



THE GREENHOUSE GAS AND SUSTAINABILITY SYMPOSIUM AND THE ILLINOIS GOVERNOR'S SUSTAINABILITY AWARDS

OCTOBER 28, 2009

THE I HOTEL - CHAMPAIGN, IL

Agenda

9:00-9:15 AM	Welcome by ISTC
9:15-9:45 AM	<i>Potential Impacts of Climate Change on the U.S.: The Need for Action</i> , Don Wuebbles, Dept. of Atmospheric Sciences, University of Illinois
9:45-10:15 AM	<i>The Business of Carbon</i> , Eric Jackson, Environmental Change Institute, University of Illinois
10:15-10:45 AM	<i>The Climate Registry, GHG Reporting, and Related State, Regional, & National Developments</i> , Ann McCabe, The Chicago Climate Registry
10:45-11:00 AM	Break
11:00-11:30 AM	<i>Update on Carbon Sequestration Project</i> , Rob Finley, Illinois State Geological Survey, University of Illinois
11:30 AM-NOON	<i>Miscanthus: Costs and Potential for Mitigating Greenhouse Gases</i> , Madhu Khanna, Dept. of ACE, University of Illinois
12:00-12:30 PM	<i>Industry Perspectives on Carbon Management and Greenhouse Gas Regulations</i> , Dave Kolaz, Illinois Manufacturers' Association
12:30-1:30 pm	Luncheon
1:30-3:00 PM	2009 Governor's Sustainability Awards Presentation

Bios & Abstracts

Don Wuebbles is a Professor in the Department of Atmospheric Sciences and the Department of Electrical and Computer Engineering at the University of Illinois. He earned his B.S. and M.S. degrees in Electrical Engineering from the University of Illinois. He received his Ph.D. in Atmospheric Sciences from the University of California at Davis. Wuebbles previously worked as a research scientist and group leader at the Lawrence Livermore National Laboratory. He is the author of almost 400 scientific articles, and is currently a member of the team preparing a new assessment of the understanding of potential climate impacts for the U.S. government. He, along with many others, shared in the 2007 Nobel Peace Prize for his work with the Intergovernmental Panel on Climate Change.

Abstract- Potential Impacts of Climate Change on the U.S.: The Need for Action
Concern about the potential impacts of global warming is one of the most important issues facing humanity. The available evidence strongly indicates that human activities are playing the most significant role in bringing about recent changes in climate, especially in the last four decades. Wuebbles coauthored a recent federal authorized assessment that analyzes how these changes are likely to impact the United States. This presentation focuses on the state of the science and the resulting basis for mitigation policies and emissions reductions.



Eric Jackson is a Senior Carbon Expert at the new Environmental Change Institute at the University of Illinois. He is also Owner & CEO at CP (Carbonless Promise) Holdings, a leading Greenhouse Gas Management Services company in Minneapolis. Jackson has been a Manager and Senior Executive of various other companies for over 25 years; he has been involved in international commodity trading, logistics and supply chain management, commodity risk management, and



renewable energy. He graduated from the University of Illinois with a bachelors' degree in Agricultural Economics.

Abstract - The Business of Carbon

Companies and other organizations are increasingly coming to understand that paying attention to their carbon footprint is just good business. Stakeholders are making decisions in part based on good resource stewardship, and that includes carbon emissions as well as energy use. Reducing energy use through a combination of energy efficiency and demand response improves the enterprise bottom line and reduces the carbon footprint.

Ann McCabe has been the Midwest regional director for the Climate Registry since January 2008. She recruits companies, state agencies, consulting firms, and others to voluntarily report their direct and indirect greenhouse gas emissions and works on outreach with Midwest state board members. McCabe has over 20 years of environmental regulatory and policy experience, including private sector, state government, and nonprofit. She has a bachelor's degree from Williams College and a master's in public policy from the University of Chicago.



Abstract: The Climate Registry, GHG Reporting, and Related State, Regional & National Developments

The Climate Registry is the voluntary greenhouse gas database for North America. It is a nonprofit organization that provides meaningful information to reduce greenhouse gas emissions. The Registry establishes consistent, transparent standards throughout North America for businesses and governments to calculate, verify and publicly report their carbon footprints in a single, unified registry.

Rob Finley is the Director of the Energy and Earth Resources Center at the Illinois State Geological Survey, which is part of the Institute of Natural Resource Sustainability at UIUC. He previously worked as Associate Director at the Bureau of Economic Geology at The University of Texas. Finley is currently heading a major project on geological carbon sequestration in the Illinois Basin aimed at addressing concerns with global climate change. Rob has served on



committees of the National Petroleum Council, the American Association of Petroleum Geologists, the National Research Council, the Stanford Energy Modeling Forum, and the U.S. Potential Gas Committee. Rob holds a Ph.D. in geology from the University of South Carolina; and is an Adjunct Professor in the Department of Geology at the University of Illinois.

Abstract: Developing a Large-Scale Geologic Carbon Sequestration Site in the Illinois Basin

The Midwest Geological Sequestration Consortium (MGSC) has completed drilling a 7,230 feet carbon dioxide injection well at Decatur, Illinois as part of the U.S. Department of Energy's Regional Carbon Sequestration Partnership program. The well will take 1,000 tons/day of supercritical CO₂ for three years beginning in April. Extensive core, sample, and log data analysis is underway to evaluate injectivity, define perforation strategies, model the CO₂ plume, and predict rock and brine interactions. Geophysics and a two-year monitoring period after injection ceases will allow unprecedented understanding of CO₂ behavior in the subsurface and the safety and effectiveness of carbon sequestration in saline reservoirs.

Madhu Khanna is a Professor in the Dept. of Agricultural and Consumer Economics, and also at the Energy Biosciences Institute, Institute of Genomic Biology, at the University of Illinois. She received her master's degree and Ph.D. in Agricultural and Resource Economics from the University of California, Berkeley. Her research interests are in the areas of technology adoption and voluntary approaches to pollution control; welfare analysis of alternative policy instruments



for environmental protection; economic, land use, and environmental implications of biofuels; and policies for carbon sequestration. Khanna is currently a Member of the Science Advisory Board Environmental Economics Committee for the U.S. Environmental Protection Agency.

Abstract: Miscanthus: Costs and Potential for Mitigating Greenhouse Gases

Perennial grasses, such as miscanthus and switchgrass, and crop residues, like corn stover, offer considerable potential to produce second generation biofuels and to be co-fired with coal to produce electricity. This presentation addresses key factors that are likely to influence the viable mix and location for growing energy crops, their economic competitiveness and life cycle greenhouse gas emissions as compared to gasoline and coal. The implications of various biofuel and climate policies for the competitiveness of bioenergy relative to fossil fuels will be discussed.

Dave Kolaz is the Senior Environmental Consultant for the Illinois Manufacturers' Association. He helps coordinate the IMA's efforts to make sure that businesses are able to compete in today's global economy while complying with the state's environmental regulations. Kolaz is an environmental consultant and a licensed Professional Engineer. Dave is former Chief of the Bureau of Air at the Illinois Environmental Protection Agency (IEPA). In that capacity, he managed a 325-member team and \$90 million budget while holding responsibility for all aspects of Illinois' air control programs. He received a Bachelor of Science degree in Aeronautical and Astronautical Engineering from the University of Illinois and received a Master of Science degree in Environmental Engineering from Southern Illinois University.



Abstract: Industry Perspectives on Carbon Management and Greenhouse Gas Regulations

The concept of sustainable development is commonly viewed as having an environmental dimension that contains both economic and social dimensions. Industry is committed to sustainable development policies that produce an appropriate balance so that the social and economic benefits produced by the American manufacturing and industrial sector are not adversely impacted. Federal climate change policies must incorporate certain fundamental principles if they are to achieve this balance.

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