



# CLIMATE CHANGE AND INVESTMENT ACADEMY

In collaboration with Columbia University's Earth Institute

THE EARTH INSTITUTE  
COLUMBIA UNIVERSITY

## OVERVIEW

The Climate Change and Investment Academy integrates scientific and academic analysis of how climate change can affect investment risks and opportunities, from macroeconomic to issuer levels. Speakers and panelists will discuss the risks and opportunities arising from both predictable and uncertain elements of the earth's climate system, and the social, political and economic responses to climate impacts.

Structured over a six-week period, the Academy draws upon a first-of-its-kind collaboration between AllianceBernstein (AB) and climate experts at Columbia University's Earth Institute.

Participants will learn about the evolving relationship between the basic research enterprise that produces climate system knowledge and the needs of the private sector.

## PROGRAM STRUCTURE

The program begins in late February and runs through the end of March. Each week, AB will release a recorded module on our virtual learning platform for attendees to complete. Modules focus on new and emerging developments in climate science, with the final module dedicated to the investment implications of climate change.

One-hour live Q&A sessions will follow one week after each module is released, enabling Academy participants to interact with Columbia faculty and AB investment professionals in structured discussions. Participants can submit questions before and during these live sessions.

# CLIMATE CHANGE AND INVESTMENT ACADEMY

## MODULE 1: INTRODUCTION TO CLIMATE SCIENCE (60 MINUTES)

Recording Release Date: February 22, 2021

- + Frameworks for case studies and decision support
- + Introduction to climate risk categories, uncertainties and opportunities
- + Defining data, actionable information, climate and financial models

### Live Q&A Sessions

- + **Session 1:** March 3, 2021, 9 a.m. New York | 2 p.m. London | 3 p.m. Paris
- + **Session 2:** March 3, 2021, 4 p.m. Los Angeles | 7 p.m. New York  
March 4, 2021, 8 a.m. Hong Kong | 9 a.m. Tokyo | 11 a.m. Sydney

### Faculty:

#### Radley Horton

Lamont Associate Research Professor at the Lamont-Doherty Earth Observatory, Columbia University's Earth Institute

#### Marco Tedesco

Lamont Research Professor at the Lamont-Doherty Earth Observatory, Columbia University's Earth Institute and adjunct scientist at the NASA and Goddard Institute of Space Studies

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## MODULE 2: CHINA'S POLICY AND GLOBAL IMPLICATIONS (30 MINUTES)

Recording Release Date: March 1, 2021

- + China's historical and current carbon emissions
- + A focus on emerging climate and emissions regulations in China and their global implications
- + China's key policy areas
- + Regulatory initiatives on the horizon and recommendations for China to achieve its goal of carbon neutrality by 2060

### Live Q&A Sessions

- + **Session 1:** March 10, 2021, 9 a.m. New York | 2 p.m. London | 3 p.m. Paris
- + **Session 2:** March 10, 2021, 4 p.m. Los Angeles | 7 p.m. New York  
March 11, 2021, 8 a.m. Hong Kong | 9 a.m. Tokyo | 11 a.m. Sydney

### Faculty:

#### David Sandalow

Inaugural Fellow, Center on Global Energy Policy; Co-Director, Energy and Environment Concentration at the School of International and Public Affairs at Columbia University

## MODULE 3: CLIMATE LITIGATION AND LIABILITY (30 MINUTES)

Recording Release Date: March 1, 2021

### Topics include:

- + Discussion of current climate litigation actions at the local, state, national and international levels
- + The basis and precedent for current litigation and potential corporate liability
- + Emerging best practices for corporations and other issuers to address this regulatory/litigation/headline risk
- + Key drivers of climate litigation, including climate change attribution and detection for and by various stakeholders

### Live Q&A Sessions (combining content from Modules 2 and 3):

- + **Session 1:** March 10, 2021, 9 a.m. New York | 2 p.m. London | 3 p.m. Paris
- + **Session 2:** March 10, 2021, 4 p.m. Los Angeles | 7 p.m. New York  
March 11, 2021, 8 a.m. Hong Kong | 9 a.m. Tokyo | 11 a.m. Sydney

### Faculty:

#### Michael Burger, JD

Executive Director of the Sabin Center for Climate Change Law at Columbia Law School

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## MODULE 4: CLIMATE AND COVID-19 (45 MINUTES)

Recording Release Date: March 8, 2021

### Topics include:

- + Applying lessons learned from the COVID-19 pandemic to the study of and response to climate change
- + Challenges in scenario modelling, analysis and data availability from the epidemiological and climate perspectives
- + How changes in human behavior brought about by environmental and health stress can contribute to the public's capacity to address severe global crises
- + Examining various paths to building back from the pandemic in terms of speed, approach and competing interests
- + The integration of the private sector into disaster response going forward

### Live Q&A Sessions

- + **Session 1:** March 17, 2021, 9 a.m. New York | 1 p.m. London | 2 p.m. Paris
- + **Session 2:** March 17, 2021, 5 p.m. Los Angeles | 8 p.m. New York  
March 18, 2021, 8 a.m. Hong Kong | 9 a.m. Tokyo | 11 a.m. Sydney

### Faculty:

#### Jeffrey Schlegelmilch

Director for The National Center for Disaster Preparedness, Columbia University's Earth Institute

## MODULE 5: CLIMATE SOLUTIONS PANEL (45 MINUTES)

Recording Release Date: March 15, 2021

### Topics include:

- + Discussion of progress in technological solutions for adapting to and mitigating climate risk
- + The timeline for commercial viability
- + Potential impact on mitigating greenhouse gas emissions
- + Identifying and addressing gaps in support for the innovation ecosystem

### Live Q&A Sessions:

- + **Session 1:** March 24, 2021, 9 a.m. New York | 1 p.m. London | 2 p.m. Paris
- + **Session 2:** March 24, 2021, 5 p.m. Los Angeles | 8 p.m. New York  
March 25, 2021, 8 a.m. Hong Kong | 9 a.m. Tokyo | 11 a.m. Sydney

### Faculty:

#### Moderator: Lisa Sachs, JD

Adjunct Assistant Professor of International and Public Affairs;  
Director, Columbia Center on Sustainable Investment at the  
School of International and Public Affairs at Columbia University

#### Panelist: David Goldberg, Ph.D.

Lamont Research Professor; Associate Director for Marine and  
Large Programs at the Lamont-Doherty Earth Observatory,  
Columbia University's Earth Institute

#### Panelist: S. Julio Friedmann, Ph.D.

Senior Research Scholar at the Center on Global Energy Policy,  
Columbia University's Earth Institute

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## MODULE 6: INCORPORATING CLIMATE INTO THE INVESTMENT PROCESS (45 MINUTES)

Recording Release Date: March 22, 2021

### Topics include:

- + The urgency of, and challenges to, integrating climate change into existing investment processes
- + Review of nonlinearities, cascading events and dissonance between time horizons
- + Potential changes to and from traditional macroeconomic drivers such as growth, inflation and capital allocation
- + Linking physical and transition risks and opportunities to financial-statement analysis

### Live Q&A Sessions:

- + **Session 1:** March 31, 2021, 9 a.m. New York | 2 p.m. London | 3 p.m. Paris
- + **Session 2:** March 31, 2021, 5 p.m. Los Angeles | 8 p.m. New York  
April 1, 2021, 8 a.m. Hong Kong | 9 a.m. Tokyo | 11 a.m. Sydney

### Faculty:

#### Michelle Dunstan

Global Head—Responsible Investing; Portfolio Manager-Global ESG Improvers Strategy, AllianceBernstein

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