

The highly uncertain and regionally uneven threats of climate change pose risks to the earth's population groups that call for dramatic shifts in the way we produce and utilize energy. These risks imply the need for new modes of behavior, and perhaps more importantly, the deployment of advanced technologies. Historically, advanced technologies have entered into markets under the principles of two forces: the "supply" of new scientific and technical understand, and the "demand" for new or better goods and services. Using these two explanations for technical innovation, I will discuss the role that governments around the world are assuming in attempts to deploy energy technologies to mitigate climate change. At the core of the challenge for policy makers lie two realities:

- 1) The *supply* of new scientific and technical understanding may continue to move at it's own pace -- governed primarily by the natural frontier of scientific and technical possibilities. This rate may be insufficient for the challenges posed by climate change.
- 2) The diffuse, public benefits of averting climate change may remain insufficiently organized to create relevant *demand* for climate change-mitigating technologies.

In this discussion, I will focus on recent policy developments in the United States in response to the climate and energy challenges that are shared by many other countries.