



## Executive Summary

# Climate Change Deep Dive

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**February 24-26, 2021**



### Key Takeaways

- Climate change is a collective action problem with long timescales
- Business, government, and other actors must address the problem on a global scale
- Policies can help slow the rate of climate change
- Stakeholders are recognizing the importance of investment in climate change resilience and adaptation
- Understanding local context, and working with local actors, is critical to drive change on the issue
- Storytelling matters when communicating the urgency for climate change



The Advanced Leadership Initiative (ALI) is an innovative academic program designed to unleash the potential of experienced leaders to help solve society's most pressing challenges. Participants become part of a vibrant community of change-makers who continue learning, collaborating, and innovating for impact.

ALI Deep Dive sessions highlight one major global or community challenge where ALI Fellows might fill a gap. Deep Dives include specialized readings, notable speakers including industry experts, and faculty from relevant cross-university Harvard programs. These highly interactive sessions focus on problem solving with practical applications of knowledge.

ALI Fellows contribute ideas based on their experience and knowledge to find immediate solutions. Fellows are able to ideate with expert practitioners in the field and consider all affected constituencies.



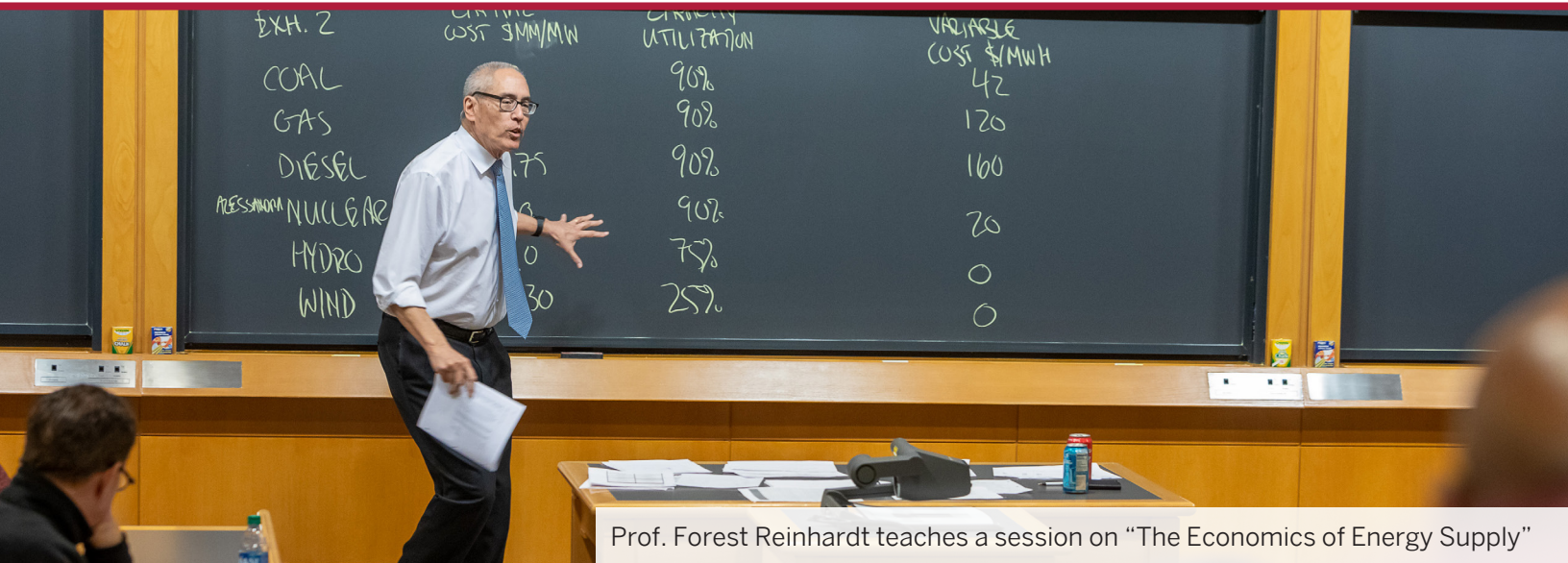
Prof. Daniel Schrag and ALI Fellows discuss factors that make climate change difficult (photo from Feb 2020)

### Key Takeaways

- **Climate change is especially challenging because it is a collective action problem with long timescales**

The actions of any one country create consequences for the entire world when it comes to climate change. Nations, and private actors, must work together to change behaviors that worsen climate change. The main problem revolves around the intense rate of change and what kind of displacement it will cause for both humans, and ecosystems to be able to adapt.

The nature of the Earth's oceans and the carbon cycle mean that the full impact of climate change is delayed—actions taken today may take hundreds of years to reach their full effect. In contrast, efforts to combat climate change have immediate costs but delayed benefits. This makes it very difficult to generate political will on the issue. Technology is critical to any climate change solution, but there needs to be a global demand for renewables such as wind and solar to work.



Prof. Forest Reinhardt teaches a session on “The Economics of Energy Supply”

- **Business, government, and other actors must work together—on a global scale—to address the problem**

Business has an important role to play in addressing climate change. There is evidence that businesses that promote sustainable practices will save money and improve their bottom line. Firms must reframe their purpose to contributing to social well-being beyond profits.

Governments also have an important role to play by encouraging the development of new technologies and regulating the use of carbon. Economists believe that carbon pricing—either in the form of a carbon tax or cap-and-trade policies—is the most efficient and effective policy for governments to use.

- **Policies can help slow the rate of climate change, but they must be easy to understand and adopt**

Complicated policies are difficult for businesses and individuals to adopt, and difficult for governments to enforce. Simple, wide-reaching policies have the potential for the greatest impact on fossil fuel emissions. The U.S. Navy has been an exemplar in its response to climate change.

Under the leadership of Secretary Ray Mabus, the Navy identified climate change as a threat to national security and had clear policies for sailors and marines to follow. Their policies also engaged individual actors to find solutions and promote buy-in.

**“All aspects of climate change have long timescales and are challenging.”**

- Daniel Schrag

- **Stakeholders are beginning to recognize the importance of investment in climate change resilience and adaptation**

Many of the effects of climate change are unstoppable. Stopping fossil fuel emissions overnight would not prevent global warming or sea-level rise. As a result, stakeholders are beginning to invest more in resilience and adaptation.

As extreme climate events become more common, these investments in infrastruc-



ture save money in the long run, despite having higher up-front costs. This infrastructure allows communities the ability to bounce back from a climate disaster, and rebuild with success. Recent examples, like the deep freeze in Texas, highlight the value of investing in climate resilient infrastructure.

- **Understanding local context, and working with local actors, is critical to drive change on the issue**

Climate change has disparate impacts around the world. Often, low-income and marginalized groups experience the most devastating impacts of climate change. Establishing trust with these groups—through artists and other local actors—is essential to fully understand the effects of climate change and to identify workable solutions. It is important to leverage networks within local communities in order to distribute necessary resources to those who need it.

Shifting money and resources to the local level can promote ecological justice and support the most impacted communities. With these resources, local actors can help foster a shift from an extractive economy to a regenerative economy. Artists have the unique ability to meet people at the community where they are, and publish stories that can be widely distributed. These local, diverse voices are necessary to find lasting solutions to mitigate climate change.



Prof. Rebecca Henderson brainstorms with ALI fellows on ways to reimagine capitalism

- **Storytelling matters**

Communicating the dangers of climate change, and the effectiveness of potential solutions, is critical to building a movement around the issue. Climate change is an inter-generational problem. Artists' creative voices and original work have a particularly important role to play in communicating these narratives. Tapping into emotions through visual representation can draw people in, make tangible the long-term realities of climate change, and encourage action on a global scale. Together, arts, advocacy, and policy can be an unstoppable force for change.



Artist Zaria Forman captures climate change through her pastel drawing of a glacier



**“Artists are climate’s first responders.”**

- Jayeesha Dutta



### **Faculty Chair**

#### **Meredith Rosenthal**

C. Boyden Gray Professor of Health Economics and Policy  
Harvard School of Public Health

### **Faculty Advisor**

#### **James Honan**

Faculty Executive Committee, Senior Lecturer  
Harvard School of Education

### **Deep Dive Faculty Chair**

#### **Forest Reinhardt**

John D. Black Professor of Business Administration  
Harvard Business School

### **Speakers**

#### **Joseph Aldy**

Professor of the Practice of Public Policy  
Harvard Kennedy School

#### **Jayeeshia Dutta**

Activist and National Steering Committee Member  
Climate Justice Alliance

#### **Zaria Forman**

Artist  
NASA Operation IceBridge

#### **Rebecca Henderson**

John and Natty McArthur University Professor  
Harvard University

#### **Ray Mabus**

75th Secretary  
United States Navy

#### **John Macomber**

Senior Lecturer of Business Administration  
Harvard Business School

#### **Daniel P. Schrag**

Sturgis Hooper Professor of Geology, Harvard University  
Professor of Environmental Science and Engineering, Harvard Kennedy School

#### **Robert Stavins**

A.J. Meyer Professor of Energy & Economic Development  
Harvard Kennedy School