



U.S.-China Clean Energy Research Center (CERC)

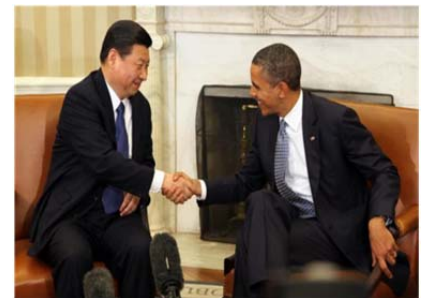
Vision

CERC accelerates development and rapid deployment of critical technologies for clean energy in the United States and China. CERC's mission is to generate a diversified energy supply and accelerate the transition to an efficient and low-carbon economy while mitigating the long-term threat of climate change.

About CERC

In November 2009, President Barack Obama and President Hu Jintao announced the establishment of the \$150 million U.S.-China Clean Energy Research Center (CERC). The Protocol formally establishing the Center was signed by the leaders of the US Department of Energy, the Chinese Ministry of Science and Technology, and the Chinese National Energy Administration. CERC is also supported by the Chinese Ministry of Housing, Rural and Urban Development. CERC continues to enjoy high-level support in the new administrations of both countries. In November 2014, President Barack Obama and President Xi Jinping announced the extension and expansion of CERC, to add a new technical track on energy and water research. <http://www.whitehouse.gov/the-press-office/2014/11/11/us-china-joint-announcement-climate-change>

CERC facilitates joint research and development on clean energy technology by teams of scientists and engineers from the United States and China. It is a flagship initiative funded in equal parts by the United States and China. It has broad participation from universities, research institutions and industry, supporting more than 1,100 researchers, with more than 100 US and Chinese partnering entities.



CERC Consortia

The work of CERC is carried out in three (which will expand to four) areas of strategic importance to both countries:

Joint Work Plan Research Areas: Public Private Partnership	
Advanced Coal Technology Consortium	Advanced power generation; clean coal conversion technology; pre-combustion capture; post-combustion capture; oxy-combustion capture; CO ₂ sequestration; CO ₂ utilization (including EOR, algae); simulation and assessment; and communication and integration.
Clean Vehicles Consortium	Advanced batteries and energy conversion; advanced biofuels and clean combustion; vehicle electrification; advanced lightweight materials and structures; vehicle-grid integration; and energy systems analysis, technology roadmaps and policy.
Building Energy Efficiency Consortium	Integrated design; building envelope; building equipment; integration of distributed and renewable energy; lighting systems and controls; whole building technology integration; monitoring and simulation activities; and policy and market promotion research.
NEW: Energy-Water	This technical track will begin in calendar year 2015, with the United States and China mutually agreeing to Joint Work Plan Research Areas.

CERC Intellectual Property Protection

CERC is empowered by the Protocol's Intellectual Property Annex that strengthens protection of IP and provides precedent-setting terms that enable joint creation and exchange of IP. All CERC research projects comport with the mutually agreed-upon IP "Technology Management Plans," endorsed by both governments.

Joining CERC

Procedures, criteria and guidelines for joining CERC may be found at the CERC website, noted below. All members of CERC benefit from the opportunity to interact with leading organizations in the field, build relationships with partners and other-country participants, and provide strategic direction to leading edge research with paths to commercialization. CERC members support the mission and add value to the work program by providing contributions of an intellectual, technical, financial or other in-kind nature.

For more about the U.S.-China Clean Energy Research Center, see: <http://www.us-china-cerc.org/>



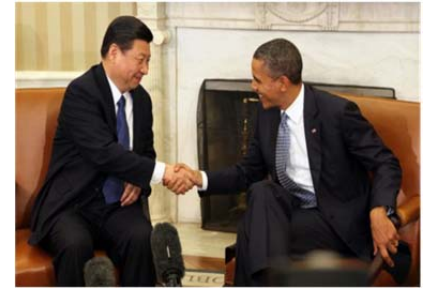
中美清洁能源联合研究中心(CERC)

愿景

中美清洁能源联合研究中心 (CERC) 旨在促进中美两国对清洁能源关键技术的开发和快速应用。其目的是希望能形成一种多元化的能源供应来加速向高效低碳经济的过渡，同时避免气候变化的后果进一步恶化。

概况

2009年11月，奥巴马总统和胡锦涛主席共同宣布成立总投资为1.5亿美元的中美清洁能源联合研究中心 (CERC)。在北京的成立仪式上，美国能源部与中国科技部和中国国家能源局的领导正式签署了《关于中美清洁能源联合研究中心合作议定书》。中国住房与城乡建设部也对 CERC 工作提供支持。现在 CERC 继续享有两国新一届政府高层的支持。2014年11月，奥巴马总统和习近平主席共同宣布中美清洁能源研究中心的扩展，即加入一个新的研究领域：水资源和能源的关系。 <http://www.whitehouse.gov/the-press-office/2014/11/11/us-china-joint-announcement-climate-change>



CERC 通过中美两国的科学家和工程师组建的团队推动清洁能源技术的联合研发，这是一项由中美两国均等出资的旗舰计划，得到了大学、研究机构和企业广泛参与，支持超过 1100 多位研究人员，有 100 多个中美合作单位。

技术联盟

CERC 执行对中美两国都具有战略重要性的三个领域，并且将扩展到四个：

联合工作计划研究领域公-私合作伙伴关系	
先进煤技术联盟	清洁发电；清洁煤转化技术；燃烧前碳捕获；燃烧后碳捕集；富氧燃烧捕获；二氧化碳封存；二氧化碳利用（包括提高原油采收率,藻类）；模拟和评估；以及交流和整合。
清洁能源汽车联盟	先进电池和能源转化；先进生物燃料和清洁燃烧；车辆电气化；先进轻质材料和结构；车辆电网整合；以及能源系统分析、技术路线图和政策。
建筑节能联盟	一体化设计；建筑围护结构；建筑设备；分布式和可再生能源集成；照明系统和控制；整体建筑技术整合；监测和模拟活动；以及政策和市场推广研究。
新领域：能源—水关系联盟	这个技术分支将在 2015 年开始启动。中美两国共同确定了联合工作计划研究方向

知识产权保护

CERC 经由议定书的知识产权附件授权，加强了对知识产权的保护并提供先列设置条款，以实现联合创造和交换知识产权。由双方商定并由两国政府批准的知识产权“技术管理计划”适用于所有 CERC 研究项目。

如何加入

在如下的 CERC 网站可找到加入 CERC 的程序、标准和准则。所有 CERC 成员都具有参与 CERC 项目的机会并从中受益，包括：与其领域内的牵头单位相互配合、建立伙伴关系、结识另一国参与者，以及向具有商业化路径的最前沿研究提供战略指导。CERC 成员需秉持其使命，并通过贡献智力、技术、资金或者其他实质力量来体现其对 CERC 的价值。