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Mr. Stephen Connors is director of the ANALYSIS GROUP FOR REGIONAL ENERGY ALTERNATIVES (AGREA) part of the M.I.T. Energy Initiative (MITEI). AGREA's primary research focus is in *strategic planning* in energy and the environment, with an emphasis on the transformation of regional energy infrastructures (e.g. "energy pathways") to simultaneously address energy security, climate change, and other energy challenges.

Fundamental to AGREA's approach is the use of long-term planning tools within a *multi-attribute tradeoff analysis* framework. This approach automatically looks for cost-effective ways to attain multiple goals of cost-competitiveness and environmental quality, and also encourages public participation in the planning process via *stakeholder interaction* and input. AGREA's current interests focus on how to incorporate the daily, seasonal, and inter-annual dynamics of renewable energy resources and energy efficiency options into the design of robust, cost-effective sustainable energy pathways. Alternatives such as wind, solar and biofuels reduce both greenhouse gases and dependency on fossil fuels, but introduce uncertainties of their own. AGREA is including these "situational" aspects of future energy options into its strategic planning and outreach activities.

As an extension of his role as director of AGREA, Mr. Connors also coordinates several international energy initiatives involving MIT. These include the ALLIANCE FOR GLOBAL SUSTAINABILITY's (AGS) "*Near-Term Pathways to a Sustainable Energy Future*" integrated research, education and outreach program, and the *Sustainable Energy Systems Focus Area* of the MIT-PORTUGAL PROGRAM involving four Portuguese technical universities developing "regional sustainability" tools for local and regional governments and business. Past projects have looked at energy pathways in the United States, Switzerland, China, Mexico City and Scandinavia.

Mr. Connors is currently a member of the U.S. Dept. of Energy's Wind Program Peer Review Panel, and a member of the editorial board for the journals *Wind Engineering* and *Sustainability Science*. He is also a member of the strategic planning committee of the U.S. Offshore Wind Collaborative, and for the last several years has been a reviewer/judge for the Massachusetts Renewable Energy Trust, the MIT Deshpande Center, and the MIT Clean Energy Prize. Mr. Connors is the former head of the MIT ENERGY LABORATORY's *Electric Utility Program*, and holds two degrees from the UNIVERSITY OF MASSACHUSETTS in Amherst (Mechanical Engineering and Applied Anthropology), as well as a Masters from M.I.T. in Technology and Policy. Between his two degrees from UMass, Stephen was a Peace Corps volunteer in Benin, West Africa working on the design and testing of wood conserving cookstoves. In addition to his work at MIT, Mr. Connors active in several Boston area initiatives, such as the AltWheels Alternative Transportation and Energy Festival (www.altwheels.org) to promote better energy conservation, increased use of renewable energy, and sustainable transportation.

Select Papers and Reports

“CMI Energy Security Initiative—Comments to the DTI Energy Review,” S. Connors, W. Nuttall, D. Marks and H. Aldridge (April 2006)

“Economic and Environmental Performance of Potential Northeast Offshore Wind Energy Resources,”

M. Berlinski and S. Connors, [MIT LFEE 2006-02 RP](#) (Jan. 2006)

“National Assessment of Emissions Reduction of Photovoltaic (PV) Power Systems,” by S. Connors, E. Kern, M. Adams, K. Martin and B. Asiamah-Adjei. U.S. Environmental Protection Agency [MIT- LFEE 2004-003 RP](#) (Jan. 2004)

“Windpower – A Turn of the Century Review,” by J. McGowan and S. Connors. [Annual Review of Energy and the Environment](#), Vol. 25 (Nov. 2000)