



Consent

Agenda Item 4e

August 17, 2015

ITEM NAME: Performance of Environmental Strategies

PROGRAM: Global Equity and Private Equity

ITEM TYPE: Asset Allocation, Performance & Risk – Information Consent

EXECUTIVE SUMMARY

This item provides an update on CalPERS' Global Equity Environmental Index Fund and Private Equity Clean Energy and Technology Fund (the "Fund"). Additional information on background, portfolio construction, and performance is included in the sections below.

STRATEGIC PLAN

This agenda item supports the CalPERS Strategic Plan goal to improve long-term pension and health benefit sustainability.

BACKGROUND

Global Equity

Global Equity received delegated authority to invest in environmental strategies in 2005, and in 2006 the program was launched with six "exclusionary" strategies (companies with negative climate footprints were excluded) and all were externally managed.

In February 2010 the Committee authorized Global Equity to fund an internally managed equity strategy, benchmarked to the HSBC Climate Change Index (HSBC CCI). The internally managed strategy used an "inclusionary" approach, focusing on including more of companies with more positive climate-related revenue. The CalPERS' Global Equity Environmental Index Fund was initially funded with a \$500 million commitment on September 1, 2010.

In late October 2010 the exclusionary strategies were defunded.

Private Equity

In 2007 CalPERS Private Equity committed \$400 million to Pacific Corporate Group (PCG) to invest in clean energy and technology investment through the Clean Energy and Technology Fund (CETF), a Fund of Funds. Of the \$400 million commitment, \$349.6 million had been committed at the end of the three year Investment Period. An additional commitment of \$65 million was made by

Private Equity to a Supplemental Pool, to be invested into funds and/or direct investments at Private Equity staff's discretion.

The capital committed to CETF was deployed into 14 Clean Technology Fund investments across Venture Capital and Growth strategies, and 14 direct investments across a broad range of Clean Technology sub-sectors.

ANALYSIS

Portfolio Construction and Strategy – Global Equity

CalPERS' Global Equity Environmental Index Fund provides CalPERS the opportunity to, on a large scale, support and become more deeply involved in the global climate change industry. It invests in liquid, public companies with measurable revenue associated with climate change initiatives and represents exposure to a young and rapidly growing portion of the global economy.

The HSBC CCI is constructed of companies that derive their revenues from one of four climate change themes: (1) Production, (2) Efficiency, (3) Adaptation and Mitigation, and (4) Finance. In order to be considered for inclusion in the model, a company must derive at least 10% of its revenue from one or more of these themes. Further, the higher the percentage of a company's revenue generated from one of these themes, the more of the company's capitalization will be reflected in the model. Table 1 below provides additional information.

Table 1 – Climate-Related Revenue and Capitalization Included Percentages

| Climate Related Revenue (%) | Climate Change Exposure Factor (% of capitalization included) |
|------------------------------------|--|
| 0 to 10 | 0 |
| 10 to 25 | 25 |
| 25 to 50 | 50 |
| 50 to 100 | 100 |

As of March 31, 2015, the market value of CalPERS' Global Equity Environmental Index Fund is \$649 million.

Portfolio Construction and Strategy – Private Equity

Geographically the portfolio is primarily focused on the United States with some exposure to Europe and other regions. The Fund mandate was designed to achieve the following:

- Broad and Flexible Scope
 - Reflect the diversity of opportunities with environmental benefits
 - Encompass a large enough pool of investment opportunities
- Emphasis on Diversification
 - By sector, geography, stage, and structure
- Emphasis on patient and prudent approach to investing
 - Use time to select most qualified partners
- Adhering to guidelines in Delegation Resolution
 - Fund concentration limits; commitments are subject to participation by other investors

As of September 30, 2014, 73% of the Fund is invested with funds, and 27% is in direct investments. The table below outlines the commitment percentages by vintage year as of September 30, 2014.

Table 2 –Clean Energy and Technology Fund Commitments by Vintage Year

| Vintage Year | Percentage of Commitments | \$ (millions) |
|---------------------|----------------------------------|----------------------|
| 2006 | 2% | 10 |
| 2007 | 23% | 95 |
| 2008 | 55% | 229 |
| 2009 | 12% | 48 |
| 2010 | 8% | 32 |
| <i>Total</i> | <i>100%</i> | <i>414</i> |

Performance

In both Global Equity and Private Equity, performance has fallen short of expectations. Attachment 1 provides additional Global Equity performance information. Summary performance information is outlined in the sections below.

Global Equity

Though the CalPERS' Global Equity Environmental Index Fund portfolio performed well versus most environmental benchmarks, relative returns versus CalPERS' Global Equity Policy Benchmark were negative in nearly all time periods. Table 3 below provides the performance of CalPERS' Global Equity Environmental Index Fund Portfolio versus the Global Equity Policy Benchmark as of March 31, 2015.

Table 3 – Performance of CalPERS' Global Equity Environmental Index Fund Portfolio versus Global Equity Policy Benchmark, For the Period Ended March 31, 2015

| | 1-Month (%) | 3-Month (%) | Year to Date (%) | 1-Year (%) | 3-Year (%) | Inception to Date (%) |
|--|-------------|-------------|------------------|------------|------------|-----------------------|
| Global Equity Environmental Index Fund (HSBC CCI) | -0.87 | 1.91 | 1.91 | 1.07 | 9.96 | 6.61 |
| Global Equity Policy Benchmark | -1.14 | 2.69 | 2.69 | 5.82 | 11.81 | 12.79 |
| Excess Performance | 0.27 | -0.77 | -0.77 | -4.75 | -1.86 | -6.19 |

Performance of CalPERS' Global Equity Environmental Index Fund has been 6.61% since inception (September 2010). As of March 31, 2015, performance since inception has underperformed the Global Equity Policy Benchmark by 6.19%.

Private Equity

As of September 30, 2014, the Fund's total value multiple was 0.67x with a gross internal rate of return of -9.7%.

- Median return for CalPERS Private Equity funds of similar vintage is 9%.

BUDGET AND FISCAL IMPACTS

Not Applicable

BENEFITS/RISKS

Not Applicable

ATTACHMENTS

Attachment 1 – Performance Data – Global Equity

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