



## Climate and Energy Decision Making Sponsored Seminar

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Fellow

Presenting on:



## RFF Haiku Electricity Market Model

January 11th, 2011

12 noon

(Lunch served at 11:50 am)

129 Baker Conference Room  
Department of Engineering and Public Policy

Seminar Abstract: The RFF Haiku electricity market model is a deterministic, highly parameterized simulation model of the electricity sector in the 48 contiguous states of the U.S. through the year 2035. The model is designed to capture the electricity market effects and airborne emissions impacts – for CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and Hg – of public policy affecting the sector. Recent applications of the model have addressed questions related to policies that would cap emissions of CO<sub>2</sub>, encourage deployment of renewable generators by portfolio standards or tax credits, and improve energy efficiency in end-use electricity consumption. The model characterizes electricity demand for three customer classes – residential, commercial, and industrial – with price-responsive demand functions that are dynamically linked through time and broken down for twelve time blocks in each year. The supply side of the model accounts for capacity planning with an intertemporally consistent investment/retirement module, electricity generation and ancillary services provision, post-combustion emissions control investments and interregional power trading across twenty-one geographic model regions.

Speaker Bio: Anthony Paul is the RFF Center for Climate and Electricity Policy Fellow. His research interests include allowance allocation under cap-and-trade programs for air pollution reductions, energy efficiency on the demand side of electricity markets, and electricity market regulatory structures.

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