

## Real Estate Investment and Climate Risk Assessment

### *A Survey of Real Estate Portfolio Managers for the North Carolina Retirement Systems*

*Released May 2011*

#### Introduction

**In the financial and investment sectors, there is a growing recognition that climate change and energy risks pose a serious threat to the long term security of investments.**

In 2009, Ceres, a research and advocacy organization working on corporate sustainability issues, administered a survey to 500 of the largest asset managers to learn how they are considering climate risks and responding to regulatory attention associated with greenhouse gases. The survey found that only a small number of asset managers were incorporating climate risks and opportunities throughout their investment analysis.

Under State Treasurer Janet Cowell, the North Carolina Department of State Treasurer (NCDST) has been an engaged investor on environmental and governance issues.

Following the Ceres report, and two surveys conducted by the Florida State Board of Administration and California Public Employees' Retirement System, Treasurer Cowell sought to better understand the extent to which companies and investment managers gauge climate change and energy risks. As a result, NCDST chose to begin its work with a survey of the managers to the State's Real Estate Fund.

#### Key Findings

- There is a spectrum of concern and activities within investment firms that focus on climate change and energy efficiency. Most firms fall somewhere in the middle and seem moderately concerned.
- A common pattern among respondents is to (1) emphasize energy efficiency in their portfolio, either as an investment strategy or as part of their capital improvements, and to (2) manage environmental and climate change risk through an environmental site assessment conducted in the due diligence or pre-purchase phase of the investment cycle.
- Investment firms cited energy efficiency as a mechanism for improving sustainability and addressing climate change because it is financially quantifiable and represents concrete actions that firms can take to accomplish.
- Climate change as a concept is more problematic for firms because of the uncertainties that it represents, as well as for the difficulties around financially quantifying climate impacts and the short time frame under which these investments operate. Most firms who recognize climate change impacts look to insurance coverage to mitigate their perceived risk.
- Real estate portfolio managers evaluate environmental risks during pre-screening and valuation, though only one-half evaluate the properties in-house.
- 85 percent of funds had or were developing a sustainability policy, though only one-half communicate the policy with the public.
- 95 percent of funds screen properties for environmental litigation risks, though only 60 percent conduct a climate change assessment.
- 91 percent of funds consider energy efficiency strategies in their investments, though fewer than one-half track resource consumption in their properties and only one-quarter track energy efficiency performance.

# Summary of Survey Results

## Expertise

### Key Findings

95 percent of funds use consultants to provide environmental risk assessment during pre-investment screening.

81 percent use consultants to provide environment related risk assessments during property valuation.

86 percent of funds provide guidance to investment analysts in order to increase the beneficial environmental attributes of assets under management.

48 percent of the funds have investment analysts with specialized environmental, green investments or renewable energy related expertise.

### Focus Question

**Do any of the funds actively seek investments in the following types of properties?**

- Brown fields (4)
- Green buildings (10)
- Transit-oriented development (11)
- Urban infill (13)
- None of the above (6)

*Response count indicated in figures above, answered question: 22, skipped question: 3*

## Policies

### Key Findings

52 percent of funds have a sustainability policy or other environmental policy, while an additional 33 percent have planned or considered such a policy.

62 percent of funds incorporate sustainability or environmental risks into the investment guidelines or risk parameters.

24 percent have planned or considered incorporating a sustainability policy.

48 percent of funds do not communicate their sustainability policies in a public way.

### Focus Question

**Are properties within the Fund vulnerable to any of the following impacts?**

- Hurricanes (16)
- Typhoons (2)
- Severe winter snow storms (12)
- Severe general storms (e.g., tornadoes, hail, rain, lightening) (17)
- Flooding, particularly properties within flood plains (coastal and river) (14)
- Droughts (9)

*Response count indicated in figures above, answered question: 20, skipped question: 5*

## Climate Change

### Key Findings

59 percent of funds conduct climate change risk assessment as part of their due diligence prior to investing.

62 percent of funds indicated that there are climate change risks that could affect the fund investments.

45 percent of funds stated that core properties are managed to minimize climate change impacts or to maximize energy efficiency.

In the last 5 years, 42 percent of funds have experienced increased insurance premiums due to perceived vulnerability of climate related catastrophe.

95 percent of funds screen investments for the possibility of future climate and/or environmental litigation.

# Summary of Survey Results (continued)

## Focus Questions

### Which climate risks does the Fund screen for?

- Physical risks to companies due to climate change (5)
- Flooding or sea level rise (15)
- Damage to external envelope (e.g., wind speeds, rain, solar radiation) (12)
- Wind-related structure damage (13)
- Decreased durability of materials (8)
- Subsidence (sinking of land) (8)
- Scarce water resources (12)
- Pressure on infrastructure (extreme flooding and contamination) (11)
- Delays to construction (12)
- Less desirable internal office characteristics resulting from external changes (e.g., mold, water damage, more frequent retrofits) (13)
- Mandated greenhouse gas emissions and/or emission-management policies (10)
- Government implemented taxes, fiscal initiatives and penalties to reduce CO2 emissions (10)
- Competitiveness for products/services due to climate change (4)
- Loss of property value due to detrimental impacts by climate change (11)
- How vulnerable are assets against current and changing occupier needs (specifically older buildings) (14)

*Response count indicated in figures above, answered question: 19, skipped question: 6*

### Relative to other risk parameters the Fund considers, how important are climate risks?

- More important (0)
- Higher than other risk parameters (0)
- Equal to other risk parameters (12)
- Lower than other risk parameters (6)
- Lowest importance (1)
- Not applicable (3)

*Response percent indicated in figures above, answered question: 22, skipped question: 3*

## Energy Strategies

### Key Findings

91 percent of funds consider energy efficiency in their investment strategy.

55 percent of funds currently hold properties certified within the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

The average value of LEED properties held by investment funds is \$601 million; the average percentage of total capital value of the fund represented by the LEED investments is 10.2 percent.

50 percent of funds currently hold properties recognized through the Energy Star program. Energy Star properties account for \$712 million of the fund's investment capital and an average of 6 percent of the fund's capital investment.

46 percent of funds monitor resource consumption on at least some of their investments.

27 percent of funds track energy efficiency performance within their portfolio.

### Focus Question

#### If the Fund is not tracking energy use within the investment portfolio, what are the barriers to implementing an energy tracking protocol?

- No internal expertise to analyze properties (5)
- No knowledge of a common tool to create a uniform measuring system (7)
- No interest (0)
- No human resources to devote time to such tracking (4)
- Other, please explain (9)

*Response count indicated in figures above, answered question: 17, skipped question: 8*

## The Process

To conduct the survey and to advise the larger initiative, NCDST partnered with the Nicholas Institute for Environmental Policy Solutions at Duke University. The Nicholas Institute is a nonpartisan institute founded in 2005 to help decision makers in government, the private sector, and the nonprofit community address critical environmental challenges.

The survey was conducted August 4-16, 2010. NCDST contacted each of the 35 real estate fund managers and excluded three for extenuating circumstances. Of the 32 remaining funds, 25 responded to the survey for a response rate of 78 percent. Of the 33 questions asked, the response rate per question was 60 percent. The questions that the survey sought to answer included:

- To what degree do real estate investment analysts have access to specialized expertise related to green investments, energy efficiency and climate-related risks?
- Does the real estate investment firm have policies on sustainability and environmental risks?
- To what degree do managers invest in Energy Star or LEED certified properties?
- To what degree do managers track resource consumption and energy efficiency?
- What type of risk-based due diligence do funds undergo when screening investments?

## List of Partners

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|------------------------------------|--|--|
| 1. Frogmore Real Estate Partners   | 9. Crow Holdings Realty Partners* L.P.         | 17. Penwood Select Industrial Partners, L.P. |
| 2. Nahele, LLC.                    | 10. Rockpoint Real Estate Fund* LP;            | 18. Cherokee Investment Partners IV, L.P.    |
| 3. LEM Real Estate L.P.            | 11. Benson Elliot Real Estate Partners, LP     | 19. RREEF Global Opportunities               |
| 4. DRA Advisors, LLC*              | 12. Paladin Realty Latin America Investors, LP | 20. Prudential Real Estate Investments       |
| 5. JE Roberts Partners*            | 13. Hawkeye Partners: Scout                    | 21. JPMorgan Chase Bank                      |
| 6. CIM Urban REIT                  | 14. RLJ Real Estate Fund                       | 22. Starwood Opportunity                     |
| 7. STAG Investments, LLC           | 15. Credit Suisse*                             | 23. Shorestein                               |
| 8. Keystone Industrial Fund, L. P. | 16. AG Core Plus Realty Funds                  |  |

*\* This partner responded on behalf of multiple funds*

## About the North Carolina Department of State Treasurer

The Department of State Treasurer serves the people of North Carolina through a variety of functions related to the financial health of the state and its citizenry. State Treasurer Janet Cowell serves as the state's banker and chief investment officer, and, as such, she is responsible for more than \$72 billion in assets.

The Department administers the public employee retirement systems for more than 850,000 North Carolinians and provides fiscal assistance and expertise to local governmental units. It also administers NC Cash, the unclaimed property database that holds nearly \$500 million.

## About the Nicholas Institute for Environmental Policy Solutions at Duke University

The Nicholas Institute for Environmental Policy Solutions at Duke University is a nonpartisan institute founded in 2005 to help decision makers in government, the private sector, and the nonprofit community address critical environmental challenges. The Institute responds to the demand for high-quality and timely data and acts as an "honest broker" in policy debates by convening and fostering open, ongoing dialogue between stakeholders on all sides of the issues and providing policy-relevant analysis based on academic research. Since its inception, the Institute has earned a distinguished reputation for its innovative approach to developing multilateral, nonpartisan, and economically viable solutions to pressing environmental challenges. For more information, please visit [nicholasinstitute.duke.edu](http://nicholasinstitute.duke.edu).

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***For more information regarding this survey, contact Andrew Holton at [andrew.holton@nctreasurer.com](mailto:andrew.holton@nctreasurer.com).***