Workshop Objectives – Board Input

• **Clarity**
  - Map the range of current activity on sustainability factors: environmental, social, and governance

• **Relevance**
  - Establish those issues where CalPERS has capacity and there is potential impact on sustainable risk and return

• **Priorities**
  - Identify the areas of focus, sequence and co-ordination across the portfolio

• **Implementation**
  - Plan delivery of key components, with reporting and targets integrated into INVO strategy
Overview

• **Total Fund Process for Integrating ESG**
  - INVO strategic initiative 2009: a process to integrate sustainability factors into the investment decision making across asset classes to improve risk management and investment returns

• **IESG Cross-Asset Class Team**
  - Asset classes and risk team, co-ordinated by Corporate Governance Unit

• **Global Peer ESG Exchange**
  - CalPERS benchmarked to 11 leading pension funds – $1.5 Trillion in AUM

• **External Consultant**
  - Mercer research report and menu of options: “Responsible Investment’s second decade: Summary report of the state of ESG integration, policy and reporting” (summary attached)
Evidence of ESG Impact on Risk & Return

• **Assessing the Evidence**: Information usefulness varies by region, sector, & time horizon (see Appendix to Mercer report attached - Responsible Investment’s next decade: Developing CalPERS Total Fund process for ESG integration)

• **Pioneering Research**
  - Mostly Conducted by Practitioners
  - Academic Interest is Growing

• **State of Research - Attribution**
  - Risk & Return
  - Environmental
  - Social
  - Governance
Evidence of ESG Impact on Risk & Return

Mercer Review of Research - Comments
- Academic and broker studies considered
- ESG themes are varied, more work completed on governance
- A relatively new field, there are gaps in the literature
- Focused on specific topics within asset class, much on exclusion

High Level Findings
- ESG results are primarily driven by manager skill and style
- It is a misconception that responsible investment leads to financial underperformance
- Balance of studies are positive to neutral, a minority are negative
Evidence of ESG Impact on Risk & Return

• Mercer’s Meta-Reports (36 studies total, through 2009)
  - 86% of the studies are either neutral or positive
  - More recent studies show positive relationship across asset classes

• 2010 – 2011: More Recent Evidence
Trends in ESG - Two Decades

FROM
- Siloed
- Divestment
- Input Questions
- Scattered Initiatives

TO
- Integrated
- Engagement
- Measured Outcomes
- Focused Strategy
Benchmark Analysis

- **Global Peer Exchange: 11 Leading Pension Funds – $1.5 Trillion in AUM**
  - APG Asset Management (Netherlands)
  - AustralianSuper (Australia)
  - BT Pension Scheme (United Kingdom)
  - Florida State Board of Administration (United States)
  - Government Employees Pension Fund (South Africa)
  - Norges Bank Investment Management (Norway)
  - Ontario Teachers’ Retirement System (Canada)
  - PGGM (Netherlands)
  - Previ (Brazil)
  - TIAA-Cref (United States)
  - Universities Superannuation Scheme (United Kingdom)
Benchmark Analysis – CalPERS vs. Peers

• **Strengths**
  - Broad asset class activity and innovation
  - Targeted investments
  - Engagement and market reform
  - Leadership on collaboration and standards

• **Opportunities**
  - Develop a total fund policy
  - Integrate ESG factors into investment strategy
  - Establish framework for monitoring
  - Publish a Sustainable Investment Report
  - Build out staff education
CalPERS Sustainability Inventory

- **111 Separate Initiatives Catalogued**
  - Including external and internal mandates, compliance with legislation, endorsement of guidelines, capital commitments, engagement and standards on ESG

- **Sustainability: A Unifying Theme**
  - **Environmental:** climate change – carbon, energy efficiency, clean technology, renewable energy, water stress
  - **Social:** human capital – exploitative labor practices, health and safety, responsible contracting, diversity
  - **Governance:** alignment of interest – executive compensation, fund manager terms and conditions
Sustainable Investing: Integration of Environmental, Social and Governance (ESG) Factors Workshop

Sustainability – What is it?

• Defining sustainable investment - understanding financial, governance, environmental, and social risks & opportunities that factor into long term continuity

• A wider consideration of risks and opportunities, which supports fiduciary responsibility

• Sustainability is based on the economics of capital: financial, physical, human, social
Strategy on Sustainability - Issues to Address

• **Priorities**
  - CalPERS activity covers a wide array of issues
  - Select for capacity to deliver and potential impact on risk & return
  - Co-ordinate internally and externally

• **Performance**
  - Identify quality data and key performance indicators linked to long term investment objectives on both risk and return

• **Procurement**
  - Develop a framework for external management and services to allow monitoring and reporting across asset classes
Global Equity – Potential Focus

• **Priorities**
  – Engagement strategy: globalize and monetize the Focus List Program with ESG integrated into financial objectives

• **Performance**
  – Quantitative and qualitative ESG analysis: commission research to evaluate weighting techniques to provide capital “tilt” to capture risk and return opportunities

• **Procurement**
  – Develop framework to identify relevant ESG quantitative and qualitative factors
Fixed Income – Potential Focus

• **Priorities**
  – Articulate how ESG factors are considered in fixed income’s investment decision making process

• **Performance**
  – Commission a study to quantify ESG factors and their contribution to risk adjusted return

• **Procurement**
  – Develop an asset-class specific expectations documents for external managers
AIM – Potential Focus

• **Priorities**
  – Monitor the performance of existing clean tech & emerging manager exposures and evaluate manager alignments of interest

• **Performance**
  – Evaluate the on-going performance of AIM’s exposures to Clean Technology (Approximately $1.2 billion) & Emerging Managers (Approximately $7.5 billion) relative to the total portfolio

• **Procurement**
  – Implement new manager due diligence process that includes ESG factors
Real Assets – Potential Focus

• **Priorities**
  - Real Estate: Initiate CalPERS and investment manager membership in Greenprint Foundation
  - Infrastructure & Forestland: Research and identify appropriate reporting standards
  - Infrastructure & Forestland: Research and identify appropriate alignment of interest standards

• **Performance**
  - Infrastructure & Forestland: Utilize investment and manager reporting to track and report ESG progress

• **Procurement**
  - Real Estate, Infrastructure & Forestland: Research and identify methods to incorporate ESG factors into due diligence for investments and manager selection process
  - Infrastructure & Forestland: Research and identify methods to incorporate ESG factors into due diligence for investments
Asset Allocation – Potential Focus

- **Priorities**
  - Evaluate findings of co-commissioned Mercer study, “Climate Change Scenarios Analysis - Implications for Strategic Asset Allocation” (study attached)

- **Performance**
  - Assess potential impact of fund exposure

- **Procurement**
  - Support risk management scenario planning and long term asset allocation review
Total Fund – Potential Focus

• **Priorities**
  - Replace ESG labels with “Sustainable Investing”
  - Develop a Sustainable Investing Policy for the Total Fund
  - Develop and publish CalPERS Sustainable Investment Report for 2012

• **Performance**
  - Review results of asset class commissioned research on sustainability data
  - Develop implementation plan with key performance indicators
  - Evolve cross asset class team and staff education

• **Procurement**
  - Develop uniform process to collect relevant disclosure on sustainability factors by external investment managers for each asset class
**Investment Beliefs**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strategic asset allocation is the dominant determinant of return and risk</td>
<td>45%</td>
<td>45%</td>
<td>-</td>
<td>-</td>
<td>9%</td>
</tr>
<tr>
<td>2. A return premium is required to take on risk</td>
<td>45%</td>
<td>45%</td>
<td>-</td>
<td>-</td>
<td>9%</td>
</tr>
<tr>
<td>3. Premium is required for illiquidity</td>
<td>27%</td>
<td>55%</td>
<td>18%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Long term investment horizon is an advantage</td>
<td>75%</td>
<td>18%</td>
<td>9%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Risk is not fully measurable</td>
<td>27%</td>
<td>27%</td>
<td>-</td>
<td>45%</td>
<td>-</td>
</tr>
<tr>
<td>6. Costs matter because they reduce returns</td>
<td>64%</td>
<td>27%</td>
<td>-</td>
<td>9%</td>
<td>-</td>
</tr>
<tr>
<td>7. Asset valuations are mean reverting</td>
<td>9%</td>
<td>64%</td>
<td>27%</td>
<td>-</td>
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</tr>
</tbody>
</table>

**ESG factors impact risk and return over the long term**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36%</td>
<td>9%</td>
<td>27%</td>
<td>18%</td>
<td>9%</td>
</tr>
</tbody>
</table>

**Additional Investment Beliefs**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inefficiencies in the market create investment opportunities</td>
<td>55%</td>
<td>45%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Make it as simple as possible; simple solution is often the best</td>
<td>18%</td>
<td>45%</td>
<td>18%</td>
<td>18%</td>
<td>-</td>
</tr>
<tr>
<td>3. Be unconventional – Do not follow the herd</td>
<td>55%</td>
<td>36%</td>
<td>9%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Next Steps

• Finalize recommendations – based on Board workshop discussion
  - Develop timetable expectation: One, Three, and Five Year Plan

• Investment Committee Action Item, Fall 2011, to propose implementation plan