2021 Future Energy Systems: Technology and Policy

September 28, 2021 10:00 am -12:00 pm

10:00 AM - 10:40 AM

Where Are We Going and How Do We Get There? Robert Armstrong Chevron Professor of Chemical Engineering Director, MIT Energy Initiative (MITEI)



Chevron Professor of Chemical Engineering Director MIT Energy Initiative (MITEI)

Professor Robert C. Armstrong directs the <u>MIT Energy Initiative</u>, an Institute-wide effort at MIT linking science, technology, and policy to transform the world's energy systems. A member of the MIT faculty since 1973, Armstrong served as head of the Department of Chemical Engineering from 1996 to 2007. His research interests include polymer fluid mechanics, rheology of complex materials, and energy.

Armstrong has been elected into the American Academy of Arts and Sciences (2020) and the National Academy of Engineering (2008). He received the Founders Award for Outstanding Contributions to the Field of Chemical Engineering (2020), Warren K. Lewis Award (2006), and the Professional Progress Award (1992), all from the American Institute of Chemical Engineers. He also received the 2006 Bingham Medal from the Society of Rheology, which is devoted to the study of the science of deformation and flow of matter,

Armstrong was a member of MIT's *Future of Natural Gas* and *Future of Solar Energy* study groups. He advised the teams that developed MITEI's most recent reports, *The Future of Nuclear Energy in a Carbon-Constrained World* (2018) and *Insights into Future Mobility* (2019), and is co-chairing the new MITEI study, *The Future of Storage*. He co-edited *Game Changers: Energy on the Move* with former U.S. Secretary of State George P. Shultz.

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10:40 AM - 11:20 AM

The Technology Needs of Decarbonized Future Robert Stoner Deputy Director for Science and Technology, MIT Energy Initiative (MITEI) Founding Director, MIT Tata Center



Robert Stoner Deputy Director for Science and Technology, MIT Energy Initiative (MITEI) Founding Director, MIT Tata Center

Robert J. Stoner is an inventor and technology entrepreneur who has worked extensively in academia and industry throughout his career, having built and managed successful technology firms in the semiconductor, IT and optics industries. From 2007 through 2009 he lived and worked in Africa and India while serving in a variety of senior roles within the Clinton Foundation. Stoner also serves as Director of the Tata Center for Technology and Design at MIT, and as the faculty co-director of the MITEI Electric Power Systems Center. His current research relates to energy technology and policy for developing countries. He earned his Bachelor's degree in engineering physics from Queen's University, and his Ph.D. from Brown University in condensed matter physics.

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11:20 AM - 12:00 PM

Future Energy Systems Center: Decarbonization and Policy Chris Knittel George P. Shultz Professor of Applied Economics MIT Sloan School of Management Chris Knittel George P. Shultz Professor of Applied Economics MIT Sloan School of Management

Christopher R. Knittel is the George P. Shultz Professor of Applied Economics at the Sloan School of Management, Director of the Center for Energy and Environmental Policy Research, and Co-Director of the MITEI Low-Carbon Energy Center for Electric Power Systems Research at the Massachusetts Institute of Technology. He joined the faculty at MIT in 2011, having taught previously at UC Davis and Boston University. Professor Knittel received his B.A. in economics and political science from the California State University, Stanislaus in 1994 (*summa cum laude*), an M.A. in economics from UC Davis in 1996, and a Ph.D. in economics from UC Berkeley in 1999. His research focuses on environmental economics, industrial organization, and applied econometrics. He is a Research Associate at the National Bureau of Economic Research in the Productivity, Industrial Organization, and Energy and Environmental Economics Policy, the Journal of Industrial Economics and Journal of Energy Markets. His research has appeared in the American Economic Review, the American Economic Journal, the Review of Economics and Statistics, the Journal of Industrial Economics, the Energy Journal and other academic journals.