



RASEI

RENEWABLE AND SUSTAINABLE ENERGY INSTITUTE

BIG energy seminar series

Addressing global energy challenges in scale and complexity.

Cleantech startup collaborations and the underrated importance of governmental partners

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Date: Monday, December 21st from 1pm – 2pm

Please join by Zoom: Join Zoom Meeting

<https://cuboulder.zoom.us/j/94684735241>

Abstract:

Accelerating innovation in clean energy technologies is a policy priority for governments around the world aiming to mitigate climate change and to provide affordable energy. While most research has focused on the role of governments financing R&D and steering market demand, there is a more limited understanding of the role of direct government interactions with startups. This talk demonstrates the relevance of direct government-startup interactions for increased inventive activity and likelihood of crossing the “valley of death” in the context of US climate-tech startups. We will present empirical findings for two forms of government-startup interactions: (i) Direct technology and licensing collaborations between climate-tech startups and government partners such as NREL—and the role in the broader energy innovation ecosystem in Colorado—which proved to enhance startup patenting and follow-on financing more than comparable collaborations with private firms or universities. (ii) Financial, technological, and managerial support for climate-tech startups through the U.S. Advanced Research Projects Agency – Energy (ARPA-E) program, where our findings suggest that ARPA-E-funded startups filed patents at twice the rate of similar U.S. firms. While the agency’s high-risk high-reward funding model has succeeded in advancing energy technology, our findings suggest that more is needed to help these innovative firms cross the valley of death and bring new cleantech products to market.

Bios:

Claudia Doblinger is an assistant professor of Innovation and Technology Management at the Technical University of Munich (TUM), where she primarily works on clean energy innovation and entrepreneurship. Her main focus is on understanding how political incentives affect the innovation and entrepreneurial activities of firms, especially in the context of clean energy and transportation technologies. Her research has been published in peer-reviewed journals such as Nature Energy, Research Policy, and the Journal of Product Innovation Management. She has previously worked at the Harvard Kennedy School, the University of Regensburg (Germany), and a German energy company. She holds a Ph.D. in Innovation and Technology Management.

Kavita Surana is an assistant research professor at the Center for Global Sustainability, School of Public Policy at the University of Maryland College Park, where she works on innovation, clean energy, and climate change. She is particularly interested in the role of technology and innovation to achieve multiple goals for energy, climate, and the economy in different regional and country contexts. Her research has been published in journals such as Nature Energy, Nature Climate Change, Research Policy, and Technological Forecasting and Social Change. She previously worked at the Harvard Kennedy School, World Bank, ICF International, and a government-funded R&D organization in France. She holds a Ph.D. in materials science and engineering.

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