



US-China Workshop on the Climate-Energy Nexus November 11-13, 2009 Oak Ridge, Tennessee, USA

CONFERENCE OVERVIEW

INTRODUCTION

On July 20, 2006, in Beijing, representatives of the University of Tennessee-Oak Ridge National Laboratory's (UT-ORNL) Joint Institute for Biological Sciences (JIBS) and UT's Institute for a Secure and Sustainable Environment (ISSE) signed a framework agreement for the establishment of a **China-US Joint Research Center for Ecosystem and Environmental Change** (<http://isse.utk.edu/jrceec/>). The focus of this agreement is to promote research collaboration, academic exchange, student education, and technology training and transfer in areas of environmental concern. This specific agreement was reached with two Institutes of the Chinese Academy of Science (CAS)—the Institute of Geographical Science and Natural Resources Research (IGSNRR) and the Research Center for Eco-Environmental Science (RCEES)—both in Beijing. The Joint Center's primary collaborative themes include: (1) ecosystem processes and management, (2) environmental sustainability of bioenergy production, (3) ecological foundations of water resources and quality, and (4) technologies for improvement of eco-environmental systems.

Since establishment of the Joint Center, an Environmental Sustainability and Bioenergy theme has arisen and been the topic of 20 reciprocal visits and joint workshops in China and the US. The first annual workshop was convened on September 11-14, 2007, in Knoxville, Tennessee, to address the environmental aspects of bioenergy production and sustainability. Approximately 40 scientists from the partnering institutions and six program officers from the US National Science Foundation (NSF) and the Chinese government attended the workshop.

The second China-US workshop, sponsored by the US NSF and the Natural Science Foundation of China (NSFC), was held on October 15-18, 2008, in Beijing, China, with a focus on bioenergy consequences for global environmental change. About 80 scientists, program leaders, and scientists attended the conference, including officials from US Embassy in Beijing.

This year's workshop, "China-US Workshop on the Climate-Energy Nexus," is being jointly organized by Oak Ridge National Laboratory (ORNL) and the University of Tennessee (UT) and will be held on November 11-13, 2009 at ORNL. It will bring together approximately 100 leading scientists of climate, ecology, energy, and green technology from China and the US to exchange perspectives and findings, identify opportunities, and make action plans for promoting bilateral research collaboration in climate and energy. The 2009 workshop will be an important communication among the leading scientists of the US and China for the upcoming United Nations Conference, which will be held in Copenhagen, Denmark, December 2009, for discussing the new protocol on global warming control and carbon dioxide emission mitigation. The workshop is fully consistent with the US-China Ten-Year Energy and Environment Cooperation Framework agreed to by the two governments in June 2008.

BACKGROUND

The economies of the US and China are the globally dominant drivers of fossil fuel consumption and the release of greenhouse gases and are thus strategically linked to the challenges of global climate change and the sustainable development of alternative and renewable energy sources. In addition, the US and China are natural partners for protecting climate through the transformation of energy production and use. These two nations share responsibility for developing realistic goals, effective strategies, and practical protocols for the best solutions for global climate and

energy problems. More than ever before, the US and China need to exchange perspectives at all levels and develop a sustainable, mutually beneficial joint agenda on renewable energy development and the mitigation of carbon dioxide emissions before the world leaders agree on a new protocol that will work more effectively than the Kyoto agreement, which expires in 2012. More importantly, US-China collaboration in energy and climate will not only represent the realization of a series of bilateral environment and energy agreements signed at the annual meetings of the **US-China Strategic Economic Dialogue** (SED), but will also create new economic opportunities through technology transfer under the established goals of clean and sustainable development mechanisms.

WORKSHOP GOALS AND OBJECTIVES

The workshop will seek to promote a broad China-US research partnership through establishing joint specific research and education programs in climate and environmental sustainability while increasing the production of renewable energy. Specifically, the conference will:

- Overview the advances in critical research and development of global climate change, bioenergy sustainability, ecosystem management, and technologies for mitigating carbon dioxide emissions;
- Explore effective, comprehensive strategies for reducing the impacts of global climate change;
- Identify major opportunities for China-US joint programs on climate, ecosystem, bioenergy, and technology development;
- Establish a mechanism to regularly bring students and junior researchers into the cross-cultural international research of global climate change and renewable energy;
- Prepare a joint white paper for guidance on climate control and clean energy development in the future.

SPONSORS

US Department of Energy
US National Science Foundation

PARTICIPANTS

Participants (90-110) will include scientists, students, and government officials from the following institutions:

- Oak Ridge National Laboratory (ORNL)
- The University of Tennessee (UT)
- Purdue University (Purdue)
- Climate Institute, Washington D.C.
- National Energy Technology Laboratory (NETL)
- National Renewable Energy Laboratory (NREL)
- U.S. Environmental Protection Agency (USEPA)
- U.S. Department of Energy (USDOE)
- China Embassy in the United States, Washington D.C.
- Chinese Academy of Sciences (CAS)
- University of Science and Technology of China (USTC)
- Tsinghua University (Tsinghua)
- East China University of Science and Technology (ECUST)
- Sichuan University (SCU)
- Huaibei Municipal Government, Anhui Province, China
- Chinese Academy of Social Sciences
- Laboratory for Climate Sciences and the Environment, France
- Springer, New York

WORKSHOP ORGANIZERS AND COMMITTEES

This China-US workshop, the third annual conference convened by the “China-US Joint Research Center for Ecosystem and Environmental Change,” will be held in Oak Ridge, Tennessee, November 11-13, 2009. It is hosted jointly by Oak Ridge National Laboratory and the University of Tennessee.

Scientific Committee

Chairperson: Dr. Gary S. Sayler (Director, UT-ORNL Joint Institute of Biological Science [JIBS])
Members: Dr. Paul J. Hanson (ORNL)
Dr. Virginia H. Dale (ORNL)
Dr. John W. Bickham (Purdue)
Dr. Brian H. Davison (ORNL)
Dr. Gary K. Jacobs (ORNL)
Dr. Qingxiang Guo (USTC)
Dr. Zhi-Yun Ouyang (CAS-RCEES)
Dr. Gui-Rui Yu (CAS-IGSNRR)

Organizing Committee

Chairperson: Dr. Randall W. Gentry (UT ISSE)
Members: Dr. Jie (Joe) Zhuang (ISSE/JIBS)
Dr. Pankaj Sharma (Purdue)
Dr. Joshua Fu (UT)
Dr. John Drake (ORNL)
Mr. Keith Kline (ORNL)
Dr. Sheng-Gong Li (CAS-IGSNRR)
Dr. Jin-Lou Huang (CAS-RCEES)
Dr. Yao Fu (USTC)

Hotel

Participants will stay at the DoubleTree Hotel located at 251 S. Illinois Avenue, Oak Ridge, TN 37830. American participants should reserve their hotel before October 21 for a special rate for the Joint China-US Workshop (Group Code: JCU) via telephone (865) 481-2464 or from the webpage <http://doubletree.hilton.com/en/dt/groups/personalized/ORKDTRDT-JCU-20091112/index.jhtml>

Contact Information

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