

Energy and Resources Group Spring 2008 Colloquium Series (ER295)

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Where Policy and Models Meet: Taking a Second Look at EPA AND EIA Analysis of Federal Climate Legislation

110 Barrows Hall / 4:00 p.m.

When Congress considers a major piece of climate legislation, its authors call on two federal agencies to model the policy's impact on the nation's energy sector in the decades ahead. Energy modeling teams at the Environmental Protection Agency (EPA) and the Energy Information Administration (EIA) took 4-6 months to analyze the Lieberman-Warner bill, generating hundreds of pages of charts and tables that few policy analysts were able to substantively engage. While most people focused on the carbon prices resulting from these parallel studies, many important technology policy implications of the various scenarios were overlooked. For instance, the NEMS model used by the EIA met the Lieberman-Warner cap on greenhouse gas emissions in 2030 by deploying twice as much nuclear power as the ADAGE model used by EPA, which had twice as much coal. The research prepared for this colloquium features a fresh cross-examination of the Lieberman-Warner results by applying two decomposition techniques that can highlight key findings from the energy analysis of climate legislation in a more accessible form for policy professionals. With the Chair of the Energy & Commerce Committee striving to vote on a new cap-and-trade bill by Memorial Day, this type of energy analysis for climate policy is highly relevant to a national discussion of "what it could take" to meet a U.S. cap on greenhouse gas emissions, with or without a price signal.