



EUROPEAN
COMMISSION

Community research

January 30, 2004

**European Commission and the United States
Second Joint Climate Change Science
and Technology Workshop**

The European Commission and the United States convened the Second EC-U.S. Joint Climate Change Science and Technology Workshop at the Institute of Atmospheric Sciences and Climate of the Italian National Research Council in Bologna on January 29-30, 2004, at the invitation of the Research Directorate-General of the European Commission. The meeting was conducted under the 2002 agreement of ministerial-level representatives to the U.S.-EC High Level Dialogue on Climate Change to enhance cooperation on climate-related research.

Dr. Anver Ghazi, Head, Global Change Unit of the European Commission Research Directorate-General and Dr. Harlan Watson, U.S. Department of State Senior Climate Negotiator and Special Representative led the respective delegations.

The European Commission team included representatives from the European Commission Research Directorate-General and Environment Directorate-General, and selected research experts from European Union Member States. The U.S. team included experts from the U.S. Climate Change Science Program Office, the U.S. Department of Commerce National Oceanic and Atmospheric Administration, the U.S. Department of Energy, the U.S. Department of State, the National Aeronautics and Space Administration, the National Renewable Energy Laboratory, and the National Energy Technology Laboratory.

The two sides discussed activities in the six areas that were identified at the first U.S.-EC climate change science and technology research meeting in 2003: (1) carbon cycle research; (2) aerosol-climate interactions; (3) feedbacks, water vapor and thermohaline circulation; (4) integrated observation systems and data; (5) carbon capture and storage; and (6) hydrogen technology and infrastructure. U.S. and EC representatives also discussed additional areas of cleaner energy technology cooperation, including renewable sources of energy and energy efficiency.

For each area, the EC and U.S. representatives reviewed ongoing cooperative activities, and explored potential new activities. Topics included joint projects as well as programs that are being coordinated so as to maximize the combined research capacity of the United States and the European Commission. Examples of such projects and activities include:

- Development of integrated carbon cycle research with special emphasis on scientific cooperation of the CarboEurope project and the North American Carbon Program;
- Efforts to integrate data from existing surface-based aerosol-observing networks and aerosol-observing satellites into a set of unified products;
- Research to quantify uncertainty in projections of future climate by: a) utilization of multi-model ensembles; and b) structured experiments to quantify and compare feedback processes in models;
- Research and development of large integrated sequestration and energy plant projects through the Carbon Sequestration Leadership Forum and related activities;
- Development of the integrated observation systems required to provide the data needed for sustained climate change research through the efforts of the United States, the European Commission, and the Group on Earth Observations, following-up on the 2003 Earth Observation Summit;
- Development of international codes and standards, coordinated pre-competitive research and development on critical enabling technologies, and data exchange on hydrogen technologies and infrastructure under the International Partnership for the Hydrogen Economy and through the International Energy Agency; and,
- Research and development activities with geothermal, solar, biomass, and wind technologies to reduce their cost and improve effectiveness.

U.S. and European participants in Bologna agreed to continue to seek opportunities, through the EC's Framework Programme for Research and Technological Development and the U.S. Climate Change Science Program and Climate Change Technology Program, to encourage additional joint projects, facilitate coordinated research calls, and increase synergy between U.S. and EC climate-related research programs.

EC and U.S. participants agreed that follow-up meetings on an annual basis would help ensure continued close coordination of their respective climate-related research programs.

The two sides worked to develop a catalog of joint and cooperative U.S.-EC climate-related science and technology research, in order to assist U.S. and EC research managers and other decision-makers. Participants also developed for each subject area a summary of ongoing cooperative activities and potential additional activities.