Air & Waste Management Association



THE MAGAZINE FOR ENVIRONMENTAL MANAGERS

Short-Lived Climate Forcers

An in-depth look at how air pollution affects climate





Also in this issue:

Inside the Industry: Environmental Firms Finally Start Hiring Again

IT Insight: Too Much Information, Too Little Time

YP Perspective: Perspectives from a Young Professional Working in Environmental Research

APRIL 2011

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Cover: Important sources of air pollutants ozone and black carbon include incomplete combustion (e.g., mobile sources, residential biofuel use), as well methane (also a greenhouse gas) emissions from rice paddies and mining. Effects on climate appear to be disproportionately larger in the Arctic, which is a "tipping point" for potential climate feedbacks and sea level rise. Effects on regional climate and health are greatest in populated source regions such as Asia.



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Short-Lived Climate Forcers

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FEATURES

Air Pollution and Climate: Forcing, the Issue

by John D. Bachmann, Vision Air Consulting

There are more than just two sides to the story of air pollution and climate. The increasing understanding of how air pollutants like ozone, black carbon, and other particles act as regional climate "forcers" has resulted in a growing interest among scientists and policy-makers in coordinating strategies for both air pollution and climate. This month, *EM* includes an introduction and overview of what is known on the topic, a look at key results of the most recent comprehensive analyses and critical assessments, and a summary of international efforts in the United States, Europe, Arctic Nations, and Asia to further examine and enable real-world strategies.

NEXT MONTH: Water –

An Essential Resource

How Air Pollution Affects Climate: Short-Lived Climate Forcers

by Erika Sasser and Linda Chappell, U.S. Environmental Protection Agency Page 8

'Bounding the Role of Black Carbon in the Climate System'— A Summary Assessment by Tami C. Bond, University of Illinois Page 11

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The UNEP/WMO Assessment of Measures to Limit Near-Term Climate Change and Improve Air Quality

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U.S. and International Efforts to Address Black Carbon, Ozone and Methane

by Sara Terry, Erika Sasser, and Marcus Sarofim, U.S. Environmental Protection Agency Page 20

Air Quality and Climate Change in Asia: Making Co-Benefits Work

by Ritchie Anne Roňo, May Ajero, and Sophie Punte, Clean Air Initiative for Asian Cities (CAI-Asia) Center

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