

# International Expert Workshop on Air Pollution and GHG Mitigation Research

Garmisch-Partenkirchen, Germany, 6 September 2001

## Workshop Goals

A workshop of 49 international experts was held in Garmisch-Partenkirchen, Germany, to discuss strategies for researching the economic and health benefits from improved local air quality resulting from reductions of greenhouse gas (GHG) emissions. Further work is needed to understand these ancillary benefits to climate control policies.

The workshop aimed to address such concerns and foster research partnerships by:

- Improving collaboration and communication among various agencies and researchers;
- Providing a forum for presentations by sponsor agencies and researchers regarding research efforts and agency activities;
- Identifying key issues, knowledge gaps, methodological shortcomings, and research needs; and
- Recommending activities and initiatives for research, collaboration, and communication.

## Presentations and Demonstrations

Sponsor agencies and related parties provided overviews of activities and interests in air pollution and health.

Presentations were given by the following:

Cathy Allen (USEPA)  
Ross Anderson (WHO Working Group)  
Aaron Cohen (Health Effects Institute)  
Devra Davis (Carnegie Mellon University)  
Myra Frazier (USEPA)  
Bryan Hubbell (USEPA, on behalf of UNECE)

Todd Johnson (World Bank)  
Regina Ostergaard-Klem (USAID)  
Francesca Racioppi (WHO Programme on Transport, Environment, and Health)  
Jorge Rogat (UNEP)

## Expert Working Groups

The experts met in three separate working groups:

### 1) *Economics, Benefits Transfer, and Policy*

This group discussed methodologies for the economic valuation of health impacts in developed and non-industrialized nations, including valuation frameworks, consistency in epidemiological studies, and differences in the underlying populations.

### 2) *Indoor Air Quality Issues and Susceptible Populations*

This group discussed the effects of indoor air pollution on mortality and morbidity and susceptible populations (*e.g.*, infants, children, and the elderly).

### 3) *Development and Transfer of Dose-Response Relationships and Exposure Models in Developing Countries*

This group explored the adaptation and transfer of dose-response relationships within and between countries, with different economic structures, air pollution composition, and populations.

## Key Workshop Recommendations

Workshop participants identified several research needs and strategies, which would facilitate better understanding of how GHG mitigation measures can impact public health through reduced air pollution.

### *Improve connections among disciplines and among regions*

Workshops, such as this one, provide a venue for communication and facilitate collaboration among different disciplines and regions, however additional connections. The experts made several recommendations along these lines, including:

- Standardization of results and methods
- Workshops and web forums to facilitate joint proposals
- Development of multi-disciplinary approaches and studies; and
- Dissemination of research through multiple outlets.

### *Guidance and support for researchers*

Researchers, especially those in some regions, need guidance and support to conduct this work. Recommendations included: guidance documents, tutors, workshops, demonstrations, standardized methods, case studies, and training courses.

### *Further data collection and research*

Several approaches were identified to help address data gaps. They include:

- Framework for assessing limited data;
- Mobile air pollution monitoring kits;
- Assessments of data needs for various regions; and
- Value of information studies for different health endpoints.

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This summary was prepared by Michelle Bell (Johns Hopkins University) and Devra Davis (Carnegie Mellon University).

The workshop was held in conjunction with the 13<sup>th</sup> Conference of the International Society for Environmental Epidemiology, and was chaired by Devra Davis.

A longer version of this summary will appear in *Environmental Health Perspectives*.  
<http://ehpnet1.niehs.nih.gov/docs/allpubs.html>

#### *Workshop sponsors:*

US Environmental Protection Agency (US EPA)  
The World Bank  
US Agency for International Development (USAID)  
World Health Organization (WHO)  
Organization for Environmental Cooperation and Development  
United Nations Environment Program (UNEP)  
Health Effects Institute (HEI)