

In March of this year, I had the opportunity to attend the MIT Energy Conference thanks to funding graciously provided by the Center for International Environment and Resource Policy (CIERP) at The Fletcher School of Law and Diplomacy. At the conference, speakers and panelists highlighted some of the technologies fueling the energy transition, showcasing where the rubber meets the road when it comes to renewable energy deployment. Being in such a space—where major private sector players like the Microsoft and Google comingled with nascent startups seeking early-round seed funding and public and private financial institutions providing the capital to catalyze the transition—really underscored the interdisciplinary exercise that is bringing transformative energy technologies to market. In the Boston area, where universities, research institutions, and tech companies abound, the best and brightest ideas are allowed to blossom—and are often showcased at the MIT Energy Conference. However, while at the surface, the event appeared to be geared toward more technical practitioners, it ultimately highlighted the essential role of those outside of the labs—like policymakers and financial institutions—in creating the conditions necessary to catalyze bold innovations, circumvent the valley of death, and roll out scalable solutions that the recipient community will use.

Several nuances are sometimes lost in conversations about green energy technologies, especially in a venue like this where brilliant minds gather to serve up cutting-edge ideas. Invariably, founders and CTOs sound like techno-optimists, as they tout their solutions to the climate crisis—as they should! But what about affordability, equity, transparency? How do we see these great technologies come to fruition, and how can they be used to build resiliency, promote climate justice, and catalyze an energy transition? I would argue that in the effort to drive transformational change, it is equally imperative to have the policies and structures in place to enable action. At the conference, Noel Bakhtian of Bezos Earthfund, highlighted the disconnect that often exists between research and deployment, and specifically mentioned how tools like tax credits and additional appropriations can mitigate these challenges. [Later, the Chief Climate Officer for the City of Boston Brian Swett described](#) the newly minted Climate Resiliency Office as an example of developing new structures to meet the Commonwealth's priorities and to facilitate energy system transition. What was abundantly clear in this gathering of philanthropies, start-ups, green banks, government, big tech, researchers, non-profits, and of course, the humble graduate student of international affairs, is that shifting the energy system requires an approach rooted in systems thinking, that engages all the moving parts involved. There may be reinforcing feedback loops or exogenous shocks, but for breakthroughs to occur and paradigms to shift, there must be engagement from actors across the entire system, and actions in one area might exacerbate or tamp down shifts in another.