

Digest of Global Initiatives (June 16, 2011)

Active or Pending:

Active

Title:

EcoPartnership: The China-US Joint Research Center for Ecosystem and Environmental Change

Countries:

China

Scope:

The economies of the US and China are the globally dominant drivers of fossil fuel consumption and the release of greenhouse gases. These two nations are thus strategically linked to the challenges of global climate change and sustainable development. And, they share responsibility for developing realistic goals, effective strategies, and practical protocols for the best solutions for global energy, climate, and environmental 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 sustainable development and the mitigation of greenhouse gas emissions. Collaboration in energy, environment and climate is necessary for the success of the bilateral agreements signed at the [US-China Strategic Economic Dialogue \(SED\)](#), creating new economic opportunities through technology transfer under the established goals of clean and sustainable development.

JRCEEC.—The China-US Joint Research Center for Ecosystem and Environmental Change ([JRCEEC](#)) is a 5-year agreement established in 2006 by a consortium of US and Chinese research organizations. JRCEEC partners include the University of Tennessee (UT)-Oak Ridge National Laboratory (ORNL) Joint Institute for Biological Sciences (JIBS), UT's Institute for a Secure and Sustainable Environment (ISSE), and Purdue University's Center for the Environment on the US side, and on the China side two Institutes of the Chinese Academy of Science (CAS): the Institute of Geographic Sciences and Natural Resources Research and the Research Center for Eco-environmental Sciences, and the University of Science and Technology of China. The agreement expires in 2011 and the JRCEEC has transitioned into an EcoPartnership. Since its creation in 2006, the China-US Joint Research Center for Ecosystem and Environmental Change has engaged nearly 1,000 Chinese and US scientists from more than 40 institutions in international workshops, field site visits, and exchange programs for students as well as junior and senior researchers. The 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.

EcoPartnership.—In May of 2011 the US Department of State and the National Development and Reform Commission of the People's Republic of China approved a proposal to establish an [EcoPartnership](#) that builds on the success of the JRCEEC. The EcoPartnership is led by Purdue University's Center for the Environment and includes UT's ISSE, UT/ORNL's JIBS and the Chinese Academy of Sciences' Institute of Geographic Sciences and Natural Resources Research, the Research Center for Eco-environmental Sciences, and the Institute of Applied Ecology. The EcoPartnership will provide leverage for expanding the already impressive accomplishments of the JRCEEC. This should translate into increased opportunities for academic exchanges and joint research projects with our Chinese partners, but also increased interchange and closer ties to our US partners. These activities

support the strategic goals of Purdue University by engaging China on environmental issues of global concern, and by building closer ties to the national labs. They also support the goals of the Department of State and the EcoPartnership program. According to Secretary of State Hilary Clinton who spoke at the signing ceremony; “We need to harness the unique skills of both of our cities, our states, our universities, our private companies, our civil societies to find solutions to common problems. That is especially true when it comes to clean energy, energy security, environmental stability, and climate change.”

The centerpiece of the China-US Joint Center is an annual workshop, which is hosted reciprocally by US and Chinese partners. Since JRCEEC hosted its first international workshop in 2007, the annual event has more than tripled in size and scope. Purdue faculty and students have participated in all 4 annual workshops. The 2010 workshop, held in Beijing, drew 160 participants (43 from the United States including 8 faculty and 3 grad students from Purdue), representing 17 Chinese and US universities and institutes. JRCEEC’s 2011 workshop, “Global Sustainability Issues in Energy, Climate, Water, and Environment,” will convene at Purdue University September 26-29. This workshop will be the inaugural event of the EcoPartnership. In addition to the annual workshop there will be faculty and student exchanges among the partnering institutions.

Vision.—The development of the EcoPartnership will likely follow some aspects of the model of the original JRCEEC. For example, it will almost certainly continue to focus on the promotion of academic research in environmental sustainability and biofuels but it will expand more into the policy arena as the EcoPartnership offers a unique vehicle to influence bi-national policy. Moreover, the opportunity exists to expand the partnership to include additional academic and research institutions, industry and state or local governmental entities. We intend to form an Industry Council to provide guidance for the development of the EcoPartnership as well as a funding base. Industry Council members will help focus activities of the partnership, potentially influence policy decisions in both countries, have access to advances in technology and research, enjoy networking opportunities with other industry partners, and benefit from recruiting opportunities at Purdue and the other institutions. There also will be networking opportunities with the other existing EcoPartnerships to leverage new activities and to exchange best practices and experiences.

Time Span:

Project start: May 2011

Duration: 5-year agreement signed by President Cordova

Purdue Point of Contact:

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Purdue Sponsoring Organization:

Center for the Environment

Partners (foreign and Domestic):

The University of Tennessee; Oak Ridge National Lab; Chinese Academy of Sciences

Sources of Support:

Branded by the Department of State; Potential Support from a future Industry Council; Fund raising through Purdue alumni and funding agencies for joint research projects.