Can We Get to Sustainable? Energy Resource Development in the 21st Century

Modern technological societies owe their existence to the ability to harness the planet’s vast energy resources. As these societies have matured, the pattern and intensity of energy consumption has altered the way energy is produced and distributed. The quiver of energy supply choices is full of engineering marvels, each with their own strengths and weaknesses. Though different, all these options involve mining, drilling or, in some way, altering the landscape. Rocks store hydrocarbons, uranium, pressure and heat that help move vehicles and provide stadium lighting. They provide the raw materials to make the tools that to harness the sun, wind and water to power cell phones and classrooms.

Increased awareness of the environmental impacts of energy production has led to intense public debate, including topics such as shale gas production, coal mining, nuclear plant safety and the security of oil supplies. The ability of governments to regulate energy development has even been called into question. To help reduce the rhetorical crosstalk, this presentation will examine the lifecycle impacts of energy production from a scientific, economic and policy perspective.

BIO: John P. Martin

Prior to forming JPMartin Energy Strategy LLC in 2011, John spent 17 years working on energy research and policy issues at the New York State Energy Research and Development Authority and developed a series of projects targeting oil and gas resources, renewable energy development and environmental mitigation. He has served on various state and national panels including the USDOE’s Unconventional Resources Technical Advisory Committee established to advise the department on the development and implementation of programs related to onshore unconventional natural gas and other petroleum resources. He co-directed the Governor’s Carbon Capture and Sequestration (CCS) Working Group, an interagency committee organized in 2007 to address CCS issues and was NYSERDA’s point person on a series of technical studies looking at all aspects of hydraulic fracturing and multiwell pad development. In addition, he completed the initial research on the natural gas potential of New York’s Utica Shale that helped stimulate significant industry investment in this resource. John regularly lectures and publishes on such diverse topics as the development of shale gas resources, carbon capture and sequestration, compressed-air energy storage, renewable energy resource development, and research policy. Prior to joining NYSERDA, he worked in academia, consulting and regional planning. He holds a Ph.D. in Urban and Environmental Studies, an M.S. in Economics and a B.S. in Geology, all from Rensselaer Polytechnic Institute. He also holds an M.B.A. from Miami University and completed graduate work in mineral economics at West Virginia University.