Sustainable Investments Program Vision

Beth Richtman, Managing Investment Director

July 16, 2018



Sustainable Investments | Agenda

Objective

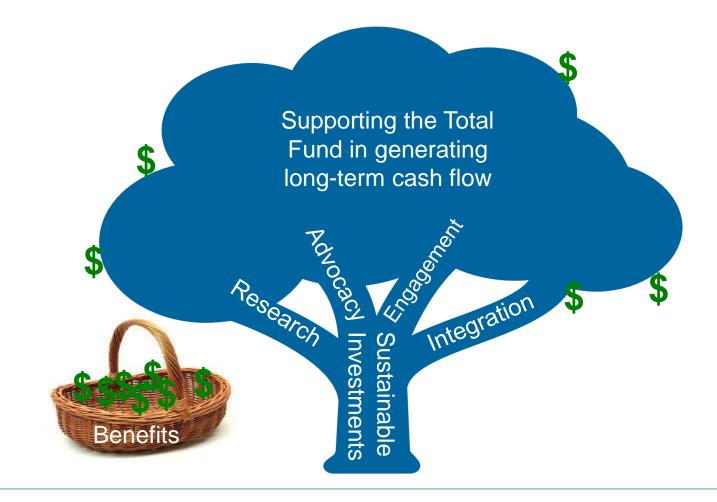
Present the Sustainable Investments' path forward to ensuring longterm sustainability for the CalPERS investment portfolio

Key Topics

- Team Overview
- Prioritization
- Integration
- Research



Sustainable Investments | Vision





Sustainable Investments | Being a Better Investor

Funded Status

ΤΤΤ

 Identification and understanding of risk and opportunities which may affect company cash flows

- Avoidance of being on the wrong side of the trade in societal, technological and environmental transitions
- Improved ability to analyze investments and make higher quality decisions



The integration journey will require a focused and intentional effort and effective collaboration throughout INVO



Sustainable Investments | Why?

Harvard Business School: Dr. George Seraphim

- "From an investor's standpoint, a sustainable company is one positioned for long-term success, one whose management understands and addresses short-term risks and innovates to exploit long-term opportunities...
- ESG is about understanding how companies are adapting to transformational change, such as the shift to a low-carbon economy.
- There are no shortcuts... need to understand the materiality of ESG issues, identify high-quality data, deeply engage with how ESG issues are reshaping business strategies, and model the impact of ESG catalysts on future revenues, costs, and cost of capital."*



Sustainable Investments | Why?

Bank of America Merrill Lynch:

- "What if we told you how to avoid stocks that go bankrupt? We think you would listen. Environmental, Social & Governance (ESG) factors are too critical to ignore, in our view. ESG is the best signal we have found for future risk...
- Prior to our work on ESG, we found scant evidence of fundamental measures reliably predicting earnings quality...ESG appears to isolate non-fundamental attributes that have real earnings impact: these attributes have been a better signal of future earnings volatility than any other measure we have found."*



Sustainable Investments | Team Plans

- Build and nurture a team with deep and relevant expertise at the intersection of sustainability & investment returns.
- INVO staff with a combined 50+ years of diverse investment experience have recently joined the Sustainable Investments (SI) team on a full or part-time basis.

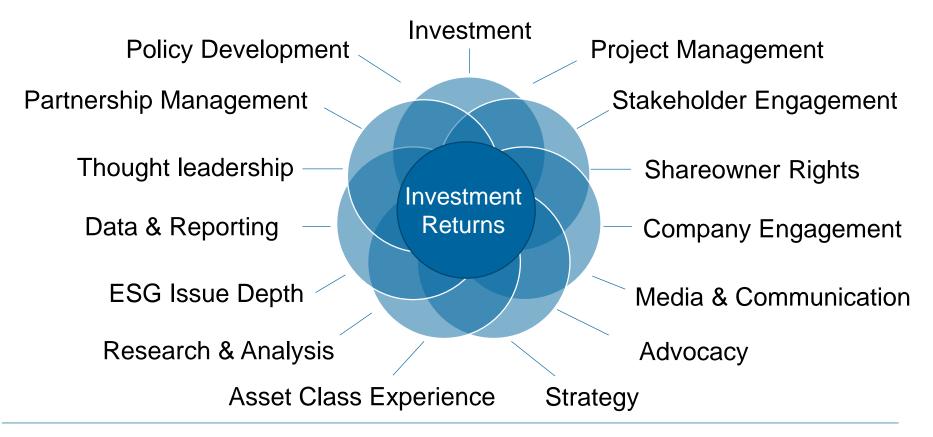


- Develop mindset across INVO that enables identification of SI risks and opportunities. Create opportunities for broader INVO to be part of the SI team's work:
 - Participation in research projects;
 - Training through integration osmosis as well as formal opportunities.



Sustainable Investments | Diverse Skills and Expertise

This team will have the ability to analyze issues, make connections, quantify risks and opportunities, strategize and problem solve





Prioritization | Wilshire Recommendations

Consider:

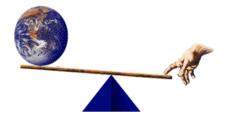
- prioritizing emerging ESG issues
- resources needed
- translating issues into investment terms



Prioritization | Guidance

Investment Belief 3: Sub-belief 3

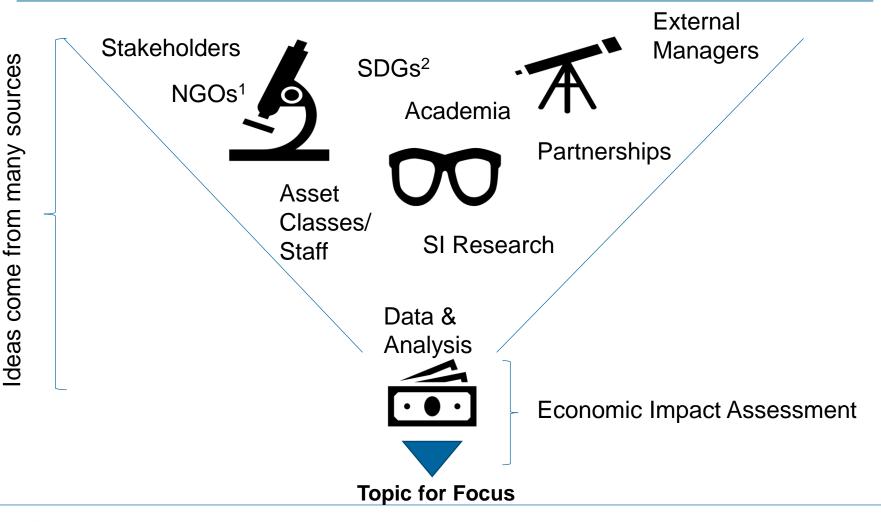
- In considering whether to engage on issues raised by stakeholders, CalPERS will use the following prioritization framework:
 - Principles and Policy To what extent is the issue supported by CalPERS' Investment Beliefs, Principles or other Investment Policy?
 - Materiality Does the issue have the potential for an impact on portfolio risk or return?
 - Definition and Likelihood of Success Is success likely, in that CalPERS' action will influence an outcome which can be measured? Can we partner with others to achieve success or would someone else be more suited to carry the issue?
 - Capacity Does CalPERS have the expertise, resources, and standing to influence an outcome?



"Give me a lever long enough and a fulcrum on which to place it, and I shall move the world." - Archimedes



Prioritization | Multifaceted Lens



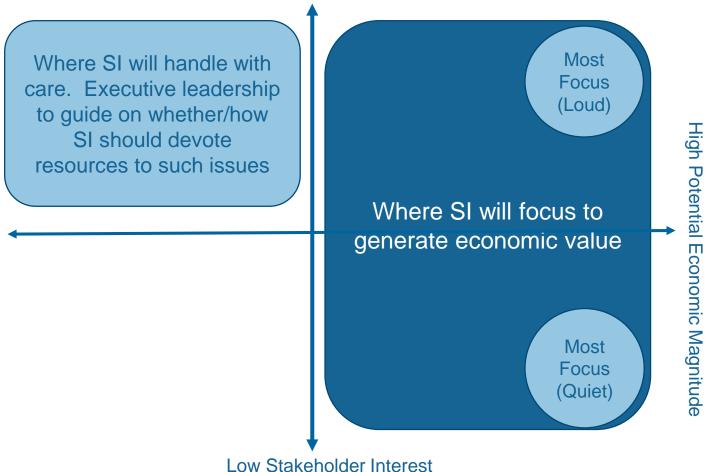


11

Prioritization | Framework

High Stakeholder Interest

Low Potential Economic Magnitude





Integration | What do we mean?

INTEGRATION

[in-ti-**grey**-sh*uh* n]

noun

1. An act or instance of combining in to an integral whole ¹

How SI Views Integration:

- Process utilizing a sustainable investment lens to drive investment insight and avoid uncompensated risk and missed opportunities
- A way to drive value and improve and protect CalPERS' funded status

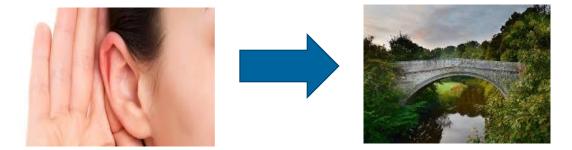
1. Source: dictionary.com



Integration | How will we achieve it?

Investment Belief 10: Strong processes and teamwork and deep resources are needed to achieve CaIPERS' goals and objectives

Listen to wider world's views on SI topics, research & understand risks/opportunities



Be a bridge translating SI topics into investment terms, prioritizing for focused approach

Serve as a highly skilled resource and partner at the intersection of sustainability and economic value

Share insights that help INVO staff understand SI issues to enable them to see nonobvious risks and opportunities

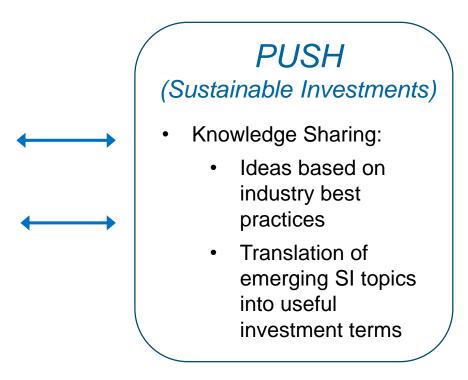




Integration | Service Model

PULL (Asset Classes)

- Research and SI expertise sharing regarding company, manager, industry and regulatory risks and opportunities
- Investment decision-making support and/or participation
- Engagement: External manager, portfolio company, stakeholder
- Policy analysis & development support
- Implementation of Governance and Sustainability Principles support
- Review, procurement and/or development of integration tools
- Advocacy with regulatory bodies & industry organizations



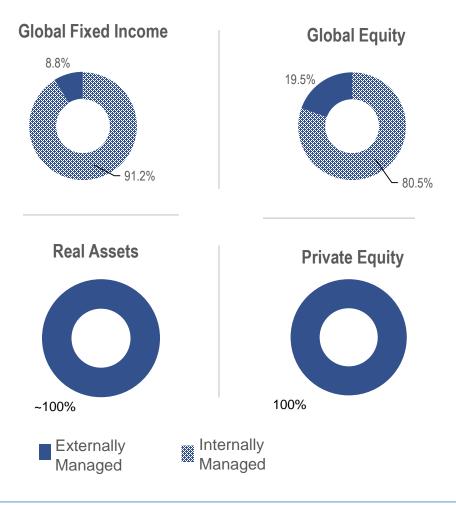
Goal: Helping the Asset Classes



Integration | Asset Class Nuance

Each asset class faces a unique set of parameters with regard to:

- Internal vs. External Management
 - Control rights
 - Direct vs. Indirect ownership
 - Structure of investment vehicle (commingled/industry product vs custom product)
 - Position in the capital structure
- Passive vs. Active Management
- Security Level vs. Index Level
- Fundamental vs. Factor Approach
- Nature of Assets
- Legacy vs. Strategic Portfolios
- Nature of benchmark





Integration | "Why Wouldn't You?"

- Choosing between two investment options projected to get the same return, why wouldn't CalPERS choose the one with the lower environmental, social or governance risk?
- Cases where CalPERS can get a good return while solving an environmental or social problem, why wouldn't we choose to do so?
- In cases where CalPERS has strong conviction about where the future is going, why wouldn't we consider whether portfolio companies or even industries will be operating in that future?
 - A lens to help see the potential uncompensated risks and better identify both "win-win" opportunities and "lose-lose" situations.
 - Support and insights to get to the right questions, which will be different for each asset class.



Research | Approach

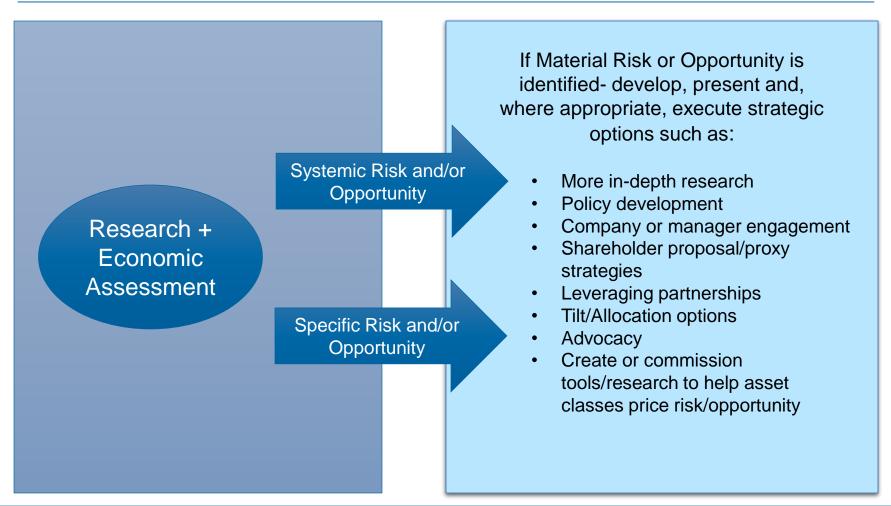
Theory: Through a distributed/resource sharing approach to some SI research INVO's culture can become one of effective integration and innovation



- Hands-up & Cross-Asset Approach
 - Climate Risk Mapping
 - Disruptive Technologies
 - ➤ Water
- Part-Time Asset Class Staff



Prioritization/Research | Model





Sustainable Investments | Summary



Team Plan

• Build and nurture a team with deep and relevant expertise



Prioritization

Driving focus to achieve highest return on resources



Integration

 Serve as a highly skilled resource and partner at the intersection of sustainability and investment returns

Research

 Multiple approaches to drive investment insight & enable focus on most high value risks and opportunities



Appendix



ESG Strategic Plan Update as Presented in March 2018

	Environmental	Social	Governance		ž	-
S T R A T E G – C	 Data and corporate reporting standards (includes water risk) 	Data and corporate reporting standards (includes human capital) Human Capital Management Petition	 Data and corporate reporting standards (focusing on the long-term) 	Integration	Advocacy	Partnerships
	 Manager Expectations (includes water risk) 	Manager Expectations	Manager Expectations			
	 Research Sustainable Investment Research Initiative (SIRI) Global Equity Strategies 	 Research Sustainable Investment Research Initiative Diversity Income inequality (action plan if warranted) 	Research Principles Review Topics: Environmental Management Practices Executive Compensation (Pay Ratio) Emerging Topics for Principles Review Product Safety Indigenous Peoples' Rights HCM Disclosures Geopolitical Risks Compensation (Clawback) Supply Chain Activities Non-voting Shares and benchmarks		Engagement	
	 Engage 80 100 + PRI Montreal Pledge Companies (identify water risk candidates) CA 100+ SASB 100 	 Diversity and Inclusion Engagement Voting 3D (Diverse Director DataSource) Advocacy External Managers Internal Talent Management 	 Private Equity Fee and Profit Sharing Transparency (including AB 2833) 	Our approach utilizes three channels	<u>supported by</u> partnerships	
C O R E	 Carbon Footprinting – Total fund Thermal Coal Companies – (SB185) 	 Responsible Contractor Program Labor Engagements 	 Proxy Voting Shareowner Campaigns (Proxy Access / Majority Voting Focus List (Japan Engagements) Divestment: Mandates, Policy & Principles 	Environmental Social Governance		_
	Work through Partnerships to leverage resources and impact Sustainable Development Goals Discussion / Review				Social Gover	
	 Corporate Engagements Financial Markets Advocacy / Federal and Legislative Guidelines Sustainability Report Response to Ad Hoc Media and Stakeholder Requests: Indigenous Peoples' Rights; Geopolitical risk; Deforestation; Turkey; Assault Weapons 			о В Ш		
				•	•	



Integration | Service Model

Services Example: Corporate Governance Proxy Voting*

- Review and provide input in to determining votes on sensitive, high-profile, and emerging sustainable investment issues
- Provide subject matter expertise including insights and research on sustainable investment issues
- Participate in proxy voting governance meetings such as GSS' proxy voting working group and meetings with senior executives to discuss final vote decisions
- Participate in relevant company, stakeholder, and partner meetings related to new and emerging sustainable investment topics
- Lead the development of new principle language relevant to sustainable investment topics
- Work with Public Affairs to craft media messaging around sensitive, highprofile, and emerging votes



Integration | Service Model

Services Example: Corporate Governance Engagements:

- Lead the development of strategies for new sustainable investments topics
- Lead or Co-Lead portfolio engagements on new and emerging sustainable investment topics with intent to educate and transition* to Corporate Governance over time and as appropriate
- Participate in other portfolio engagements as needed
- Provide subject matter expertise research and insights on sustainable investment topics as requested
- Lead, and in some cases forge, strategic partnerships around emerging issues to leverage resources and knowledge sharing opportunities



Research | Income Inequality Update

Sustainable Investment Research Initiative (SIRI)

- SIRI contains over 1,700 academic articles
- Approximately 1,250 Governance, 550 Environmental, and 540 Social*
- Approximately 50 mention Income Inequality in some way
- 5 papers at the December 2017 UC Davis Finance Symposium Capitol "Labor Markets in the Age of Inequality" looked at Income Inequality or technology disruption

Initial conclusions from abstracts

- Income inequality's affect on growth is unclear
- Economic gains may have shifted from labor to owners
- Public policy can affect income inequality and growth
- Academic literature is still developing



Income Inequality | Research Questions

Questions framing our further research:

Is this an investment issue for CalPERS?

- Does more inclusive prosperity help economic growth and drive investment returns?
- Does income inequality create risks? If so, where in the portfolio?
- How are disruptive technologies currently creating job displacement and how might they in the future?

If evidence and analysis indicates this is an investment issue, what is the recommended approach?

 What are we already doing to address this issue? (e.g. delivering defined benefit pensions, Responsible Contractor Policy, principles & advocacy on disclosure: CEO pay ratio)



Income Inequality | Next Steps

- Review most relevant academic, and industry (including partnerships) papers
- Identify and consult experts and possible partners
- Update Investment Committee March 2019
- Develop plan for IC review

