

# INVESTING IN A NEW CLIMATE

## HOW FAMILY OFFICES CAN CAPITALIZE ON CLIMATE INVESTMENT OPPORTUNITIES AND RISKS

February 25-26, 2015

Stanford Graduate School of Business  
655 Knight Way  
Stanford, CA

### AGENDA

Wednesday, February 25, 2015

- 9:00-9:10 am**      **Welcome**  
*Alicia Seiger, Deputy Director, Steyer-Taylor Center for Energy Policy and Finance*
- 9:10-9:40 am**      **[Setting the Stage—Climate Science and Economics for Investors](#)**  
*Noah Diffenbaugh, Associate Professor, Environmental Earth System Science, Stanford University*
- 9:40-10:00 am**      **[Conceptual Roadmap](#)**  
*Stefan Heck, Consulting Professor, Stanford Precourt Institute for Energy, Stanford University*
- 10:00-10:30 am**      **[Climate as a Financial Risk](#)**  
*Bob Litterman, Chairman of Risk Committee, Kepos Capital*
- 10:30-10:50 am**      **Break**
- 10:50-11:50 am**      **What Investors Need to Know About Energy Policy**  
*Moderator: [Thomas Heller, Executive Director, Climate Policy Initiative and Professor Emeritus, Stanford University](#)*  
*Stefan Reichelstein, William R. Timken Professor of Accounting, Stanford Graduate School of Business*  
*Michael Wara, Associate Professor of Law, Stanford University*  
*Dan Reicher, Executive Director, Steyer-Taylor Center for Energy Policy and Finance*

- 11:50-1:15 pm**      **Lunch**
- 1:15-2:15 pm**      **[The Landscape of Climate Exposure for Investors](#)**  
*Barbara Buchner, Senior Director, Climate Policy Initiative*  
*Dario Abramskieln, Analyst, Climate Policy Initiative*
- 2:15-3:10 pm**      **Putting Today's Tools in Practice to Make Climate-Wise Investments**  
*Presenter and Moderator: [Donna Bebb, Research Fellow, Steyer-Taylor Center for Energy Policy and Finance](#)*  
*Lee O'Dwyer, CFA, Equity Market Specialist, Bloomberg LP*  
*Douglas Cogan, Vice President and Asset Owner Consultant ESG Research, MSCI Inc.*  
*Jerome Lavigne-Delville, Chief of Standards Development, Sustainability Accounting Standards Board (SASB)*
- 3:10-3:30 pm**      **Break**
- 3:30-4:30 pm**      **[Structuring Resilient Partnerships](#)**  
*Suz MacCormac, Partner, Morrison and Foerster*  
*Will Fitzpatrick, General Counsel, Omidyar Network*
- 4:30-5:30 pm**      **Break/Travel to Dinner**
- 5:30-8:00 pm**      **Drinks and Dinner**
- Realizing the Promise of Long-Term Investing**  
*Ashby Monk, Executive Director, Global Projects Center, Stanford University*

**Thursday, February 26, 2015**

- 9:00-10:00 am**      **[Resource Revolution—How to Capture the Biggest Business Opportunity in a Century](#)**  
*Stefan Heck, Consulting Professor, Precourt Institute for Energy, Stanford University*
- 10:00-11:00 am**      **Ideas in Practice—Investing in Deployment at Scale**  
*Moderator: Dan Reicher, Executive Director, Steyer-Taylor Center for Energy Policy and Finance*  
*Jonathan Silver, President and CEO, Greenbanc Global, former Executive Director Loan Programs Office, Department of Energy*  
*Jeff Eckel, President and CEO, Hannon Armstrong*  
*Jim Hourdequin, Managing Director, The Lyme Timber Company LP*
- 11:00-11:20 am**      **Break**

- 11:20-12:20 pm**      **Ideas in Practice—Private Equity**  
*Moderator: [Stephan Dolezalek, Managing Director, VantagePoint Capital Partners](#)  
[Ali Partovi, Investor, Farmland LP](#)  
[Reuben Munger, Managing Partner, Vision Ridge Partners LLC](#)  
[Scott Jacobs, CEO, Generate Capital, and Managing Director, EFW Partners](#)*
- 12:20-1:15 pm**      **Lunch**
- Clean Energy Investment Initiative**  
*John J. MacWilliams, Senior Advisor to the Secretary of Energy at the U.S. Department of Energy*
- 1:15-2:00 pm**      **Oil and Natural Gas Prices—Fireside Chat**  
*Moderator: [Cathy Zoi, Consulting Professor, Precourt Institute for Energy, Stanford University](#)  
[Michael Levi, Senior Fellow, Council on Foreign Relations](#)*
- 2:00-3:00 pm**      **Ideas in Practice—Portfolio Management**  
*Moderator: [Sarah Stein, President, Hall Capital Partners, LLC](#)  
[Michelle Edkins, Managing Director, Blackrock](#)  
[Raj Agrawal, Member, KKR](#)  
[Kevin Johnson, Vice President and Portfolio Manager, Dodge & Cox](#)*
- 3:00-3:20 pm**      **Break**
- 3:20-4:40 pm**      **Group Workshop: Integrating Climate Considerations into Everyday Investment Decisions**  
*Stefan Heck, Consulting Professor, Stanford Precourt Institute for Energy, Stanford University*
- Based on key questions identified by participants prior to attendance, attendees will break up into issue-themed groups to work through the practical realities of implementing climate-wise investing tactics, before coming together to discuss next steps.
- 4:40-4:45 pm**      **Closing Remarks**  
*Alicia Seiger, Deputy Director, Steyer-Taylor Center for Energy Policy and Finance*

# INVESTING IN A NEW CLIMATE

## Suggested Reading

### *Climate Science*

[“Changes in Ecologically Critical Terrestrial Climate Conditions”](#)

Noah S. Diffenbaugh and Christopher B. Field, Stanford University  
Science  
August 2013

### *Energy Finance Policy*

“Modifying the U.S. Investment Tax Credit for Solar Energy: Alternatives to the Anticipated 2017 Step-Down”

Stefan J. Reichelstein and Stephen D. Comello, Stanford Graduate School of Business  
January 2015

[\(See Program Briefing Book\)](#)

[“Smarter Finance for Cleaner Energy: Open up Master Limited Partnerships \(MLPs\) and Real Estate Investment Trusts \(REITs\) to Renewable Energy Investment”](#)

Felix Mormann and Dan Reicher, Stanford University  
Brookings  
November 2012

[“An Economic Perspective on the EPA’s Clean Power Plan”](#)

Meredit Fowlie, Lawrence Goulder, Matthew Kotchen, et. al.  
Science  
November 2014

### *Conceptual Frameworks*

“Climate Investing Scope Definitions and Framework”

Stefan Heck, Stanford University  
Presentation to *Investing in a New Climate*, Stanford University  
2015

[\(See Program Briefing Book\)](#)

“The New Climate Economy”

Jeremy Oppenheim  
The Global Commission on the Economy and Climate, Presentation  
2014

[\(See Program Briefing Book\)](#)

[“The Global Landscape of Climate Finance 2014”](#)

Barbara Buchner, Martin Stadelmann, Jane Wilkinson, et. al., Climate Policy Initiative  
Climate Policy Initiative  
November 2014

***Climate Exposure Tools***

[“Climate Exposure Impact on Equity Valuation: Case Study of Vail Resorts”](#)

Donna Bebb, Steyer-Taylor Center for Energy Policy and Finance  
Presentation to *Investing in a New Climate*, Stanford University  
2015

[“Corporate Bonds: Spotlight on ESG Risks”](#)

Mark Nicholls, MRG Comms  
United Nations Principles for Responsible Investment Initiative  
2013

[“Integrated Analysis: How Investors are Addressing Environmental, Social, and Governance Factors in Fundamental Equity Valuation”](#)

ESG Working Group  
United Nations Principles for Responsible Investment Initiative  
February 2013

[“Mapping the World Bank Group Risk Mitigation Instruments for Climate Change”](#)

Valerio Micale, Gianleo Frisari, and Federico Mazza, Climate Policy Initiative  
Climate Policy Initiative  
September 2013

[“The Landscape of Climate Exposure for Investors”](#)

Barbara Buchner and Dario Abramskieh, Climate Policy Initiative  
Presentation to *Investing in a New Climate*, Stanford University  
2015

[“Risk Gaps”](#)

Gianleo Frisari, Morgan Herve-Mignucci, Valerio Micale, Federico Mazza, Climate Policy Initiative.  
Climate Policy Initiative  
January 2013

***Structuring Resilient Partnerships***

[“How I Did It: EBay’s Founder on Innovating the Business Model of Social Change”](#)

Pierre Omidyar, Omidyar Network  
Harvard Business Review  
September 2011

***Resource Revolution***

[“Resource Revolution: How to Capture the Biggest Business Opportunity in a Century”](#)

Stefan Heck, Stanford University, and Matt Rogers, McKinsey  
New Harvest  
2014

“Resource Revolution: Investor Opportunities in a New Climate”  
Stefan Heck, Stanford University  
Presentation to *Investing in a New Climate*, Stanford University  
2015  
([See Program Briefing Book](#))

### *Putting Capital to Work*

[“A Deeper Look into Yieldco Structuring”](#)  
Marley Urdanick, National Renewable Energy Laboratory  
National Renewable Energy Laboratory  
September 2014

[“Creating Climate Wealth: Unlocking the Impact Economy”](#)  
Jigar Shah, Generate Capital  
2013

[“FACT SHEET: Obama Administration Announces Initiative to Scale Up Investment in Clean Energy Innovation”](#)  
The White House: Office of the Press Secretary  
February 2015

[“Food is the New Frontier in Greentech”](#)  
Ali Partovi, Partovi Investments  
TechCrunch  
April 24, 2011

“Global Resource Risk and Opportunities”  
Stephan Dolezalek, Lee Burrows, Stefan Heck, Martin Lagod, Peter Shannon, and Andrew Shapiro, Resource Productivity Capital  
2015  
([See Program Briefing Book](#))

[“Growing the Role of US Forests in the Climate Movement”](#)  
Brian Kittler, Pinchot Institute for Conservation  
Pinchot Institute for Conservation  
2015

[“Impact Investing in the Energy Sector: How Federal Action Can Galvanize Private Support for Energy Innovation and Deployment”](#)  
Alicia Seiger, Steyer-Taylor Center for Energy Policy and Finance  
Sarah Kearney, PRIME Coalition  
Peter Berliner, Mission Investors Exchange  
October 2014

[“Sustainable Investing: Establishing Long-Term Value and Performance”](#)  
Mark Fulton, Bruce Kahn, and Camilla Sharples, Deutsche Bank Group  
Deutsche Bank Group

June 2012

["The DOE Loan Program is a Winner: Here's Why the Critics Were Wrong"](#)

Jonathan Silver, Greenbanc Global  
Huffington Post  
December 5, 2014

["The Next YieldCo: Charting New Waters"](#)

Julien Dumoulin-Smith, Michael Weinstein, and Paul Zimbardo, UBS  
UBS  
February 4, 2015

["Venture Investment's Potential to Further Mission Impact for Charitable Foundations"](#)

Kiki Tidwell, Tidwell Idaho Foundation  
Kauffman Fellows Press  
2012

***Fossil Fuel Prices***

["A Cheat Sheet on Lower Oil Prices"](#)

Scott Nyquist, McKinsey&Company  
McKinsey&Company  
February 2015

["As Oil Prices Plunge the Politics are Pivotal"](#)

Michael Levi, Council on Foreign Relations  
Financial Times  
January 19, 2015

["Vindicating Volatility: Why Fluctuating Oil Prices Are Here to Stay"](#)

Robert McNally and Michael Levi, Council on Foreign Relations  
Foreign Affairs  
November 4, 2014

["Why Falling Oil Prices Don't Hurt Demand for Renewable Energy"](#)

Victor Rojas and Paul Stinson, Environmental Defense Fund  
Environmental Defense Fund  
January 2015

["Why the World Missed the Oil Price Crash"](#)

Michael Levi, Council on Foreign Relations  
Washington Post  
December 5, 2014

***Portfolio Management Strategies***

["Building a Carbon-Free Equity Portfolio"](#)

Patrick Geddes, Lisa Goldberg, Robert Tymoczko, and Michael Branch, Aperio Group  
Aperio Group  
2014

[“Climate Change Scenarios—Implications for Strategic Asset Allocation”](#)

Mercer LLC, Carbon Trust, and International Finance Corporation  
2011

[“Fossil Fuels: Exploring the Stranded Assets Debate”](#)

Jane Goodland, Towers Watson  
Towers Watson  
2014

[“How to Use Your Risk Budget Sustainably”](#)

Ashby Monk, Stanford University  
Institutional Investor Blog  
July 2014

[“Inside Stanford’s Coal Divestment Decision”](#)

Alicia Seiger, Steyer-Taylor Center for Energy Policy and Finance  
Institutional Investor Blog  
May 2014

[“Navigating Climate Risk: Ceres’ Primer for Family Offices”](#)

Lindsey E. White, Ceres  
Ceres  
September 2013

[“The 21st Century Investor: CERES Blueprint for Sustainable Investing”](#)

Peter Ellsworth and Kirsten Snow Spaulding, Ceres  
Ceres  
June 2013

[“The New Dawn of Financial Capitalism”](#)

Ashby Monk, Stanford University  
Institutional Investor  
September 2014

[“Towards Sustainable Investment: Taking Responsibility”](#)

CalPERS  
2012