



Climate and Energy Decision Making

Sponsored Seminar



Jette Krause

Freelance Researcher

Presenting on:



“Bayesian Assessment of 2030 German New Vehicle GHG Emissions and Related Abatement Costs”

October 31, 2011

12 noon

(Lunch served at 11:50 am)

129 Baker Conference Room
Department of Engineering and Public Policy

Seminar Abstract: An iterative expert-based Bayesian approach for assessing greenhouse gas (GHG) emissions from the 2030 German new vehicle fleet and quantifying the impacts of their main drivers. A first set of expert interviews has been carried out in order to identify technologies, which may help to lower car GHG emissions and to quantify their emission reduction potentials. It has been found that the different experts expect 2030 German new car fleet emissions to be at 50 to 65% of 2008 new fleet emissions under the baseline scenario. They can be further reduced to 40 to 50% of the emissions of the 2008 fleet through a combination of a higher share of renewables in the electricity mix, a larger share of biofuels in the fuel mix, and a stricter regulation of car CO₂ emissions in the European Union. Technically, 2030 German new car fleet GHG emissions can be reduced to a minimum of 18 to 44% of 2008 emissions, a development which cannot be triggered by any combination of measures modeled in the BBN alone but needs further commitment.

Speaker Bio: Jette Krause is a freelance researcher specialized on questions related to climate change, environmental politics and environmental technology, with a focus on automotive and electromobility issues. She has finished her Ph.D. thesis at the Potsdam Institute for Climate Impact Research (PIK), in which she has applied an expert-based Bayesian Network approach for analyzing the development of CO₂-emissions from the German new vehicle fleet until 2030. She has studied Economics and Social Sciences at Cologne University, Sciences Po Paris, and Potsdam University, and has completed a three-year training at a German journalist school.

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