



**U.S. COMMERCIAL SERVICE**  
United States of America  
Department of Commerce

# China Energy and Environment

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## CS China Energy and Environment Update

is an electronic publication produced by the U.S. Commercial Service in China. The *Update* provides U.S. companies with information and analysis on China's energy and environmental technology market, project alerts, highlights from the U.S. Mission in China and U.S. Department of Commerce, U.S. Government activities in the cleantech sector, and a listing of upcoming events and activities.

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## U.S. GOVERNMENT HIGHLIGHTS

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#### FCS Beijing Organized U.S. – Shandong Energy Cooperation Workshop

By Hongying Cai

The U.S.-Shandong Energy Cooperation Workshop was held on November 29 in Jinan- the capital city of China's Shandong Province. The workshop was jointly organized by the U.S. Commercial Service in Beijing, the Shandong Foreign Affairs Office and the Shandong Provincial Economic and Information Technology Commission. The workshop attracted over 82



*(Ambassador Gary Locke speaks at the workshop)*

Chinese company executives and senior officials from the energy conservation offices of 17 cities in Shandong Province, with over 180 total attendees. They represented numerous industry sectors - power generation, steel, chemical, electric, biochemical, oil and gas, cement, coking, metallurgical, wind, solar and environmental protection.

U.S. Ambassador to China, Gary Locke, led a trade mission of 10 U.S. companies to attend this event, where he also gave the closing remarks. Minister-counselor for Commercial Affairs of the U.S. Embassy in Beijing, Mr. William Zarit, and Deputy Director-general of Shandong Provincial Foreign Affairs Office, Mr. Zhang Jigang, represented the U.S. and Chinese sides, respectively, in opening the workshop. The 10 U.S. companies in attendance- Albemarle, Autodesk, Eaton, Honeywell, ICF, LanzaTech, Lp Amina, Solatube, Tenneco and UPC Renewables- presented their energy efficiency solutions to the Chinese audience.

Commercial Officer (CO) Elizabeth Shieh, Commercial Specialist (CS) Hongying Cai and Commercial Assistant Ming Yang worked closely with Shandong Provincial government officials and arranged one-on-one meetings between the U.S. firms and Chinese companies. Three companies signed 5 contracts and

MOUs at the event. The Ambassador and Shandong Governor Jiang Daming witnessed the signing.

The event was extremely successful; as the U.S. companies were pleased with the number of attendees, level of participants, and the concrete projects and opportunities discussed. Not only did the U.S.



*(Minister-Counselor Zarit speaks at the workshop)*

companies identify many potential customers and form new, ongoing relationships, from which they believe many deals will result, but this visit also resulted in more than 100 media articles and television interviews/spots.

### Ambassador's Trip to Taiyuan

On November 8, 2011, U.S. Ambassador, Gary Locke, traveled to Taiyuan with Career Counselor William Zarit, CO Elizabeth Shieh, and CS Eric Jon, to participate in the groundbreaking ceremony for the establishment of the joint venture, between Harsco Corporation and Taiyuan Iron & Steel Co., Ltd- one of world's largest steel producers. The JV created a contract in excess of US\$500 million, over a 25-year period, that will commercialize slag co-products in China, for a range of agricultural and industrial uses. Harsco Chairman, President, and CEO, Salvatore D. Fazzolari, Harsco Chairman, Managing Director of Harsco China, Mr. Dejun Shan, and Shanxi Governor, Wang Jun, all attended the groundbreaking ceremony.

### US - China Source Water Protection and Water Reuse Seminar

The US-China Source Water Protection and Water reuse Seminar, held on December 8-9 in Beijing, was sponsored by the U.S. Trade and Development Agency. The workshop was jointly organized by the

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Chinese Ministry of Environment Protection and the U.S. Environment Protection Agency. It was supported by the U.S. Department of Commerce. Ms. Shi Xiaojuan, Division Director of Department of Pollution Prevention and Control of China MEP, moderated the workshop. Ms. Sasha Koo-Oshima, Senior International Water advisor to the Assistant Administrator for the Office of water of U.S. EPA, and Ziyang Fan, Assistant General Counsel of U.S. TDA, gave remarks at the opening ceremony. Experts and U.S. company representatives spoke on clean water, water protection, and water reuse.

CS Commercial Officer, Elizabeth Shieh, attended the seminar and met with Chinese officials as well as representatives from participating U.S. companies.

Since its initiation, in November of 2008, the Sino-US Clean Water Action Plan has launched a string of effective policy dialogues and technical workshops on the theme of water quality management, safe drinking water supply, as well as agricultural and rural area water pollution prevention and control. At this event, both sides made reports on the progress made in 2011 & the working plan for 2012.

### The First U.S. LEED Golden Certificate Awarded in South China to the Excellence Group

On December 12<sup>th</sup> FCS Guangzhou and Beijing attended the LEED award for the Excellence Century Center in Shenzhen, China. Nellie Cheng, Director of China Operations for the U.S. Green Building Council, awarded the first LEED Golden Certificate in South China to Li Xiaoping, president of the Shenzhen Excellence Group.

EMS1, a subsidiary of United Technology Corporation and a long-term US client of FCS China,



(CS Guangzhou and Beijing attend the Award Ceremony)

provided the core environmental consulting for the project. FCS Beijing has supported UTC EMS1 through a variety of activities including the Energy Cooperation Program and the 2010 US Green Build IBP. CS Guangzhou CO Dewey Moore, and CS Beijing CS Merry Cao attended this event and gave remarks. CS Guangzhou Residential Management Fellow, Julia Gitis, also presented at this events.

### CS Shanghai Promotes Green Building Technologies at U.S.-China SCACP



(CS Specialist Scott Yao at SCACP)

On December 1, 2011, CS Shanghai promoted U.S. green building technologies and materials at the U.S.-China Standards and Conformity Assessment Cooperation Program (SCACP), in Shanghai. Leading U.S. companies, including United Technologies Co, GE, Dow Chemicals, Solatube, Solutia, and Autodesk, presented on subjects ranging from integrated building solutions to green building technologies at the workshop. CS Shanghai Commercial Officer Sarah Fox-Shin and Commercial Specialist Scott Yao attended the event, where CO Fox-Shin delivered opening remarks. Commercial Specialist Yao met with the representatives from U.S. companies and Chinese participants, from local architectural design companies, to counsel them on their market strategy. SCACP is a training/cooperation program for Chinese government officials and industry representatives, in the area of industrial standards policy and regulatory development. The program is funded in part by the USTDA through the US-China ECP.

### U.S. Coal Mining Trade Mission Helps Strengthen U.S.-China Ties

By Suresh Kumar - Assistant Secretary for Trade Promotion and Director General of the U.S. and Foreign Commercial Service  
(Continued from previous edition)

For example, Schramm, Inc., of West Chester, Pennsylvania, manufactures heavy-duty drilling rigs and equipment for the energy and coal mining sector. A long-time client of the U.S. Commercial Service, this firm, whose rigs were utilized to successfully rescue 33 miners trapped deep underground during the Chilean mining disaster one year ago, was encouraged to participate in the USA Pavilion at the 2009 China Coal and Mining Expo held in Beijing. At the show, U.S. Commercial Service staff provided Schramm representatives with marketing support and introduced the firm to several prospective Chinese partners. As a result, Chinese coal mine operators purchased millions of dollars worth of Schramm's T200XD drill model, and Schramm has since become a reliable partner of many Chinese coal companies.

LP Amina of Warren, Michigan, produces technology aimed at reducing emissions of

nitrous oxides from industrial boilers. With the help of U.S. Commercial Service advocacy assistance in Washington, DC, and China, LP Amina won major contracts for a nitrous oxide reduction project in Guangzhou, China. This technology will help improve China's environment to the benefit of its citizens.

In addition to connecting U.S. companies with Chinese partners, our trade professionals in China also respond to Chinese investors' inquiries in many different industry sectors, addressing concerns about U.S. federal rules or regulations.

Furthermore, many U.S. economic development organizations are seeking to attract Chinese Foreign Direct Investment (FDI) in the United States. U.S. Commercial Service staff at the U.S. Embassy and Consulates are actively engaged in assisting with these efforts. Chinese firms are at the forefront of what is anticipated to be a period of significantly increasing FDI flows into the United States in the coming years, directly contributing to our mutual economic and employment growth. According to the Commerce Department's Bureau of Economic Analysis report, in 2010, China's direct investment in the United States was about \$3.2 billion. Some FDI may lead to production of U.S. exports, which supports President Obama's National Export Initiative aimed at doubling U.S. exports by the end of 2014. Increasing U.S. exports supports jobs in both the United States and the importing country, benefitting both economies. To this end, the United States continues its longstanding policy of openness to foreign direct investment.

Meanwhile, U.S.-China commercial engagement continues to benefit from a Memorandum of Understanding between the U.S. Commercial Service and the China Council for the Promotion of International Trade. This cooperative effort is increasing mutual business partnering through its focus on small and medium-sized companies. One example is business outreach activities targeting 14 of China's next-tier cities—locations such as Xi'an, one of the stops on our trade mission; and Chongqing, Tianjin, Harbin, and Shenzhen. Next-tier cities have high growth rates and offer great opportunities for expanded U.S. trade, but have traditionally been overshadowed by better-known trading centers such as Shanghai and Beijing. Altogether, these 14 next-tier cities boast a total population of 137 million, with an estimated total GDP this year of \$1.2 trillion, about the equivalent of Mexico's GDP.

The coal mining trade mission couldn't be happening at a more opportune time in the growing U.S.-China trade relationship. Following the mission, U.S. participants will have the option of attending the China Coal and Mining Expo in Beijing, October 28-21. U.S. companies on the mission look forward to exploring new business opportunities with their prospective Chinese counterparts. (End)

## Department of State



### The Largest Waste-to-energy Project in Western China Makes Test Run in Chengdu

(Source: Xinhua News Agency)

Chengdu Jiujiang Environmental Power Plant (成都九江环保发电厂), the largest garbage incineration power plant in western China, has begun operational trials. The project is a joint venture of Chongqing Sanfeng Group (重庆三峡环境产业集团) and U.S.-based Covanta Energy. The power plant is designed to process 1,800 tons of garbage per day, producing 180 million kW-h/year, meeting the electricity needs of approximately 100,000 households. [\(link\)](#)

### Key West-East Electricity Transmission Project in Yunnan under Construction

China Southern Power Grid's largest electricity transmission program during the 12th Five-year Plan - the Liangdu Project (两渡工程) - which consists of two electricity transmission

plans- Nuozhadu (糯扎渡) and Xiluodu (溪洛渡)- broke ground in Pu'er City, Yunnan. The total investment of the project exceeds RMB33 billion, and the plans cover more than 4,000 kilometers in distance, from Yunnan to Guangdong Province. [\(link\)](#)

### China Released the Final Targets for CO2 and Energy consumption Per Unit of GDP

China released the final provincial and special administrative area targets: carbon dioxide (CO2) per unit of GDP, energy consumption per unit of GDP, and various other pollutant targets. While most provinces are expected to reduce CO2 emissions and energy consumption, some less developed provinces are allowed an increase in pollutant discharge, in order to allow for continued economic growth. The overall targets for China remain a 17% reduction in CO2 emissions, a 16% reduction in energy consumption per unit of GDP, an 8% decrease in sulfur dioxide (SO2), a 10% reduction in nitrous oxides (NOx), a carbon oxygen demand (COD) reduction of 8% and a 10% reduction in ammonia nitrogen. Each province is responsible for designing an appro-

priate economic growth and pollution control plan to meet these targets. The central government states it will seriously review the environmental performance of each governor when considering promotions.

### Chongqing All-Electric Vehicles Hit the Road

Chang'an Auto announced, on December 18, that the company's all-electric cars are now commercially available. The battery-run vehicle, with a range of 105km per charge, sells for RMB 200,000 (~32,000 USD), which is 3-5 times higher than conventional cars from the same maker. The Chongqing municipal government's current "green" incentive program does not yet extend to all-electric vehicles and private owners are not yet eligible to take part, but Chang'an Auto is hoping that will change. It is also negotiating with State Grid Electricity Company to install more charging posts for car owners. Chang'an Auto is concentrating its "green" vehicle production bases in Beijing and Chongqing, expecting to produce 640,000 alternative fuel/hybrid cars by 2020. [Click here for more information](#)

## Department of Energy



### 2011 China Smart Energy Summit

DOE China gave a presentation on U.S.-China energy cooperation. The summit brought together representatives from government, industry and academia, hailing from Japan, the U.S, EU and China, to discuss the opportunities for communications technology.

### DOE China Participated in the 2011 JUCCE-CECEP China Energy Forum

The unique forum structure brought together government officials, academia and industry leaders to examine technological solutions that best meet US and China needs. The Forum format required industry and government officials to have detailed discussions that revealed natural areas for expanding collaboration. DOE China led a panel with Chinese government officials, from MOST, NDRC, MOHURD, MIIT and the Chengdu and Tianjin local governments, in evaluating clean energy industry start-up projects- energy efficiency, industrial efficiency, solar, building technologies and energy finance- and their impact on meeting energy security, job growth and climate change needs.

### U.S.-China Clean Energy for Sustainable Cities Program

The program recently brought together a delegation consisting of representatives from eight American cities, which included the mayors of Birmingham and Ft. Worth; the commissioner of Columbus and Franklin County, Ohio; and senior officials from San Francisco, Denver, Honolulu, Richmond and Charlotte. During the week of December 5<sup>th</sup>, the delegation met with senior government and city officials in Beijing, as well as U.S. and Chinese companies, to promote U.S. businesses and advance the widespread adoption of advanced-energy technologies in cities throughout China and the United States. With the support of Sister Cities International, the Department aims to strengthen ties between U.S. and Chinese cities, to support the development and deployment of clean energy. As cities in both countries grow and change, this program encourages cities to collaborate and share best practices on appropriate trade and investment policies; promoting the use of energy efficiency and renewable energy, and creating new opportunities for economic development and job creation

### DOE Partnership with the Woodrow Wilson Center for Scholars

DOE is exploring closer collaboration with the Woodrow Wilson International Center for Scholars, in an effort to connect U.S. NGOs and industries to Chinese decision makers. This effort hopes to raise awareness of, and develop solutions to, the growing freshwater supply problems in China. The project recognizes the developing choke-point between energy demand and freshwater supply that could jeopardize China's economic stability and have global ramifications. A logical starting point is the coal industry, as it consumes over 20 percent of China's water and continues to grow. The project would also include Eco-Cities, as these projects incorporate smart water use and treatment in their base designs. This group would include industry and NGOs, and much like the Energy Cooperation Program, it would coordinate efforts with DOE and other relevant Embassy sections, using existing agreements with NEA, MOHURD, and MOST as a framework to develop the projects.

For more info, please Email: [ecp@amchamchina.org](mailto:ecp@amchamchina.org)

Or visit: [www.uschinaecp.org](http://www.uschinaecp.org)



## USTDA and NEA Sign MOU For ECP

The U.S. Trade & Development Agency (USTDA) and the National Energy Administration (NEA) of China signed an MOU, supporting the US-China Energy Cooperation Program (ECP), during the November 22nd meeting of the U.S.-China Joint Commission on Commerce and Trade held in Chengdu, China.

Signed by USTDA Administrator Leocadia I. Zak and NEA Administrator Liu Tienan, the MOU states that USTDA, in consultation with NEA, and other Chinese government departments, will conduct feasibility studies, advisory meetings, study tours, workshops and other projects for the development of best practices, related to clean energy industries.

In October and November of 2009, the USTDA and NEA, together with the US Departments of Commerce and Energy, and China's Ministry of Commerce, officially recognized the launch of the ECP. ECP has assisted its member companies achieve their business development objectives, a by product of which has led to bilateral job creation, IPR protection, and increased market access.

## ECP Founding Member Solatubes Signs Strategic Partnership with Chengdu City

ECP founding member Solatube International, Inc. has signed a strategic partnership agreement with the Chengdu Urban and Rural Construction Commission, which will use Solatube's Tubular Daylighting Device (TDD) technology, in the city's low carbon and renewable energy demonstration projects. The agreement was also signed as part of the 22nd U.S.-China Joint Commission for Commerce and Trade, and was witnessed by U.S. Secretary of Commerce John Bryson, U.S. Ambassador Gary Locke, and U.S. Trade and Development Agency Director Leocadia Zak.

Under the partnership, Chengdu could purchase up to 200,000 units of Solatube's TDDs, saving up to 87 million kilowatt hours of electricity and reducing carbon dioxide emission by 190 million pounds. Chengdu, could become the biggest TDD-equipped city in the world, potentially creating 200 jobs, according to Solatube. The total value of the project is more than US\$60 million, with US\$25 million in U.S. export content. Selected as one of China's "Low Carbon Towns," Chengdu is promoting a low carbon economy and has designated more than 90 square miles for energy efficient building development.

Solatube is a member of ECP's Energy Efficient Building and Design and Solar Power Working Groups. Through the working groups, ECP is developing sector-based business opportunities that advance the clean energy industries in both China and the U.S.

## UPCOMING EVENTS

**Mercury Emissions Control Technologies Reverse Trade Mission - early 2012 (TBC):** CS will lead Chinese Ministry of Environmental Protection and industry representatives to meet with U.S. EPA and explore U.S. mercury abatement technologies.

For more info contact: [Elizabeth.Shieh@trade.gov](mailto:Elizabeth.Shieh@trade.gov)

**IE Expo 2012 (IFAT China + EPTEE + CWS) – Mar 7-9, 2012:** CS Shanghai will support this comprehensive environmental show.

For more info contact: [Scott.yao@trade.gov](mailto:Scott.yao@trade.gov)

**The 12th China International Petroleum & Petro-Chemical Technology & Equipment Exhibition - Mar 19-21, 2012:** CS will be hosting a USA pavilion at what is advertised as "the largest petroleum exhibition in the world"

For more info contact: [Jianhong.Wang@trade.gov](mailto:Jianhong.Wang@trade.gov)

**Buyer Delegation to Waste Expo in Las Vegas -May 1-3, 2012:** CS shanghai will bring a Chinese buyer delegation to visit this solid waste show.

For more info contact: [Scott.yao@trade.gov](mailto:Scott.yao@trade.gov)

**The 5th edition of Aquatech China 2012 in Shanghai-June 6-8, 2012:** CS Shanghai will support this show and set up a U.S. Pavilion.

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