supply chain. The effect of climate change on a consumer goods company, for example, is not just related to what that company emits, but also what its suppliers and products emit. Insurance companies may come under pressure if climate change

increases financial losses. Health care companies may be affected by the potential for new viruses and diseases that may emerge because of receding shorelines and changes to biodiversity. In today’s inter-dependent global economy, there are very few, if any, sectors that will not be affected by climate change and the impact will be complex and multi-directional.

Investors are calling for change in hopes of pre-empting these scenarios. In September 2007, a group of 22 U.S. state pension funds, environmental groups and other investors called upon the U.S. Securities and Exchange Commission to require public companies to report on their financial risk from global climate change. The coalition is asking for more comprehensive disclosure of climate risk in earnings and operations statements.

### A New Perspective

From an investment perspective, climate change is not an issue that can be tackled piecemeal. Nor can it be ignored. Investors need to review their entire portfolio for both climate change risk and opportunities to capitalize on global companies evolving their business models in the right direction.

Going forward, incorporating climate change issues in company, industry and sector analyses will become commonplace in the investment community. “Dealing with this issue will require a new long-term mindset,” DeSantis says. “It’s an investment opportunity. It’s a diversification opportunity. And it’s an opportunity to protect the world in which we live.” ♦

## Green Indices

Today there are multiple stock indices tracking the performance of alternative energy companies, clean technology companies and other companies committed to mitigating the causes of climate change. They include:

- Ardour Capital Alternative Energy Indices
- Cleantech Index
- KLD Domini 400 Social Index
- KLD Global Climate 100 Index
- KLD Global Sustainability Index
- Melvin Clean Energy Index
- NASDAQ Clean Edge US Index
- WilderHill ECO Indices